



# SLCOG 2016

1<sup>st</sup> – 3<sup>rd</sup> July 2016

at the  
Galadari Hotel, Colombo.

*“Serve Women and Save the World”*

## ABSTRACTS *of* Plenary Lectures Guest Lectures Symposia Free Communications

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## **Abstracts of the SLCOG 2016**

**1st – 3rd July 2016,  
Colombo, Sri Lanka**

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# SLCOG 2016

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**PL02: Non-assuring Foetal Heart Rate Patterns - When to Intervene**

*Prof. Sir Sabaratnam Arulkumaran*

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**Plenary Symposium: Sustainable Development Goals**

**1. Why Sri Lanka didn't reach MDG**

*Prof. Kapila Gunawardena*

**2. SDG to improve maternity care in Sri Lanka**

*Dr. Nilmini Hemachandra*

**3. SDG - Global perspective**

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**4. Panel Discussion:**

*Moderator - Dr. Ananda Ranatunga*

# SLCOG 2016

## ABSTRACTS OF PLENARY LECTURES

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### **PL01: The Dramatic Health Benefits of Modern Hormonal Contraceptives**

**Prof. Ian S. Fraser**

*University of New South Wales, Sydney, Australia*

Modern hormonal contraceptives (HC) offer a very wide range of health benefits, above and beyond the highly effective contraceptive outcomes. The modern, young HC user generally now assumes that her modern contraceptive method will offer a very high efficacy level, but increasingly we are seeing that these 'social media-aware' young women are expecting more benefits from their method than just contraception. Most will expect their menstrual periods to become lighter and less painful, and that their acne will improve. On the other hand, few will be aware of the broad range of conditions that can be treated or prevented by appropriate use of modern hormonal contraceptives. These benefits can be considered either as therapies for existing conditions or as prevention from the possible development of future disease.

Sadly, there is still a powerful mythology pervading most societies that links completely untrue beliefs with hormonal contraception. This audience must be aware that many women still believe that the combined oral contraceptive pill "causes cancer, makes a woman infertile, causes her to put on weight", none of which are generally true. This dichotomy between beliefs, knowledge and reality merits a major exercise in community awareness, in addition to more effective training for medical professionals in what the evidence about reproductive hormone use actually shows!

### **PL02: Non-assuring Foetal Heart Rate Patterns - When to Intervene**

**Prof. Sir Sabaratnam Arulkumaran**

*St. George's University of London*

The fetus receives its oxygen and nutrition through the umbilical cord (from the placenta) that floats in the amniotic fluid. The placenta receives oxygen from the maternal blood. Uterine contractions of labour reduce or intermittently cut off the blood perfusion into the retroplacental area thus reducing the exchange of gases and essential nutrition to the fetus. Pregnancies known to be at high risk have continuous observation of the fetal heart rate (FHR) and uterine contractions i.e. cardiotocography (CTG) electronically (EFM). Electronic fetal monitoring by CTG are fraught with problems of high sensitivity but low specificity. Monitoring by CTG is by pattern recognition. This ends in unnecessary operative deliveries if interpreted without the understanding of the pathophysiology. At times the fetuses that are acidotic are missed. Fetal scalp blood sampling (FBS) increases the specificity and reduces unnecessary operative delivery rates. FBS is an intermittent measure and failure to get adequate samples is not uncommon. The value of FBS has been challenged.

The CTG at term should have a baseline rate between 110 to 160 bpm – however a rise in the baseline of a particular fetus of its own baseline within the normal range is of significance and may suggest

hypoxia or infection. The presence of accelerations suggest a non acidotic fetus and is considered to reflect the integrity of the somatic nervous system. The baseline variability reflects the integrity of the autonomic nervous system (sympathetic and parasympathetic) and a normal baseline variability (BLV) of 5 to 25 beats reflect a small chance of acidosis. Reduction of BLV of < 5 bpm especially when associated with decelerations increases the chance of acidosis and the absence of variability with decelerations needs intervention in the form of changing position, hydration, stopping oxytocin, fetal scalp blood sampling or delivery of the fetus. The worsening pattern is reflected by the increase in baseline rate with catecholamine surge, absence of accelerations, increase in depth and duration of decelerations, reduction of time spent at the baseline rate and reduction and finally absent baseline variability (i.e. gradually developing hypoxia). With this progression and absent variability action should be to deliver the fetus unless spontaneous delivery is imminent or the situation of stress can be reduced or reversed. In the late first and second stage of labour at times the decelerations could last 90 to 120 seconds with the FHR being at the baseline rate for <60 seconds and mostly with salutatory variability (>25 bpm) reflecting hypoxia and over reaction by the autonomic nervous system. Intervention within 30 to 40 minutes is recommended to prevent sub-acute hypoxia leading to acidosis. A prolonged deceleration of <80 bpm is likely to lead to acidosis at a rate of 0.01 every minute and delivery within 15 minutes should help to avoid asphyxia. Some fetuses may be already partially compromised and present with absent or minimal baseline variability and shallow decelerations. They usually present a clinical history of meconium, infection, bleeding or absent fetal movements. These fetuses are best delivered early to avoid increasing hypoxia.

### **PL03: Medico legal issues - How to handle?**

**Mr. Yasantha Kodagoda**

Abstract not Available

### **PL04: Dr.P. Dissanayake Endowment Lecture Congenital Malformations of Genital Tract - Diagnosis to Intervention**

**Prof. Alka Kriplani**

*Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi, Federation of Societies of obstetricians & Gynaecologists – India*

**Introduction:** Mullerian anomalies are congenital defects of the female reproductive tract resulting from failure in the development of the Müllerian ducts and their associated structures. The prevalence of mullerian anomalies is 5.5% in the general population and upto 25% in women with an adverse reproductive history [1]. Most cases are idiopathic with hormonal, environmental and chromosomal factors being considered as other possible mechanism. In order of frequency arcuate uterus is most

common, followed by septate, subseptate and bicornuate. These anomalies are also associated with malformations of urinary tract (40%), cardiac (16%) and musculoskeletal system (10-12%) [2]. Associated anomalies have important management implications.

**Diagnosis:** Accurate initial diagnosis of outflow tract obstruction is of utmost importance, because the best surgical outcomes are achieved at first attempt. Transvaginal 3D ultrasound is highly accurate for initial diagnosis and classification of mullerian anomalies, with MR imaging sometimes required for final assessment.

**Classification:** The American Society for Reproductive Medicine formerly American Fertility Society (AFS) classification is the most widely recognized classifications of mullerian duct anomalies [3]. The new ESHRE/ESGE classification system has used anatomy and not embryological origin as its basis of classification making it more simple, clear and management based [Fig 1][4].

**Management:** Both its diagnosis and treatment options are subjects of ceaseless improvements and refinements through innovative thoughts. Advances in minimally invasive techniques has simplified the management of complex mullerian anomalies. The benefits of laparoscopic over open surgery are well documented, and the shorter hospital stay and more rapid recovery are of particular benefit in young patients.

**Vaginal agenesis:** Mullerian agenesis occurs in 1 out of every 4,000-10,000 females [5]. The most common cause of vaginal agenesis is Meyer-Rokitansky-Kuster-Hauser syndrome characterised by absent or small rudimentary uterine bulbs and vagina, normal female phenotype and genotype and primary amenorrhoea. The goal of therapy is to provide adequate sexual function and deal with the psychologic impact of absence of reproductive organs. Fertility is possible because both ovaries are usually normal and successful in vitro fertilization with surrogate pregnancy has been achieved. Recently uterine transplantation and live births have been successfully achieved in such patients by Brannstrom et al [6]. Vaginal agenesis can be managed non-surgically with successive vaginal dilatation. A number of surgical techniques can be employed for neovagina creation. Historically the most common surgical procedure used to create neovagina has been the modified Abbe-McIndoe operation. This procedure involves dissection of space between rectum and bladder and placement of mould covered with split-thickness skin graft or amnion homograft. Postoperative dilatation is essential until the patient engages in regular sexual activity to prevent contracture. Laparoscopic modification of procedures for creation of neovagina include Vecchietti and Davydov's vaginoplasty. Vecchietti procedure involves creation of neovagina using traction device attached to abdominal wall. Davydov developed a three stage operation, which requires dissection of rectovesicular space with abdominal mobilization of segment of peritoneum and its subsequent attachment to introitus. Laparoscopic approaches offer the benefits of reduced morbidity and faster recovery.

**Transverse vaginal septum:** It is less common than congenital absence of vagina and uterus. Upper vaginal septum was reported in 46%, midvaginal in 40% and 14% in lower vagina. The lower surface of septum is covered by squamous epithelium and upper surface by glandular epithelium. In neonates and young infants obstruction can lead to serious and life threatening problems caused by compression of surrounding organs. During puberty it presents with cyclic abdominal pain, amenorrhoea and pelvic mass. The most common differential diagnosis is imperforate hymen. Treatment is surgical with resection of septum followed by end-to-end anastomosis of upper and lower vaginal mucosa.

A Z-plasty technique can be used to prevent circumferential scar formation.

**Cervical dysgenesis/ agenesis:** It is an extremely rare congenital anomaly. Cervical agenesis is often found in association with vaginal agenesis. Dysgenetic cervix can present as fibrous cord, fragmented cervix or cervical os obstruction. Obstructive symptoms necessitate surgical correction. Surgical correction is often associated with high incidence of complication and failure rate, hence many authors have recommended hysterectomy as an initial procedure in congenital absence of cervix and vagina. Surrogacy can be offered to these patients as an alternative to form their own family. In cases of cervical dysgenesis where a part of cervix with mucus is present, the operation consists of anastomosis and canalization. In cases of cervical agenesis with no functional cervical part, uterovaginal anastomosis and cervical reconstruction (neocervix creation) have been proposed as treatment options.

**Unicornuate Uterus:** Unicornuate uterus can be present alone or with a rudimentary horn. The rudimentary horn with cavity may or may not communicate with the unicornuate uterus. In some cases there is no cavity or no horn. Most rudimentary horns are noncommunicating. The variety with non communicating functional rudimentary horn is the most common and clinically significant. It is usually associated with urinary tract malformation on side opposite the unicornuate uterus. It carries the poorest fetal survival rate (40%) of all anomalies. Laparoscopic resection of rudimentary horn has become the standard treatment to prevent complications of ectopic pregnancy and severe endometriosis.

**Conclusion:** The management of congenital malformation in young patients is challenging. The clinician should also address issues related to psychological stress and low self esteem of these patients. For optimum results early and accurate initial diagnosis is of utmost importance. Management in an experienced centre will provide the best surgical outcome and save the patient the turmoil of repeated failed procedures and compromised quality of life.

## PL05: Advanced Imaging in Gynaecology

**Major General (Dr.) Sanjeewa Munasinghe**

*Military Hospital, Colombo, Sri Lanka*

Recent advances in cross-sectional imaging have led to an increasingly important role for radiology in the management of gynaecological conditions. Multiple imaging modalities are utilized to investigate the female pelvis including ultrasound (US), computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography-computed tomography (PET CT) and positron emission tomography- magnetic resonance imaging (PET MRI). Each modality has a different role in screening, diagnosis, staging, treatment selection and follow-up.

Ultrasound scan is the first-line imaging modality and the screening tool in most of the gynaecological conditions. Multidetector computed tomography (MDCT) is the investigation of choice in planning further management in patients believed to have metastatic gynaecological malignancies. It allows comprehensive evaluation of local infiltration, site of peritoneal metastasis, lymphadenopathy and distant metastasis. The major disadvantage of CT scan is the amount of radiation exposure to the patient MRI has become integral to the diagnosis and management of patients with gynaecological malignancies, as it provides exquisite anatomical detail and allows quantitative, multiparametric functional assessment of tumours. Addition of functional sequences, such as dynamic contrast-enhanced MRI

(DCE) and diffusion weighted (DW) sequences to conventional MRI has further improved its value.

In patients with endometrial cancer, MRI plays an important role in pre-operative evaluation and surgical planning not only by allowing non-invasive assessment of important prognostic factors such as depth of myometrial invasion, cervical stroma invasion, presence of peritoneal implants and lymphadenopathy, but through the use of functional imaging techniques it can also provide insights into tumour aggressiveness and micro-environment. In patients with cervical cancer, it can determine tumour location (exophytic or endocervical) and size as well as invasion of the parametria, pelvic side-wall or adjacent organs and lymph nodes with greater accuracy. In patients with ovarian cancer, MRI is a problem-solving modality.

FDG-PET CT has been most widely adopted for staging patients with suspected advanced disease, in suspected recurrence, assessing response to treatment and forecasting prognosis, offering a whole-body imaging approach.

The lecture will highlight the various imaging techniques available for variety of gynaecological conditions with particular emphasis on their relative advantages and disadvantages.

## **Plenary Symposium: Sustainable Development Goals**

### **1. Why Sri Lanka didn't reach MDG**

***Prof. Kapila Gunawardena***

Abstract not available

### **2. SDG to improve maternity care in Sri Lanka**

***Dr. Nilmini Hemachandra***

*World Health Organization, Colombo, Sri Lanka*

Abstract not available

### **3. SDG - Global perspective**

***UN Speaker***

### **4. Panel discussion**

***Moderator - Dr. Ananda Ranatunga***



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## LIST OF GUEST LECTURES

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**GL01: Maternal Suicide in Pregnancy**

*Dr. Thilini Rajapaksha*

**GL02: Laparoscopic Pelvic Floor Surgeries**

*Dr. Hafeez Rahman(India)*

**GL03: Past Success, Current progress & Challenges & Future Directions in Reducing Teenage Pregnancies**

*Dr. Ramya Pathiraja*

**GL04: Management of Recurrent Prolapse**

*Dr. Ruwan Fernando*

**GL05: Doppler in Third Trimester and Timing of Delivery**

*Dr. Nalinda Rodrigo*

**GL06: Non- malignant Vulval Disease**

*Dr. Dr. Chathura Ratnayake*

**GL07: Fetal Growth Restriction - New Insights**

*Dr. Hemantha Perera*

**GL08: Management of Uterine Myomas - Update**

*Dr. Sanath Lanarolle*

**GL09: When & How to Treat Endometriosis – Update**

*Dr. R.Prathapan*

## SLCOG 2016

### ABSTRACTS OF GUEST LECTURES

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#### **GL01: Maternal Suicide in Sri Lanka**

**Dr. Thilini Rajapaksha**

*Faculty of Medicine, University of Peradeniya Sri Lanka*

In the mid-1990s, Sri Lanka had a very high rate of suicide, almost the highest rate of suicide in the world. Since 1995 however, the rates of national suicide have been declining. In contrast, in recent years there has been increasing concern about maternal suicides in Sri Lanka.

Maternal suicide, or the death of a woman by suicide, during pregnancy or upto one year after termination of the pregnancy, is often an avoidable tragedy, which has many negative repercussions on the family and society. A recent survey in Sri Lanka indicated that of all maternal suicides, about 48% occur during pregnancy. These are often young mothers (below the age of 30 years), and the common means of suicide include self-poisoning, and death by burning or hanging.

Data from the West indicates that a major psychiatric illness is associated with almost half of all maternal suicides. Pregnant and postpartum mothers are also more likely to use violent methods to commit suicide, compared to the general population. Unfortunately there is no data available for Sri Lanka in this regard. It has been traditionally perceived that suicide in pregnant and postpartum mothers in Sri Lanka is usually 'impulsive'; but it is very likely that many of these mothers who commit suicide are suffering from an undiagnosed major mental illness, albeit sometimes occurring against a background of complex social issues, similar to the patterns seen elsewhere in the world.

Minimization of suicide in pregnancy and during the postpartum period is a nationally important, but challenging, issue; it requires close collaboration between obstetric and psychiatric health care professionals, increased awareness of this issue in the community and among health professionals, and a system of monitoring and referral, to facilitate early detection, assessment and care of mothers who are psychologically distressed.

#### **GL02: Laparoscopic Pelvic Floor Surgeries**

**Dr. Hafeez Rahman**

*Sunrise Hospital, India*

Abstract not available

#### **GL03: Past success current progress and challenges and future directions in reducing Teenage pregnancy in Sri Lanka**

**Pathiraja RP**

*Department of Gynaecology & Obstetrics Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka*

**Introduction:** Teenage pregnancy in s is a complex issue affecting families, health care professionals, educators, government officials and youths themselves.

The negative obstetric and fetal outcomes as well as social consequences associated with teenage pregnancies are well documented. In Sri Lanka, adolescents represent 22% of the total population and the median age at marriage among women has been increased almost seven years from 18.1 to 24.6 during the last century resulting them to engage in premarital sexual activities and exposing themselves to unplanned pregnancies. The majority of teenage pregnancies were in the age group of 15 – 19 years. The prevalence of teenage pregnancy in Sri Lanka during the past 10 years ranged from 4% to 8% with a declining trend which is much lower than the recorded teenage pregnancy rates in other South Asian countries.

The highest percentage of live births to females under 19 years was seen among the Sri Lankan Tamils living in rural and estate sectors. The Eastern province had the highest teenage pregnancy rate of 10.2% while Central province had the lowest rate of 4.1%.

Low education and poor socioeconomic status, lack of knowledge and low levels of contraceptive usage and unmarried individuals facing difficulties in accessing contraceptive services were associated with teenage pregnancy.

**Past success:** A consistent declining trend in the percentage live births to females aged less than 19 years was observed from the year 2000 (8.1%) to 2006 (5.4%). Sector differentials are seen with the estate sector having the highest percentage.

Positive development include the increase in the number of hospital-based contraceptive and sexual and reproductive health (SRH) services, training of teachers, support staff and school nurses and PHIs on SRH and life skills, early intervention to identify young people at risk of teenage pregnancy and appointing committees to follow up the children who drop out in school. Family Planning Association of Sri Lanka (FPA) initiated a counselling and health care services and hotline service to provide medical information on RH issues. The peer education program has been implemented in universities.

**Current progress and challenges:** Availability, accessibility, acceptability, confidentiality and even lack of publicity and visibility of available services were the main barriers to SRH services. These services need to be expand and should also be available for unmarried adolescents as well. Failure to make SRH education as a part of the school curriculum was inexcusable. Teachers have no appropriate material, equipment, skills and right attitude to teach reproductive health.

The most vulnerable population of recent school dropouts and leavers is often being neglected.

**Future directions:** Area specific problems should be investigated to provide services in a more acceptable manner. Integrated services delivered through the healthcare system are identified as one of the most effective ways of delivering SRH services. This is a huge challenge in countries like Sri Lanka due to various cultural and social barriers. It is important that this service integration should be done in a very careful manner without disrupting the available system. Existing provision of allocation of funds must be reviewed and there is a need to prioritize the teenage pregnancy prevention programme and to maintain the current downward trend in teenage pregnancy. There is a need to

improve social marketing and accessibility of the youth friendly services.

More researches are needed to explore qualitative aspects of adolescent health care needs and their perceived barriers.

**Conclusion:** Teenage pregnancy is a common public health and social problem with adverse medical consequences worldwide and its prevention is relevant in achieving the millennium development goals of maternal and child survival.

There continues to be considerable variation in progress around the country. Over the past decade there has been significant progress in reducing teenage pregnancy but also missed opportunities and disappointments.

A single programme model cannot suit all needs. Models have to be adapted to the available resources and the social and cultural contexts.

Sri Lanka needs to ensure that all young people get comprehensive sexuality education that is age appropriate and gender sensitive. This needs to be coupled with strengthening of youth friendly health services. Young people need to be given the skills and training required to meaningfully engage and provide leadership in every sphere of life that affects them. Special attention needs to be paid to vulnerable young people

Many of these proposals are positive but the challenge is how the government and local areas working in partnership can make them happen.

#### **GL04: Management of Recurrent Prolapse**

**Dr. Ruwan Fernando**

*Faculty of Medicine, Faculty of Medicine, Imperial College of London*

Abstract not Available

#### **GL05: Doppler in Third Trimester and Timing of Delivery**

**Dr. Nalinda Rodrigo**

*Department of Gynaecology & Obstetrics Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka*

The significance of Doppler ultrasound in evaluating pregnancies that have the risk for preeclampsia, intrauterine growth restriction, fetal anaemia, and umbilical cord complications has become indispensable in today's obstetric practice. Recent developments enable us in timing delivery of severely growth-restricted fetuses by promoting the use of ductus venosus Doppler. Primarily it appeared that abnormalities in ductus venosus waveform were the endpoint for pregnancies afflicted with intrauterine growth restriction. This is in contrast to newer data proposing these abnormalities as plateau prior to further fetal deterioration as observed by changes in the biophysical profile.

The majority of adverse perinatal outcomes in developing countries are placental-associated diseases. The uterine artery Doppler evaluation predicts most occurrences of early-onset preeclampsia and intrauterine growth restriction, and its use in these pregnancies improves a number of perinatal outcomes. Doppler investigation of middle cerebral artery in combination with umbilical artery seems to improve prediction of adverse outcome in near-term pregnancies.

It was postulated that Doppler ultrasound would be a useful addition to our armament of tests of antenatal fetal well-being and timely intervention. On the basis of abnormal Doppler results, obstetrical decision making might improve and prevent intrauterine death because hypoxic cerebral damage may begin before labor. Intrapartum asphyxia is probably more damaging when superimposed on underlying hypoxia. Doppler assessment may lead to intervention that reduces the risk of fetal brain damage.

#### **GL06: Non-malignant Vulval Disease**

**Dr. Chathura Ratnayake**

*Faculty of Medicine, University of Peradeniya*

Presentation of lower genital tract complaints to a medial practitioner is not uncommon. However, the attention given to them by the medical practitioners are minimum. Most of them are treated with various steroids, antifungal treatments before referring to a specialist clinic. Exposure given to vulval pathologies are traditionally limited in undergraduate and postgraduate curricula which results in most doctors being ill equipped to deal with vulval conditions. In 2011 ISSVD (International Society for study of vulvovaginal diseases) released a new classification of vulvovaginal conditions. In this emphasis is placed on clinical diagnosis rather than more histology based diagnosis which were used earlier. This allows a more syndrome based management of most of the vulval conditions. The new classification will be reviewed in this presentation and an algorithm for vulval presentation will be discussed. New web based information resources and guidelines will also be reviewed.

#### **GL07: Fetal Growth Restriction – New Insights**

**Dr. Hemantha Perera**

*Sri Jayawardenepura General Hospital, Faculty of Medicine, Kotelawala Defence Academy, Sri Lanka*

Fetal growth restriction (FGR) is the inability of a fetus to reach its genetic growth potential. Placental insufficiency which results from inadequate invasion of maternal spiral arterioles by extravillous trophoblast cells leads to reduced oxygen transfer to the fetus across the placenta, is the most common cause for FGR. Unless detected and delivered on time, FGR leads to intra uterine hypoxic damage and death.

Small for gestational age (SGA) is defined as birth weight or estimated fetal weight below the 10th centile for the particular gestational age. Not all SGA fetuses are growth restricted as the genetic potential may be only for a lower than average birth weight, yet these babies are healthy. On the other hand, some fetuses who fail to achieve their genetic growth potential and thus have FGR, may end up in a weight for gestation above the 10th centile. Therefore they are not SGA and will not be addressed if weight is used as the sole criterion to define FGR.

Despite these fundamental facts, SGA is often synonymously used with FGR, particularly by the neonatologists because most of the immediate complications after birth are related to a low birth weight. However, the "thrifty phenotype" hypothesis of Barker which proposed that alterations in intrauterine nutrition and endocrine status result in developmental adaptations that permanently change structure, physiology, and metabolism, thereby predisposing individuals to cardiovascular, metabolic,

and endocrine disease in adult life, we have to change our approach to the issue of FGR and SGA if we are to minimize the so called unexplained fetal and neonatal hypoxic damage and still births.

#### **GL08: Updates on Management of Uterine Fibroids**

**Dr. Sanath Lanerolle**

*Castle Street Hospital for Women, Colombo, Sri Lanka*

Several treatment options are available for the management of fibroids including expectant management, medical management, surgical management and radiological management. The type of treatment depends on the age, future fertility wishes, location and the size of the uterine fibroids and best available evidence.

Recent developments in medical management includes SPRM (Selective Progesterone Receptor Modulators), SERM (Selective Estrogen Receptor Modulators), and GnRH antagonists. Recent evidence has found that SPRM (Ulipristal Acetate) more effective in management of uterine fibroids and has lesser side effects compared to GnRH analogues.

Surgical management of fibroids include hysteroscopic, laparoscopic, vaginal or laparotomy routes. According to available evidence, traditional hysteroscopic resection is still the gold standard treatment for submucosal fibroids. Laparoscopic myomectomy is considered to be the best option for women who have fertility wishes. Robotic assisted gynaecological surgery is emerging but is associated with greater blood loss than standard laparoscopic myomectomy. Myolysis and Cryomyolysis are new procedures where electric current and freezing probe is used to destroy myoma cells respectively and can be used in both hysteroscopy and laparoscopy.

Recent development of radiological management of fibroids includes uterine artery embolization (UAE) and MRI guided focus ultrasonography (MRgFUS). UAE is considered as an effective alternative to hysterectomy, where hysterectomy is not feasible. MRgFUS is newer radiological treatment option with the advantage of preserving the uterus. High-frequency ultrasound waves are used to denature proteins leading to cell death and shrinkage of fibroids.

#### **GL09: When & How to Treat Endometriosis**

**Dr. R.Prathapan**

*Colombo South Teaching Hospital*

Endometriosis is an inflammatory, oestrogen-dependent disease that often results in substantial morbidity, pelvic pain, multiple surgeries, infertility and reduction in quality of life. It affects about 5% to 10% of the reproductive aged women and the significance of the disease depends on the clinical presentation.

The overall amount of endometriosis is not related to the frequency or severity of symptoms, and the condition's aetiology remains unknown. Endometriosis should only be treated when either pain or infertility is a presenting symptom. As an incidental finding at the time of surgery, endometriosis does not require any medical or surgical treatment.

Medical treatments must be effective and safe to use until the age of menopause or until pregnancy is desired. Currently, hormonal contraceptives, various types of progestogens, anti-progestogens, GnRH agonists, NSAIDs and aromatase inhibitors are in clinical use. Most new medical treatments being developed also have hormonal targets such as selective progesterone receptor modulators (SPRMs) and selective estrogen receptor modulators (SERMs). Non-hormonal treatments with targets such as angiogenesis, inflammation, the immune system and neuropathic pain are also being tested in women with endometriosis.

Surgical management in women with endometriosis related pain should be reserved for those in whom medical treatment has failed and who have an acute adnexal event (adnexal torsion or ovarian cyst rupture) or who have severe invasive disease involving the bowel, bladder, ureters, or pelvic nerves.. On the other hand the treatment of infertility caused by endometriosis consists of either surgical removal of endometriotic tissue with adhesiolysis in order to restore normal anatomy or assisted reproductive technology. Surgical options include elimination of endometriotic lesions and division of adhesions most commonly by electrocautery or laser and by helium plasma coagulation, and interruption of nerve pathways such as Laparoscopic Uterine Nerve Ablation (LUNA) for chronic pelvic pain.

# SLCOG 2016

## LIST OF SYMPOSIA

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### Symposium 01: Cancer Screening In Gynaecology – Update

1. Genetic screening for breast & gynaecological cancer
2. Screening for breast cancer
3. Screening for gynaecological cancers

*Dr. Kanishka De Silva*

*Dr. Himali Ihalagama*

### Symposium 02: Renal Disease in Pregnancy

1. Effects of pregnancy on renal disease
2. Renal transplant & pregnancy
3. Obstetric outcome in renal disease - Dr. Madura Jayawardane

*Dr. Eranga Wijewickrama*

*Dr. A.L.M. Nazar*

### Symposium 03: Obstetric Emergencies

1. Emergencies and challenges in primary care
2. Non haemorrhagic shock in peripartum period
3. Hypertensive emergencies - Current management

*Dr. M.A.K. Perera*

*Dr. Madhava Karunaratne*

*Dr. Romani Fernando*

### Symposium 04: When Menstruation Goes Wrong (FIGO)

1. Women who bleed heavily
2. Cultural perspectives of acute & severe menstrual bleeding
3. Panel discussion

*Prof Ian S. Fraser*

*Dr. Rohana Haththotuwa*

*Prof Ian S. Fraser - Dr. Rohana Haththotuwa*

### Symposium 05: Heart Disease Complicating Pregnancy

1. Cardiac pharmacotherapy in pregnancy
2. Challenges to the anaesthetist
3. Challenges to the obstetrician

*Dr. Jayanthimala Jayawardena*

*Dr. Saroja Jayasinghe*

*Dr. Probodhana Ranaweera*

### Symposium 06: Menopause

1. Coronaries after menopause
2. Post-menopausal Osteoporosis when & how to intervene
3. Psychological changes in menopause

*Dr. M.D.P. Gunaratne*

*Dr. Mangala Dissanayake*

*Dr. Buddhi Jayasekara*

### Symposium 07: Helping Vulnerable Women

1. How we look after our “Pregnant Children”
2. Forensic evaluation of sexually assaulted victim
3. Gender-based violence: We can do much to help the survivors

*Dr. Janaki Karunasinghe*

*Dr. Sameera Gunawardane*

*Dr. Lakshman Senanayake*

### Symposium 08: Improving Outcome in Diabetes Complicating Pregnancy

1. Screening
2. Strategies of blood sugar control
3. Obstetric outcome

*Dr. Asanka Jayawardena*

*Prof. Chandrika Wijeyaratne*

*Dr. Pradeep De Silva*

### Symposium 09: Translation of New Research into Practice - Foetal Medicine

1. Still birth: Prediction by first & second trimester biomarkers
2. Prediction of fetal distress at labour at term
3. Prediction of pre-term birth: History & cervical length

*Dr. Chandana Jayasundara*

*Dr. Tiran Dias*

*Dr. Iresha Mampitiya*

### Symposium 10: Endoscopy

1. Avoiding & managing complications of laparoscopic surgery
2. Tissue retrieval in laparoscopic surgery
3. Indications & limitations of laparoscopic hysterectomy

*Dr. Kumara Dissanayake*

*Dr. C. D. Ekanayake*

*Dr. Dhammike Silva*

### **Symposium 11: Improving Antenatal Care**

#### **1. Rituals in antenatal care**

*Dr. Dinuka Lankeshwara*

#### **2. Pregnancy & obesity**

*Dr. Ranil Jayawardane*

#### **3. Near miss inquiry in maternal care**

*Dr. Kapila Jayaratne*

### **Symposium 12: Perinatal Health**

#### **1. Improving the neurological outcome of the new born**

*Dr. M.R.M. Rishard*

#### **2. Optimizing management of hypoxic ischaemic encephalopathy**

*Dr. Saman Kumara*

#### **3. Improving long term outcome for the compromised baby**

*Dr. Saraji Wijesekara*

### **Symposium 13: Post-Partum Contraception & PPIUD (FIGO)**

#### **1. The need for postpartum contraception in Sri Lanka**

*Dr. Sanjeeva Godakandage*

#### **2. Importance of Birth spacing**

*Dr. Gamini Perera*

#### **3. PPIUD Project-FIGO**

*Prof. Sir Sabaratnam Arulkumaran*

#### **4. Results from group A Hospitals**

*Dr. U.D.P.Ratnasiri*

#### **5. Results from group B Hospitals**

*Dr. Dinuka Lankeshwara*

#### **6. Results from Group C Hospitals**

*Dr. Hiranthi Solangarachchi*

#### **7. Research by Harvard group**

*Mr. Ranjith De Silva*

# SLCOG 2016

## ABSTRACTS OF SYMPOSIA

### Symposium 1: Cancer Screening in Gynaecology - Update

#### 1. Genetic screening for breast & gynaecological cancer

**Prof. Vajira Dissanayake**

*Human Genetics Unit, Faculty of Medicine of the University of Colombo*

All cancers are genetic, but some cancers are inherited. The inherited cancers can be prevented by testing an affected member in the family, identifying the genetic variant running in the family, and screening pre-symptomatic persons for the variant, and instituting a personalized aggressive follow up programme for pre-symptomatic variant carriers. The availability of next generation sequencing technologies make this possible at a fraction of the cost in the past. In the Human Genetics Unit, we have introduced, genetic screening using next generation sequencing of cancer gene panels. We test for 91 genes involved in inherited cancer susceptibility. The objective of this talk is to share our experience in genetic screening of breast and gynaecological cancers.

#### 2. Screening for breast cancer

**Dr. Kanishka De Silva**

*National Cancer Institute Maharagama, Sri Lanka*

Breast cancer is the commonest female Sri Lankan Cancer accounting for 25.4% of female cancer in 2009. A rise was seen over the years and in 2009 cancer registry age standardized rate was 22.2 per 100,000 world population with a life time risk of 1 in 40. The age specific rate peaked over 90 per 100,000 in the 6th decade and reduced thereafter. But case analysis from breast clinics show highest number of cases in the 5th decade and around 70% of patients to be below 55 years essentially in their preretirement age. Though this discrepancy is most likely due to the superimposition of population pyramid on the age specific rate – higher number of young breast cancer patients necessitates a closer look at our strategies for breast cancer management. In 2009 63.7% Sri Lankan Breast cancers were operable belonging to stage I or II. This gives a good reflection of early detection, placing us in a good position among our regional neighbors.

Breast cancers are associated with detectable precancerous stages. Multiple pathological conditions with a low relative risk index than the traditional carcinoma in situ have been recognized and for these surgical management strategies are yet to be agreed. These broadly consists of different types of ductal and lobular intra epithelial neoplasia ( comprising of usual ductal hyperplasia, atypical hyperplasia, ductal carcinoma in situ, lobular carcinoma in situ and its variants) as well as not so well risk analyzed entities of papillary neoplasms. Screening and early detection tends to shift the case distribution towards this end with possible improvement of prognosis yet creating at times a significant difficulty in deciding how to manage these minimal lesions.

In addition familial breast cancer risk assessment attempts to predict the risk in patients even prior to getting these early changes and has made the decision making process even more

difficult. Familial risk evaluation, using risk calculators and models, genetic screening of patients and at risk individuals gives an opportunity to use surgery in risk reduction strategies but at the cost of losing what could essentially be a normal part of the body.

In screened detected lesions- image guided core biopsies, vacuum assisted biopsies, needle guided excisions are currently replacing traditional excision biopsies as conservative surgery is taking a center place. Extent of surgical resection for these lesions and early breast cancer needs to be customized for each patient with a personalized oncoplastic cosmetic plan within the limits of oncological safety. Analysis of our own work shows that 62.05% of clinically node negative breast cancer patients who underwent primary surgery had BCS and needed such a plan. In this node negative patients traditional axillary dissection can be avoided and experienced sentinel node biopsy teams are required to offer maximum benefit of early detection.

Currently surgery is used for diagnosis, risk reduction strategies (familial risk), managing pre-cancerous states, early cancer, locally advanced cancer, local recurrences, metastases, Oncoplastics as well as managing treatment related complications. Screening has led to the shifting of the role of surgery for breast cancer towards the minimal end of this spectrum with better results. But it has also made the decision making process much more difficult.

#### 3. Screening for gynaecological cancers

**Dr. Himali Ihalagama**

*National Cancer Institute, Maharagama, Sri Lanka*

We, as Sri Lankans are fortunate to have a free health care system in the country. Currently we have a reasonably established screening program available for cervical cancer. However we as Gynaecological Oncologists are still experiencing high number of newly diagnosed patients with advanced cervical cancers. According to the WHO screening criteria cervical cancer screening through cervical smears if found to be the best screening technology available. Importance of cervical cancer screening needs to be highlighted as a Primary preventive measure which is provided at no cost to the general public in our country. HPV-DNA typing will soon be in co-operated into the program. HPV vaccination which is again a primary preventive measure is available at a reasonable price in most private hospitals island-wide.

No proper screening methods are available for any other gynaecological malignancies. Mass screening will not be cost effective neither in ovarian nor endometrial cancers. Selective screening is recommended in women who are at high risk. Use of tumour markers like CA 125 and TVS for ovarian cancer remains debatable. Screening of endometrial cancer through assessment of TVS is also a practicable solution for us.

Genetic screening would be an ideal method. However it would be not a good option for a developing country like ours. More solid evidence and screening tests should be available with time to come to minimize the suffering from advanced cancers.

## Symposium 2: Renal Disease in Pregnancy

### 1. Effects of pregnancy on chronic kidney disease

**Dr. Eranga Wijewickrama**

*Department of Clinical Medicine, Faculty of Medicine,  
University of Colombo*

Pregnancy is associated with considerable physiological changes in the kidneys including increase in both renal plasma flow and the glomerular filtration rate and the kidney size. These changes are essential for a successful pregnancy outcome, however will have profound effects on proper interpretation and identification of worsening kidney function and superimposed pre-eclampsia.

For an example the presence of high normal serum creatinine in pregnancy could be an indication of underlying kidney disease.

Pregnancy could lead to worsening of pre-existing renal disease. The severity of renal dysfunction, proteinuria and the control of blood pressure at conception will determine the degree of progression and the reversibility of the underlying renal disease during pregnancy. Most of the tests and formulae currently used in the evaluation of kidney disease are not validated in pregnancy.

Pregnancy affects the evaluation and management of renal disease. Performing renal biopsies are generally safe up to the third trimester. Optimal management of renal diseases during pregnancy could be compromised by the inability to use a number of medications including cytotoxics in the early stages.

The window of opportunity for a successful pregnancy for most females with underlying kidney disease is narrow. Therefore a collaborative multidisciplinary approach involving the nephrologist, obstetrician, high-risk pregnancy nursing staff, dietician and the pharmacist is essential to offer the best chance of pregnancy to these patients.

### 2. Renal transplant & pregnancy

**Dr. A.L.M. Nazar**

Abstract not available

### 3. Reproductive outcome in renal disease

**Dr. Madura Jayawardane**

*Faculty of Medical Sciences, University of Sri Jayewardenepura*

Renal diseases in pregnancy considered as a major challenge in obstetrics, which is associated with statistically and clinically significant adverse pregnancy outcomes. The quoted rates of renal diseases in pregnancy range from 3 to 15 per 10000 pregnancies. When compared to preexisting renal diseases those problems arise de novo during pregnancy carries relatively satisfactory outcomes.

In Sri Lanka majority of renal diseases are still secondary to diabetes followed by hypertension and systemic disease. Rising incidence of diabetes among young population, and rising incidence of chronic kidney disease of unknown aetiology among the sub set of population in north central province, makes kidney disease in pregnancy an important upcoming burden to the healthcare system in Sri Lanka.

In broad terms, pregnancy outcome of the renal disease depend on the severity of the kidney disease. Women with mild renal impairment and controlled hypertension will have more desired pregnancy outcomes. But in cases of moderated to severe

renal impairment along with hypertension, significantly reduce the chances of having a live birth and will have more adverse pregnancy outcome with accelerated trends towards dialysis or transplantation following pregnancy.

Among a spectrum of adverse obstetric outcomes progression to more advanced renal disease, prematurity, fetal growth restriction, still births, super imposed pre eclampsia and progression in to end stage renal failure need to be anticipated and thus patients need to be kept under surveillance. It is estimated that the fetal survival ranges between 65% to 85%, fetal growth restriction 35% to 45% and prematurity 30% to 80% in moderate to severe renal impairment.

Fortunately the natural history of majority of chronic diseases is not associated with progressive deterioration of kidney functions during pregnancy. However the exception is SLE, where a flare can leads to accelerated renal disease during pregnancy with almost one in four progresses to end stage renal disease within six months of delivery.

Management of renal disease in pregnancy begins with an understanding of what changes usually occur in renal function and structure in normal pregnancy. It is essential to appreciate the need for multi-disciplinary team work in a center with all necessary facilities for dealing with high risk patients. Ideally this should begin pre conceptually with time for appropriate counseling regarding the potential risk and likely outcomes not only of the pregnancy but also for the woman post-partum.

Management of patients with renal disease involves treating or removing any underlying cause (e.g. obstruction, recurrent UTI, SLE, chronic infections, etc.) and preventing or slowing the disease progression in both chronic kidney disease and in acute kidney injury. Maternal and fetal monitoring is an essential component in this regard as any deviation from normal parameters can be readily recognized with such approach. Depending on the clinical picture there may be instances which results in expediting the delivery but overall pregnancy outcome is satisfactory for majority of cases with proper pregnancy surveillance.

## Symposium 3: Obstetric Emergencies

### 1. Emergencies and challenges in primary care

**Dr. M.A.K. Perera**

*De Soysa Hospital for Women*

Primary care defines differently. WHO define essential health care that is based on scientifically sound and socially acceptable method and technology which make universal health care accessible to all individuals and families in a community. Primary care is the logical foundation for good health care system.

We have long standing world reputed community based health delivery system. Midwife is the first contact & the center person in this system.

During pregnancy early pregnancy complications as well as late pregnancy complications need equal attention. A 24/7 coverage adequate resource provision are important aspect in organization and obviously a great challenge.

Appropriate knowledge, skills and attitudes needed for the service provider. Basic training to continuous provisional development will be all important.

Clinical decision making will be different in primary care from specialty care. It is more oriented in information provision, guide patients through health care system. Health promotion and



disease prevention and ultimately it are an integrated care system between patient and community.

Although good primary care system reduce overall health budget, cost will be a limiting factor.

In conclusion primary care whether routine or emergency needs sustained partnership with patients and practicing in context of family and community.

## 2. Non Hemorrhagic Shock in labor

**Dr. Madhava Karunaratne**

*Sri Jayawardanapura General Hospital*

Amniotic fluid embolism, acute uterine inversion, pulmonary thromboembolism, sepsis are causes for non-hemorrhagic shock in labor. Even though they are uncommon, they responsible for the majority of maternal deaths in developed & developing world.

Amniotic fluid embolism is rare, but can occur during labor, immediate post-partum period, during cesarean section or second trimester abortion. Early assumption, diagnosis and prompt management can improve the outcome.

Acute Uterine inversion is most often iatrogenic. Active management of third stage of labor will reduce the incidence. The shock is neurogenic in nature.

Treatment for clinically suspected pulmonary thromboembolism should start immediately and objective testing should be performed for diagnosis then.

The septic shock is a common cause for maternal deaths in developing world. The management includes resuscitation, identification of the source of infection and alteration of the systemic inflammatory response.

## 3. Hypertensive emergencies - Current management

**Dr. Romani Fernando**

*Hemas Hospitals, Thalawathugoda*

The two most critical components of management of hypertensive emergencies in pregnancy are stabilization and decision to deliver. Stabilization includes blood pressure (BP) control, prevention of seizure/management of seizure and fluid balance.

BP control: Mean arterial pressure (MAP) of  $>150\text{mmHg}$  will cause loss of cerebral circulation and risk of cerebral haemorrhage. MAP of  $125\text{mmHg}$  ( $150/100\text{mmHg}$ ) should be maintained for utero-placental circulation.

Antihypertensive treatment should be started in women with a  $\text{SBP} \geq 160\text{ mmHg}$  or a  $\text{DBP} \geq 110\text{ mmHg}$ . In women with other markers of potentially severe disease, treatment can be considered at lower degrees of hypertension.

Drugs: Labetalol given orally or intravenously, nifedipine given orally and intravenous hydralazine can be used for the acute management of severe hypertension.

Prevention of seizures: Intravenous  $\text{MgSO}_4$ . When  $\text{MgSO}_4$  is given, regular monitoring of the urine output, maternal reflexes, respiratory rate and oxygen saturation is important.

Fluid Balance: Total intake of fluids should be limited to  $80\text{ ml/hour}$  or  $1\text{ ml/kg/hour}$ .

## Symposium 4: When Menstruation Goes Wrong (FIGO)

### 1. Women who bleed heavily

**Prof. Ian S. Fraser**

*University of New South Wales, Sydney*

Heavy menstrual bleeding (HMB) is a very common occurrence in all cultures, but, for a variety of reasons, not all women with the problem will actually complain about it. Women with HMB are more likely to complain if the period is also accompanied by pelvic pain (cramps) or other symptoms. HMB is not always managed logically or effectively by health professionals, and over the past decade the International Federation of Gynecology and Obstetrics (FIGO) has been increasingly interested in developing professional and educational tools to assist doctors in defining the actual symptoms and clarifying underlying causes. This has a major beneficial effect in improving effective use of available investigations and in maximising the logical use of available therapies.

Why are we talking so much about AUB and HMB?

They are the commonest gynaecological symptoms

They are the commonest gynaecological complaints to a doctor

They cause the commonest deficiency disease in most cultures:

- iron deficiency

Effective hormonal and non-hormonal therapies are now widely available, and must be offered jointly with effective iron therapy. These have the joint impact of greatly improving quality of life for most women who bleed heavily.

### 2. Cultural perspectives of acute & severe menstrual bleeding

**Dr. Rohana Haththotuwa**

*Ninewells CARE Mother & Baby Hospital*

Menstruation is a biological event but culturally stigmatized. Beliefs and practices depends on the country, ethnicity, cast, religion, social status and educational back ground of an individual. Menstruation is a taboo subject and many women in Asian countries feel uncomfortable discussing it and is kept as a secret.

Lack of awareness and education, cultural myths and beliefs and the lack of facilities including, napkins, safe water and clean & private toilets have resulted in poor menstrual hygiene. Also these have caused poor attendance in school during menstruation and sometimes led to leaving school also.

This cultural silence and beliefs have prevented women obtaining proper information which has led to, delay in seeking treatment, non-acceptance of treatment, discontinuation of treatment and seeking traditional methods with regards to menstrual disorders.

In addition these myths have had an impact on the girls' & women's, emotional state, mentality, life style and health. Also they are been excluded from social and cultural activities during menstruation.

Strategies which could be implemented to combat myths regarding menstruation include,

■ Raising the awareness among the adolescent girls related to

menstrual health and hygiene

- Including reproductive and menstrual health and hygiene in school curriculum. Teachers hardly talk and guide the girls about menstrual health and hygiene
- Community based health education campaigns
- Empowerment of women through education and increasing their role in decision making
- Provision of sanitary napkins at low cost and adequate facilities for sanitation and washing should be made available
- Increasing the role of the male partner and clearing the beliefs of the male partner. It is important for men & boys to understand menstruation so they can support their wives, daughters, mothers, students, employees, and peers

### 3. Panel discussion

**Prof. Ian S. Fraser**

**Dr. Rohana Haththotuwa**

## Symposium 5: Heart Disease Complicating Pregnancy

### 1. Cardiac pharmacotherapy in pregnancy

**Dr. Jayanthimala Jayawardena**

*Institute of Cardiology, National Hospital of Sri Lanka  
Colombo, Sri Lanka*

In the treatment of hypertension, physiological fall of systolic blood pressure and diastolic blood pressure in the 1st and 2nd trimester should be considered. Maternal benefit should be weighed against fetal risks due to impaired placental perfusion and fetal teratogenicity. Commonest conditions are pre-eclampsia and eclampsia. In mild hypertension treatment is not recommended. When indicated safer drugs are methyl dopa, nifedipine, verapamil, metoprolol. Diuretics to be given under close supervision. ACE inhibitors, ARBs are contraindicated.

Commonest cause of heart failure is puerperal cardiomyopathy. Prevalence of ischemic left ventricular dysfunction is rising due to advancing maternal age. Mitral stenosis with pulmonary edema is commoner in populations where Rheumatic Heart Disease is prevalent. Symptoms are unmasked or worse in 2nd, 3rd trimester due to increased stroke volume. ACEI, ARB are contraindicated. Hydralazine is recommended as a vasodilator. Diuretics used cautiously if symptomatic. Anticoagulation indicated in atrial fibrillation, severe LV dilatation. Multidisciplinary approach should be advocated to plan timing, mode of delivery.

Anti-arrhythmic are best avoided unless symptomatic. Commonest are sinus tachycardia followed by supraventricular tachycardia (SVT). Provoking factors, secondary causes should be eliminated. Class C anti arrhythmic recommended. Adenosine is the choice in SVT. Invasive procedures such as ablation is best avoided.

Thrombotic risk is high in pregnancy due to hypercoagulable state and compression of pelvic veins. There is increased risk of deep vein thrombosis, pulmonary embolism, arterial thromboembolism, prosthetic valve thrombosis. Anticoagulation commonly indicated in atrial fibrillation and prosthetic valves. Thromboembolic risk in mother should be weighed against

bleeding risk and fetal teratogenicity. Warfarin is the anticoagulant of choice and could be continued in pregnancy if daily dose is less than 5mg. It is substituted with Low molecular weight heparin in 1st trimester when indicated and at planned delivery. Aspirin is a safer drug when anti platelets would suffice.

### 2. Challenges to the anaesthetist

**Dr. Saroja Jayasinghe**

*De Soysa Hospital for Women, Colombo Sri Lanka*

Abstract not Available

### 3. Challenges to the obstetrician

**Dr. Probodhana Ranaweera**

*De Soysa Hospital for Women, Colombo Sri Lanka*

Heart disease complicating pregnancy is the second leading cause of maternal mortality in Sri Lanka. Effective management of these patients possesses a unique challenge. Due to advances in care more patients with corrected and uncorrected congenital heart diseases are surviving in to reproductive age group. In addition, more women have delayed child bearing resulting in coronary artery disease complicating pregnancy to increase significantly. There is only limited experience in most units for management of these patients. Even though rheumatic heart disease is reducing in Sri Lanka, there are a significant number of patients with rheumatic heart disease in their reproductive ages especially in the north east. Proper pre-conceptional counseling can reduce many problems related to pregnancy. This enables optimization of patients with cardiac disease before planning a pregnancy. Availability of more effective, reliable and reversible contraceptive methods can be utilized to prevent pregnancies in this high risk group. Education of these patients of exact nature of their cardiac disease and the effect of pregnancy to their health should be offered to all patients. Timely interventions including termination of pregnancy when indicated and referral to super centers will help to reduce MMR due to cardiac disease. Effective management of these patients requires multi-disciplinary input backed with high level of facilities. Provision of care should be available in super centers with adequate facilities and expertise to reduce complications.

## Symposium 6: Menopause

### 1. Coronaries after menopause

**Dr. M.D.P Gunaratne**

Coronary heart disease is the commonest cause of death among postmenopausal women. This is more than deaths due to carcinoma of breast and gynaecological cancers. There are gender differences related to prevalence, timing, risk factors and research on coronary heart disease (CHD). Menopausal women especially those from South Asia are more prone to many of the risk factors.

Estrogen is cardio protective and with many changes occurring with estrogen deficiency at menopause atherosclerosis in the coronary arteries sets in with resultant coronary artery occlusion, and acute coronary syndrome. Microvascular disease is common leading to atypical symptoms. Often diagnosis and management is delayed and mortality due to CHD is increased. Re-infarction

is common and outcome after percutaneous intervention and coronary artery surgery is poorer than that for men. Prevalence is higher as age advances than for males and impact on the family and state is very high. Presently estrogen is not recommended for primary or secondary cardio protection. However when used in younger postmenopausal women for menopausal symptoms it is beneficial in preventing CHD.

## 2. Post-menopausal Osteoporosis when & how to intervene

**Dr. Mangala Dissanayake**

*Base Hospital Panadura*

Osteoporosis is an asymptomatic disease generally presents as a fragility fracture. Almost half of all postmenopausal women will have an osteoporosis related fracture during their life span. Typical fragility fractures are found in hip, spine and wrist. Vertebral and hip fractures are associated with increased long term mortality and 50% women with hip fractures never regain their functional independence.

Osteoporosis should be diagnosed when the bone mineral density (BMD) corresponding T score is equal or below - 2.5 or when patients have a history of atraumatic fracture. Although BMD is very specific it lacks the sensitivity ( $\pm 50\%$ ) to identify those at risk of fracture, hence treatment strategies cannot be based only on T Scores. Fracture risk is determined not only by BMD but also by bone quality which is difficult measure in a clinical setting. It is important to realize that most of the fragility fractures occur in non-osteoporotic group and factors other than BMD influence the fracture risk. Clinical risk factors can be used to assess the fracture risk with or without BMD. FRAX tool has incorporated risk factors to determine the fracture risk and it is more effective in conjunction with BMD.

Screening and early diagnosis of osteoporosis is essential and timely management will prevent the associated morbidity and mortality. Osteoporosis screening of large scale whole population groups is unlikely to be cost effective, so more selective and targeted screening for disease detection is advocated. Most guidelines recommend using risk factors to select patients for BMD testing specially women between ages of 50-65 years. Frequency of screening and identification of subgroups for which screening is most effective remains unclear.

## 3. Psychological changes in menopause

**Dr. Buddhi Jayasekara**

*Base Hospital Puttlam*

Psychological changes are common in menopause either due to hormonal changes itself or the somatic and social problems as a result of the same. It's important to differentiate depression from normal adaptive reaction as well as dementia from cognitive decline of old age. From a more psychosocial point of view, the menopausal transition has been traditionally identified as a non-adaptive event, during which women are at risk of losing a "major role": maternity. Thus, the "empty-nest syndrome" (when children leave home) was proposed as a psychosocial cause of psychological symptoms manifesting during the menopausal transition. The relative validity of this theory has been questioned. Conversely, more psychologically healthy women would consider this period an opportunity to expand work/social activities, and to

dedicate more time to the marital relationship.

Insomnia inadequate physical activity leads to significant problems during this age thus sleep hygiene stress management, exercise and balanced diet are of paramount importance.

Mental illness can keep menopausal person from relating to her family and friends and prevent taking care of other people in their life as well as make it hard to do their work and even put her life at risk.

## Symposium 7: Helping Vulnerable Women

### 1. How we look after our "Pregnant Children"

**Dr. Janaki Karunasinghe**

*Colombo South Teaching Hospital*

Obstetricians are managing pregnant children (teenagers) clinically but they have very little knowledge about their social and psychological deprivation. Especially those who are unmarried and in probation homes are unfairly affected socially and psychologically.

Presently there are two non-governmental organizations registered with the department of probation in the western province to facilitate these children. As at end of May 2016, there were 23 children in these two homes. They were aged under 18yrs and all were having court cases. These children were look after well in these homes during both antenatal and postnatal periods.

Majority of them except one or two are going to give away their babies for adoption. For that they have to stay sometimes even 3 to 4 years; breastfeeding and looking after their babies depriving of continuous education and separating from their families. Eventually they are subjected to tremendous psychological harassment when babies are separated from them.

### 2. Forensic evaluation of sexually assaulted victim

**Dr. Sameera Gunawardane**

*Department of Forensic Medicine and Toxicology, Faculty of medicine, University of Colombo, Sri Lanka*

Forensic evaluation is a crucial part of the management of sexual assault victims which has distinctly different legal and ethical considerations than clinical examination and treatment. The purpose of any forensic evaluation is to determine the veracity of an allegation, assess the severity of the offence, providing evidence to courts and assisting courts to reach a verdict. Victims of sexual assault may present as direct referrals by Police or courts purely for forensic evaluation or they may present with genital injuries, pregnancy, sexually transmitted diseases or abortion-related complications where history and examination may reveal a sexual offence. Clinicians working in relevant units should be capable of identifying instances which amount to a sexual crime and should be aware of their medico legal and ethical duties in interviewing, examining, documenting, and reporting such cases.

Aspects which are often overlooked include, avoiding multiple interviews, being impartial and non-judgmental, avoiding multiple genital examinations, sample collection and maintaining a chain of custody. When asked to provide opinion on the interpretation of genital findings, due consideration should be given to all factors which can affect the appearance of genital lesions following a sexual act. These factors include the nature and morphology of the genitalia, the nature of the act, the degree

of resistance by the victim and the time period between the incident and examination. In recent years there has been much research on the pathophysiology of ano-genital trauma following sexual assault which has changed the way of interpreting the examination findings. Despite such research, many misguided social and cultural attitudes still influence the interpretation and opinions of medical experts when reporting to courts. The lack of evidence based practice, as well as the lack of a holistic and multidisciplinary management of sexual assault victims are two major drawbacks of the medical community in responding to the escalation of sexual crimes in Sri Lanka.

### 3. Gender-based violence: We can do much to help the survivors

**Dr. Lakshman Senanayake**

Abstract not available

## Symposium 8: Improving Outcome in Diabetes Complicating Pregnancy

### 1. Screening

**Dr. Asanka Jayawardena**

Abstract not available

### 2. Strategies of blood sugar control

**Prof. Chandrika Wijeyaratne**

*De Soysa Hospital for Women, Sri Lanka*

Poorly controlled maternal glycaemia is reflected in maternal and fetal morbidity and mortality, with improved outcomes reliant on early detection and tight glycaemic control through the pregnancy. The recommended capillary blood glucose values are: preprandial glucose <95 mg/dl (5.3 mmol/l), 1-h postprandial glucose <130 mg/dl (7.2 mmol/l), and 2-h postprandial glucose <120 mg/dl (6.7 mmol/l) with targeted HbA1C <6%. In situations that glycaemic control is not easily achieved (e.g. severe insulinopenia and other patient factors), even a minor improvement can be beneficial although very low target glucose values (<87 mg/dl) are also associated with increased rates of intrauterine growth retardation.

Medical nutrition therapy (MNT) – is the essential first multidisciplinary step which requires attention to maternal weight, socio-cultural issues and a commitment to achieve an effective patient behavior change with emphasis on patient self-management. Achieving normoglycaemia with MNT alone, a fasting ketonuria with caloric restriction and the benefits of physical activity through moderate exercise programs for appropriate subjects will also be discussed.

Case-based approaches to pharmacotherapy for elevated fasting and post-prandial glucose levels while on optimal MNT using insulin (regular and analogues) regimens and oral hypoglycaemic agents (viz. metformin) will be discussed. The logistics of blood glucose monitoring and their relationship to materno-fetal outcomes, along with intra-partum and postpartum assessments will also be addressed.

### 3. Obstetric outcome

**Dr. Pradeep De Silva**

*Colombo North Teaching Hospital, Ragama, Sri Lanka*

Abstract not available

## Symposium 9: Translation of New Research into Practice - Foetal Medicine

### 1. Still birth: Prediction by first & second trimester biomarkers

**Dr. Chandana Jayasundara**

*Teaching Hospital, Peradeniya, Sri Lanka*

Still birth can be defined as death of a fetus after 22 weeks of gestation on if the gestation is unknown; the fetal weight more than 500 grams. Stillbirth affects about 1:200 pregnancies and is a devastating experience for the pregnant woman and her family as well as the caring Obstetrician. Predicting stillbirth has been a challenge as most of the factors that predicts stillbirth has a low positive Predictive Value, and the treatment options once predicted remains limited to early delivery of the fetus which itself carries high neonatal morbidity and mortality.

First and second trimester biomarkers done for Down's syndrome screening has shown to have a predictive ability in stillbirth when congenital anomalies and aneuploidies are excluded. Of these PAPP-A and free beta hCG in the first trimester and the AFP, hCG, unconjugated Oestriol and inhibin A in second trimester have different predictive abilities of stillbirth and will be discussed in detail. The problems associated with using these biomarkers to predict stillbirth are, though these tests has a significant relationship with stillbirth the sensitivity and the positive predictive value of these tests are low and not suitable in isolation as tools for screening for stillbirth risk. The future lies on inventing combine test to predict stillbirth risk and finding better ways of managing pregnancies when there is a high risk of future stillbirth.

### 2. Prediction of fetal distress at labour at term

**Dr. Tiran Dias**

*Colombo North Teaching Hospital, Faculty of Medicine  
University of Kelaniya, Sri Lanka*

"Fetal distress", commonly described by fetal hypoxia or compromise of the fetus during antepartum or intrapartum period, adversely affects the fetal outcome during pregnancy. Ability of early detection of fetal distress therefor improves fetal outcomes.

Recent studies have proven that cerebroplacental ratio (CPR) can be used to predict / detect fetal distress. Moreover various biophysical and bio chemical markers (soluble fms-like tyrosine kinase-1 and estimated foetal weight) have also been effective in the detection of fetal distress in labour.

### 3. Prediction of pre-term birth : History & cervical length

**Dr. Iresha Mampitiya**

*Obstetrics and Gynaecology, Department of Obstetrics & Gynaecology, Faculty of Medicine, University of Ruhuna,  
Galle, Sri Lanka*

The incidence of preterm birth, defined as onset of labor between 24 to 37 completed weeks continues to rise even in the developed world. Approximately 10% of Sri Lankan babies are born preterm. Spontaneous preterm birth is often associated with infection/inflammation and preterm, prelabour rupture of membranes. It is the leading cause of perinatal morbidity & mortality and long term disability.

Cervical insufficiency, defined as the inability of the cervix to retain a pregnancy in the absence of contractions or labour. The incidence of true cervical insufficiency has been estimated to be 1%. Women with inherent cervical weakness are difficult to identify. As a result cervical insufficiency is a diagnosis often made retrospectively after a woman has had a second trimester miscarriage or spontaneous preterm birth. Some have other risk factors like cervical disease resulting from congenital disorders (diethylstilbestrol [DES] exposure) and surgical or cervical trauma (surgical termination of pregnancy, repeated dilatation and curettage, loop electrosurgical excision procedure [LEEP], cold knife conisation, trachelectomy).

## Symposia 10: Endoscopy

### 1. Avoiding & managing complications of laparoscopic surgery

**Dr. Kumara Dissanayake**

*Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka*

During the last few decades the laparoscopic surgeries are playing a major role in diagnosis and surgical treatment for many gynaecological conditions. It has many advantages over the open surgery but it is not without complications. The incidence of overall complications varies from 1 to 12.5 per 1000 and depends on complexity of surgery and experience of surgeon. Avoidance of complications, its identification and timely management are utmost important in clinical practice.

Common Complications include the injuries to the gastro intestinal tract, genito urinary tract and blood vessels during the port entry and during the procedure, subcutaneous and pre peritoneal emphysema and shoulder tip pain. Rare complications are air embolism, pneumothorax, hydrothorax and cardiac arrhythmia. One of the late complication is port site hernia.

Avoidance of complications should start from appropriate patient selection and preparation, patient positioning, well trained laparoscopic team, instruments and procedure. Laparoscopic surgeons should also understand the principles of electro surgery and how to avoid complications arising from electrical energy during the laparoscopy. Early recognitions of complications and relevant management of complications with appropriate surgical input can minimize morbidity and mortality relate to laparoscopic gynaecological procedures.

### 2. Tissue retrieval in laparoscopic surgery

**Dr. C. D. Ekanayake**

*District General Hospital Mannar*

Laparoscopic surgery has many advantages over open surgery which include reduced post-operative pain, a shorter post-operative hospital stay, a faster convalescence and an improved quality of life. Due to these benefits there is a growing need to substitute operative laparoscopy for conventional open surgery.

However, appropriate specimen retrieval in laparoscopy remains a challenge especially in cystectomy for large ovarian cysts, myomectomy and hysterectomy.

The problems with specimen retrieval include issues due to spillage, time spent for retrieval and the cost incurred for the chosen method of retrieval. Dissemination of malignancy is a well-known complication due to inadvertent spillage. However even with benign pathology, problems can arise from spillage which includes chemical peritonitis in dermoid cysts and pseudomyxoma peritonei in mucinous cystadenomata. Remnants of fibroids can in rare instances cause parasitic leiomyomas, endometriosis, peritonitis and even abscess formation. The size of the cyst, amount of solid components, underlying pathology, surgical expertise and route of retrieval are factors that affect spillage. Duration of surgery is an independent risk factor for venous thrombo-embolism and as such the time spent for retrieval must also be justifiable. The cost of the chosen method for retrieval should also be financially viable.

One of the commonest methods is to use impermeable specimen retrieval bags. However commercially available bags are for single-use, and can be costly, often a limiting factor for a low middle income country like Sri Lanka. Although laparoscopic power morcellators gained in popularity there has been a sharp drop in its use in the recent past due to the inadvertent risk of morcellating an unsuspected uterine sarcoma that can lead to dissemination and upstaging of disease. Other routes of retrieval include enlarging the port site, mini-laparotomy and posterior colpotomy. Natural orifice transluminal endoscopy (NOTES) is a further enhancement of laparoscopy, in which the peritoneal cavity is accessed by incising and traversing a lumen of natural orifice which often overcomes problems associated with tissue retrieval.

Although colpotomy has been extensively documented in the past it has fallen out of favour due to an ill-perceived risk of technical difficulty, haemorrhage, sepsis, ureteric and rectal damage. It can be easily learnt and is generally safe as long as basic surgical principles, such as perioperative antibiotics and good haemostasis, are followed. In view of safety issues concerning morcellation and the relative cost-effectiveness, it is the method that can be recommended for the immediate to short-term future for Sri Lanka in terms of tissue retrieval in laparoscopy.

### 3. Indications & limitations of laparoscopic hysterectomy

**Dr. Dhammika Silva**

*Department of Obstetrics and Gynaecology, University of Sri Jayewardenepura*

Hysterectomies are one of the most common surgical procedures performed worldwide, with numbers greater than six figures each year. For decades, abdominal and vaginal approaches accounted for the vast majority of hysterectomies. The advent of better laparoscopic technology resulted in the first total laparoscopic hysterectomy (TLH) in 1989. Use of TLH has increased in the last 20 years in the light of development of technology and the surgical skills of the dedicated surgeons.

Although recent data have shown an increase in rates of minimally invasive hysterectomy, the majority of hysterectomies continue to be performed through abdominal routes. This is in spite of a strong evidence supporting that laparoscopic hysterectomy are associated with less infectious morbidity, shorter hospital stay, minimal disability and faster return to normal activity than abdominal hysterectomy. Based on these findings, laparoscopic

hysterectomy should be recommended over the abdominal route when possible.

Determining surgical candidacy and selecting the appropriate route of hysterectomy are decisions made at the time of patient evaluation in the clinic setup, and can be limiting factors to offering a minimally invasive approach. Indications for a TLH are similar to those for total abdominal hysterectomy (TAH) and may include leiomyoma, pelvic organ prolapse, and abnormal uterine bleeding. TLH may also be indicated for resection and debulking of both malignant and premalignant disease, as noted by extensive case series in the gynecologic oncologic literature.

With a structured approach to the patient, once counseled regarding alternatives to hysterectomy and that gynecologic malignancy has been ruled out, if capable in logistics and surgical skills, laparoscopic hysterectomy is always superior to open abdominal approach.

When adding new surgical skills or increasing the difficulty of procedures performed using a less invasive approach, it is best to select patients with presentations that optimize the likelihood of successful completion of the planned surgery and then gradually move toward more challenging cases.

As one of the leading institutions of performing advanced laparoscopic surgeries in Sri Lanka, University Gynaecology Unit in Colombo South Teaching Hospital, we have performed more than 200 laparoscopic hysterectomies for last four years. Among these the difficulty level of the surgery ranges from straight forward TLH to hysterectomies in patients who having significant degree of adhesions such as grade IV endometriosis to radical hysterectomies in selected cases of patient's with gynaecological malignancies.

## Symposium 11: Improving Antenatal Care

### 1. Rituals in antenatal care

**Dr. Dinuka Lankeshwara**

*District General Hospital, Ampara, Sri Lanka*

A ritual is defined as a religious or solemn ceremony consisting of a series of actions performed according to a prescribed order. Rituals and ceremonies flourish in every culture, and have done so throughout history. Among several ritual-inspiring events in life birth and death are in forefront. It is evident that some of these rituals are valued beyond their mythology and have been proven to be effective with recent scientific evidence.

Birth practices have undergone modernization over several decades. However, it seems that the birthing process is regaining its shape with more emphasis on leaving the nature to take its course. A low intervention natural birth is becoming the norm. Several examples are evident where ancient practices have been supported by new evidence. Selective ephysiotomies, feeding during labour, ambulation during labor and changing birthing positions are some of those. Women have begun to reclaim their autonomy in the birth process. The paternalistic approach of medical care is changing and the patient centered care with a greater value to autonomy is being emphasized.

Rituals in maternity care were forgotten with changed women's expectations of childbirth, improved pain management options, modern economics and the system of healthcare along with the technology used during pregnancy and birth. For many of us in modern world enacting rituals as part of an ordinary pregnancy and birth may sound strange, as we are often removed from

spiritualizing our experiences. While these encounters can enrich our experiences, taking a closer look can help us understand the underlying ideologies and cultural messages these rituals convey.

### 2. Pregnancy & obesity

**Dr. Ranil Jayawardane**

*Faculty of Medicine, University of Colombo*

Obesity is one of the common non-communicable diseases all over the world. The prevalence of obesity has reached to epidemic level among Sri Lankan adults especially in women. Being obesity increases the risk of complications for pregnant women and their babies. Such as Gestational diabetes, Preeclampsia, Sleep apnea and several fetal complications. Although radical weight loss program is not recommended during pregnancy, satisfactory weight gain will lead for optimal pregnancy outcome.

Traditionally, pregnancy is considered as a period for over consumption of foods to support both mother and baby. However, excess calorie consumption during pregnancy in obese mothers is not recommended. Dietary advices during pregnancy should be modified according to mother's pre-pregnancy body weight and rate of weight gain during pregnancy.

### 3. Near miss inquiry in maternal care

**Dr. Kapila Jayaratne**

*Family Health Bureau, Ministry of Health, Sri Lanka*

**Introduction:** Sri Lanka reports a low level of maternal mortality on par with high-income countries. The country reports 100 - 120 maternal deaths annually. With low levels of maternal deaths, further improvements of care for the pregnant women can be done by reviewing severe maternal morbidity. Maternal near-misses function as surrogates of maternal deaths. Maternal near-miss refers to a woman who nearly died but survived a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy. With the objective to ascertain the incidence and the management of severe maternal complications, we did the study in a selected network of health facilities in Sri Lanka.

**Methods:** The study was conducted as a component of the WHO Multicountry survey on maternal and newborn health. We selected 14 health facilities in the Western, Southern and Eastern provinces in Sri Lanka based on a multistage cluster sampling method. The study sample included all women giving birth, maternal deaths up to the seventh postpartum day and women with organ dysfunction related to pregnancy (i.e. the life-threatening conditions) regardless of the gestational age and delivery status. We collected information from medical records and no patient interviews were conducted. We used the WHO near-miss criteria to assess the occurrence of severe maternal complications and to compute outcome indicators and potentially confounding factors.

**Results:** From 14 health facilities in seven districts, 18,129 women were recruited and 17,988 live births were reported. Mean age of study sample was 28.3(SD 5.7) years. At least one major pregnancy complication was reported by 862(4.8%) and of them (n=75,8.7%) had organ dysfunctions. Obstetric haemorrhage was the commonest complication (n=354,2%), followed by hypertensive disorders (n=233,1.3%) and heart disease (n=124,0.68%). Commonly required interventions were oxytocin for post-partum haemorrhage (n=201, 23.3%) and

transfusion of blood products (n=183,21.2%). Maternal near-miss ratio and intra-hospital maternal mortality ratio was 405.8 and 16.7 per 100,000 live births. The estimated severe maternal outcome ratio was 423 (95%CI 328-517) per 100,000 live births.

Conclusions: For each maternal death, an estimated 11 cases of maternal near-misses are reported. The study shows the implementation status of critical life-saving interventions in Sri Lanka. Moving from maternal deaths to near-misses would provide more opportunities to improve service delivery. Markers of severe maternal morbidity can be incorporated into routine data collection systems and will provide a standardized evaluation of quality of care in health facilities.

Research outcome into Practice: Based on the experience gained, a national maternal near-miss surveillance was started in the country from January 2016. Inputs were obtained from professional colleges representing obstetricians, anaesthesiologists, physicians and administrators. Structured data collection formats were developed, guidelines disseminated and key stakeholder workshop was conducted. At present, Family Health Bureau is receiving data from 74 specialized hospitals throughout the country.

## Symposium 12: Perinatal Health

### 1. Improving the neurological outcome of the new born

**Dr. M.R.M. Rishard**

*District General Hospital Kilinochchi*

Brain injury occurring during the antenatal and perinatal period is a common cause of life-long neuro-logical disability. The etiology of brain damage is complex and multifactorial. Many neonates survive major insults without any evidence of impairment because of the plasticity of the developing brain and improvements in medical care. However, in some newborn babies, insults can cause varying degrees of long term neurodevelopmental impairment.

Genetic background, maturational age, sex and degree of brain development of particular regions affect vulnerability and the mechanisms of brain injury. Various sociocultural, environmental, medical and genetic factors may influence the outcome of such insults.

Whatever the mechanism, the consequences can be serious and become a major socioeconomic burden. This is even worse in limited resource settings. Many interventions have been successfully introduced to minimize brain damage and improve neurodevelopmental outcome of the newborns. Some of the interventions should begin preconceptionally at the community level. However, most of these interventions are centered around the management of preterm births as prematurity is the leading cause for poor neurodevelopment in neonates.

It is imperative that ensuring safe and judicious intrapartum care would also help to deliver neuro-logically intact newborns. Obstetricians practicing in limited resource settings must equip themselves with current knowledge and necessary skills to improve the neurological outcome of newborns.

### 2. Optimizing management of hypoxic ischaemic encephalopathy

**Dr. Saman Kumara**

*CSHW, Colombo*

While the management of babies with HIE has become a very sanative process, the therapy with hypothermia has emerged as its novel therapy in the developed world. Three large multicenter trials from industrialized countries and 3 independent meta-analyses have shown the efficacy of therapeutic hypothermia in reducing death and disability following neonatal encephalopathy due a perinatal hypoxic event. Many neonatal units in the developed world now offer hypothermia as standard care in neonatal encephalopathy. However, there are no enough data from low resource setting. Therefore these results cannot be extrapolated to low resource settings due to differences in population, risk benefits and high cost. Though this statement is applicable to many centers in the south East Asia, our standard for neonatal care in Sri Lanka is different and much better. Use of therapeutic hypothermia in low resource settings should be considered experimental and should therefore be restricted to well-equipped level 2 and 3 neonatal units. The safety and efficacy of hypothermia using novel low technology methods need to be examined in rigorously controlled multicenter randomized controlled trials in these neonatal units before it can be offered as a standard care as the risks may outweigh the benefits. On the other hand, we have produced good results with passive hypothermia though the number is not adequate to analyze statistically. But it may be a good clue that therapeutic hypothermia works equally well in our set up as well.

### 3. Improving long term outcome for the compromised baby

**Dr. Saraji Wijesekara**

*Professorial Paediatric Unit, Teaching Hospital Colombo South*

Babies are compromised at birth due to causes such as hypoxic ischaemic encephalopathy/neonatal encephalopathy, prematurity, meconium aspiration, group B Streptococcal infection, and diabetes in mother, maternal drug abuse and alcoholism. Most of these babies are nursed at special care baby units for a variable duration of time.

Although the immediate complications of these babies are managed in the special care baby units the long term outcome remains questionable if timely intervention does not occur.

The current concept of early intervention in the compromised baby has been globally recognized over the last decade. The importance of rehabilitation within the first years of life has been highlighted to improve the long term neurodevelopment outcome of these babies.

Early intervention strategies involve multi-disciplinary approach incorporated into the daily family routines. The community health care workers, social services and special education playing a major role while the medical and paramedical teams initiate and continue their management.

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*Jayawardena GRMUGP, Sumathipala WLDS, Guruparan K, Gamage RS, Ratnasiri UDP*

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*Wickramasinghe WMRPTB, Senanayake HM*

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*Jayasinghe SA, Wijeyaratne CN, Jayawardane DBIA, Kariyawasam CM, Perera MRL*

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*Jayawardane DBIA, Kariyawasam CM, Hemachandra DKNN;Samaranayake DBDL, Lucas MN, Wijeyaratne CN, Jayasinghe SA*

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*Jayasinghe KS, Kulatunga S, Vathana M, Liyanapatabandi D*

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*Banagala CSM, Karunaratna SMG*

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*Pieris KVM, Prasanga DPGGM, Dias TD, Palihawadana TS, Motha MBC, De Silva HJ*

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*Heenatigala CSN, Gunathilaka SNMPK, Dias TD, Palihawadana TS, Motha MBC, De Silva HJ*

**OP51: Validation of the Tamil translation of the International Consultation on Incontinence modular Questionnaire on Vaginal Symptoms (ICIQ-VS)**

*Ekanayake CD, Wijesinghe PS, Pathmeswaran A, Samaranayake KU, Herath C, Nishad AAN*

**OP52: Validation of the Sinhala translation of the International Consultation on Incontinence modular Questionnaire on Vaginal Symptoms (ICIQ-VS)**

*Ekanayake CD, Patabendige M, Wijesinghe PS, Pathmeswaran A, Herath RP Weerasinghe N*

**OP53: Outcome assessment of total abdominal hysterectomy versus ascending vaginal hysterectomy**

*Wasantha K, Sardha H, Sampath G*

**OP54: Perception, pain score and operator feasibility between traditional method verses ring pessary inserter and retriever in periodic vaginal ring pessary replacement – A descriptive cross sectional study**

*Silva KCDP, Jayawardane MAMM, Samarawickrama NGCL, Senadeera D, Withanathanrthige MR*

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## ABSTRACTS OF FREE COMMUNICATIONS

### OP1: Patient satisfaction on management of ectopic pregnancy – An audit carried out in Professorial Gynaecology Unit, Colombo South Teaching Hospital, Sri Lanka

*Withanathantrige MR, Silva KCDP, Jayawardene MAMM, Samarawickrama NGCL, Jayasundara PGCM*

*Professorial Gynaecology Unit, Colombo South Teaching Hospital, Sri Lanka*

Incidence of ectopic pregnancy is static at 11.1/1000 pregnancies. With advancement of diagnostic techniques & increased awareness of health care providers, the morbidity and mortality ratios are extremely satisfactory at present. But these management approaches should be tailored to individual patients since their expectations and health related issues may not fulfilled even with optimum management.

**Objectives:** To assess patient satisfaction over receiving information about the condition, adequacy of counseling regarding management options and satisfaction about overall care received and to assess the factors which influence patient satisfaction over the management of ectopic pregnancies.

**Design, setting and method:** Data obtained from the ectopic register maintained in University academic unit, Colombo South Teaching Hospital. Self-administered questionnaire design to assess patient satisfaction was completed on discharge from hospital (n=87) who had inward care, between January 2015 and April 2016.

**Results:** Overall 81% of patients satisfied with information they received about their condition. Satisfaction for counseling sessions was 68%, whereas 26% were not satisfied. 6 % not answered. While 72% satisfied with the overall care, 23% stated it was unsatisfactory. Similarly higher satisfaction scores were noted when average monthly income was <20,000 rupees, Educated up to O/L, symptomatic patients, counseling by a senior doctor and patients who received surgical management. History of subfertility was strongly associated with patient dissatisfaction.

**Conclusion:** Overall there was a good patient satisfaction about the comprehensive management approach of ectopic pregnancies. It is highlighted that to improve patient satisfaction health care providers should consider other socio demographic factors as well.

### OP2: Tubal Ectopic Pregnancy: A review of cases in a tertiary center during a calendar year

*Wijewardene G, Bandara HMST, Jayasundara DMCS, Kalaimaran P*

*Professorial Obstetrics and Gynaecology Unit, Teaching Hospital, Peradeniya*

**Objective:** Tubal ectopic pregnancies still continues to be an important contributor to maternal morbidity and mortality in Sri Lanka; Analysis of ectopic pregnancies management will enable to improve the overall morbidity associated with ectopic

pregnancies. The objective of this descriptive study was to analyze the management of all the ectopic pregnancies presented at a tertiary care center in a calendar year.

**Design, Setting and Methods:** This was a descriptive study conducted at the Teaching Hospital, Peradeniya. All the patients presented with suspected ectopic pregnancies were analyzed retrospectively and data entered in a data entry sheet and analyzed.

**Results:** There were 14 patients with suspected ectopics of which 9 were true ectopics and 4 did not have ectopic pregnancies and 1 was a tubal abortion. Mean age of presentation was 33.3 years and mean gestation was 47.4 days. Risk factors were identified only in 50% of the patients. Among the diagnosed ectopics 11% were managed medically, 4 (44%) managed by laparotomy and 4 (44%) managed laparoscopically. Of the 8 patients managed surgically one underwent salphynxostomy and others had salphynxectomy. 3 (33%) of the patients presented as ruptured ectopics. 4 patients needed blood transfusions.

**Conclusion:** Ectopic pregnancies are a common gynaecological casualty admission and some women present fairly late with ruptured ectopic, routine availability of laparoscopy even at off working hours will improve patient morbidity. Medical management is still not widely in most units and should be encouraged to be done when indicated.

### OP3: Prophylactic use of antibiotic for incomplete and missed miscarriage, prior to medical and surgical management: A randomized controlled trial

*Prasanga DPGGM, Rathnayaka C, Gunathilaka SNMPK*

*Gynaecology and Obstetrics Professorial Unit, Teaching Hospital, Peradeniya*

**Introduction:** Miscarriage is a common gynaecological problem in day today practice. Post miscarriage care is a challenging area coming under reproductive health. Prevention of pelvic sepsis is a main component in post miscarriage care. Effective antibiotic prophylaxis at the time of treatment for incomplete & missed miscarriage may be the answer for it. But in current practice, there is conflicting evidence and no clear guidance for the necessity of antibiotic prophylaxis.

**Objective:** To determine the effectiveness of prophylactic doxycycline use, prior to surgical and medical evacuation of incomplete and missed miscarriage, in view of reducing the post-operative pelvic infections.

**Design:** A randomized controlled trial

**Setting:** Professorial Gynaecology Unit, Teaching Hospital, Peradeniya.

**Method:** Three hundred and ninety four patients randomized to two groups. One group (n=200) received 200mg doxycycline single dose and the other group (n=194) received placebo single dose, one hour prior to the medical and surgical management. Post procedure pelvic infection was assessed by five clinical

parameters within three days and two weeks later. SPSS used for data analysis.

**Result:** There were no statistically significant differences in the age, parity, number of children and POA in between the doxycycline and placebo groups. Post intervention pelvic infection was diagnosed 4% in the doxycycline group and 6.18% in the placebo group within three days, which was not statistically significant ( $P=0.367$ ). It was 4.5% and 8.7% for doxycycline and placebo treated groups respectively at two weeks. It was also not clinically significant ( $P=0.104$ ). There was no statistically significant difference in the type of miscarriage or the type of interventions in between the two groups.

**Conclusion:** The study revealed that antibiotic prophylaxis prior to medical and surgical management of miscarriage was not able to achieve a statistically significant reduction in post intervention pelvic infection.

#### OP4: Low implantation of intrauterine pregnancy in early first trimester-Case series

**Lehwal TM, Wijesekara WDNT, Rajapakse DSD, Rodrigo WN**

*Fetal Medicine Clinic, Asiri Surgical Hospital, Colombo, Sri Lanka*

**Objective:** To assess the diagnosis, management and final outcome in high risk pregnancies which commenced as low implantation of gestation sac.

**Method:** 49 cases of high risk pregnancies were detected during the period of five years from 2011 – 2016. Low implantation of the gestation sac was identified in the initial trans vaginal ultrasound examination at 5-7 weeks of POA with a 3D ultra sound machine by a fetal medicine specialist. Low implantation was reconfirmed by an independent fetal medicine specialist. Implantation in the previous caesarean site and cervical region was excluded. Pregnancies were followed up with serial ultrasound scanning including Doppler studies until final outcome.

**Results:** Commencement of pregnancy as low implanted gestational sac showed significant association with bad outcome of pregnancy. In this group 40% of pregnancies showed IUGR (small for gestational age.) Threatened abortion rate was 26.5%. Miscarriage rate was 20.4%. Preterm delivery rate was 24%. Low birth weight (<2.5kg at term) rate was 28%. 4.1% of pregnancies ended up as IUD (<28 weeks of POA).

#### **Conclusion:**

1. Low implantation of gestation sac should be accurately detected in early first trimester (before 8 weeks).
2. Unfavorable pregnancy outcomes such as, IUGR, threatened abortion, miscarriages and sudden IUD should be anticipated and patients have to be counseled about poor outcome.
3. High risk management should be offered to these patients.
4. Further studies are necessary to identify a link between low implantation and sub fertility where wide use of assisted reproductive techniques enabled to achieve a pregnancy.

#### OP5: The factors affecting the outcome of frozen thawed embryo transfer cycles

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**Objectives:** To determine the clinical and embryological factors which affect the outcome of frozen thawed embryo transfer cycles (FET).

**Methods:** A retrospective descriptive study was carried out at Vindana Reproductive Health Centre, Colombo-07 which includes all FET cycles carried out between May 2011 to May-2015. FET cycles done using donor oocytes were excluded.

**Results:** Out of 278 FET cycles carried out during May 2011 to May 2015, 233 FET cycles were included in the study. 45 FET cycles done using donor oocytes were excluded. Mean age of the study population is 34.75 (Range 21-41). Total of 1970 embryos were frozen out of which 918 were thawed with a survival rate of 62.74%. Mean duration of cryopreservation was 201.5 days (Range 39-1046). 497 embryos were transferred with a transfer rate of 86.28%. Overall clinical and chemical pregnancy rates per each FET cycle were 34.3% ( $n=80$ ) and 7.3% ( $n=17$ ) respectively. Out of 80 clinical pregnancies 64 ended up being live births with a live birth rate of 27.46% per each FET cycle. Out of 497 transferred embryos, 93 gestational sacs were observed with an implantation rate of 18.72%. Higher clinical pregnancy rates were observed in cycles which stimulated with antagonist protocol, had a previous positive fresh cycle beta-hCG level, fertilization achieved using intracytoplasmic sperm injection and endometrial thickness more than 8mm on the embryo transfer day but these differences were not statistically significant ( $p>0.05$ ).

**Conclusion:** Out of all clinical and embryological factors, IVF protocol, previous fresh cycle beta hCG value, endometrial thickness on the day of embryo transfer and fertilization technique were the factors which affect the pregnancy outcome of FET cycles.

#### OP6: Do Body mass index matters the medical management of first trimester missed miscarriage? An experience from the tertiary care hospitals

**Krishnapillai Guruparan, Ruwan Gamage, RNG Rajapaksha, S Sivasumithran**

**Introduction:** Missed miscarriage in the first trimester can be managed with the misoprostol per vaginal administration. The optimal dosage of misoprostol is still under debate. The 400 microgram and 600 microgram and 800 microgram were tried in the trials and proven effective. Our unit uses 600 micrograms of misoprostol per vaginally and the repeated doses administered if the first dose failed.

**Methods:** The mothers with confirmed diagnosis of missed miscarriage in the first trimester, without vaginal bleeding were selected to the study. Sample size 150. The height and weight measured and Body Mass Index (BMI) calculated. Misoprostol 600 microgram administered. 24 hours allowed for the responses and trans vaginal ultrasound scan (TVUS) performed. The endometrial thickness measured as less than 15 mm taken as successful medical management. Others were given another dosage of 600 microgram misoprostol. The mean BMI of

the responders to the first dose compared with the mean BMI of the mothers who are not responded to the first dose. Results: 63 mothers were responded to the first dose. 76 mothers responded to the second doses. 11 mothers who were failed with two doses of misoprostol were managed with surgical evacuation. The mean BMI of the responders to the first dose were statistical significantly lower than the non-responders to the first dose.

**Conclusion:** The BMI influences statistical significantly in the vaginal administration of misoprostol. The high BMI mothers may need higher dose of drug or repeated administration. The clinical significance of this finding need further research evaluations.

### OP7: Association of serum IFN- $\gamma$ , IL-10, nitrogen oxides, estradiol & progesterone levels in the success and failure of pregnancy

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**Objective:** To establish association of serum IFN- $\gamma$  (TH1), IL-10 (TH2/Treg), nitrogen oxides (NOx), estradiol and progesterone levels with pregnancy outcomes.

**Method:** Naturally conceived women with uncomplicated pregnancies, with no history of miscarriages in first trimester (T1, n=24), second trimester (T2, n=21), third trimester (T3, n=14) as well as during pre-labor (n=22) were recruited for the study. Non pregnant, fertile women served as controls (n=20). Women pregnant (1st trimester) via in vitro fertilization-embryo transfer (IVF-ET) also served as a test group which was divided into two categories according to their pregnancy outcome; successful (IVF-S, n=22), miscarried (IVF-M, n=22). Serum cytokine (IL-10, IFN- $\gamma$ ) levels and reproductive hormone levels were assayed using ELISA kits while the Griess test assayed NOx levels. Appropriate non parametric tests were used in data analyses.

**Results:** All pregnant groups showed significantly higher levels of IL-10 than the non-pregnant control group ( $P < 0.05$ ) with highest levels observed in T3. IVF-M group showed a significantly low IL-10 in serum than IVF-S and T1 ( $P < 0.05$ ). IFN- $\gamma$  concentrations detected in controls reduced with onset of pregnancy (T1), whereas in T2 and T3 IFN- $\gamma$  levels were not detectable. IVF-miscarried group had the highest IFN- $\gamma$  level. NOx concentrations aped that of IL-10 where concentrations peaked at T3. Also, significantly higher NOx levels were recorded in T1 than of IVF-S and IVF-M groups ( $P < 0.05$ ). Strong, positive correlations for estradiol and progesterone were evident for the control, T1 and T2 groups but not for T3.

**Conclusion:** High IL-10 and NOx levels were compatible with positive pregnancy outcomes, while high IFN- $\gamma$  levels were associated with miscarriages.

### OP8: Perinatal outcomes and maternal outcomes of assisted vaginal breech delivery at term in a single obstetric unit in Sri Lanka

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**Background:** Planned vaginal breech delivery at term is a controversial topic. The Term Breech Trial (TBT) brought forth evidence based data advocating caesarean delivery for breech presentation.

**Objective:** To compare the perinatal and maternal outcomes of assisted vaginal breech delivery and caesarean birth of breech presentation in a single obstetric unit over a one year period.

**Methods:** Retrospective data analysis was performed using descriptive statistics and Chi squared test. Statistical significance was calculated at  $p < 0.05$ . During the study principals of the Helsinki Declaration were followed and patient anonymity was maintained.

**Results:** A total of 39 breech presentations were assessed, with 14 (35.9%) delivered by planned caesarean section while 25 (64.1%) were delivered by planned vaginal breech delivery. Statistically significant differences in age, maternal height, weight or parity were not seen between the study groups. APGAR score in the initial 1 minute of life was significantly depressed in the vaginal breech delivery group compared to the caesarean section group; APGAR less than 7, 3/25 (12%) vs 0/14, APGAR less than 4, 1/25 (4%) vs 0/14 ( $p < 0.05$ ). The single foetal characteristic showing statistical difference between groups was the type of breech presentation of the foetus ( $p < 0.05$ ). No maternal complications were encountered in either group due to mode of delivery.

**Conclusion:** The study confirmed the absence of significant adverse neonatal or maternal outcomes in vaginal breech delivery compared to caesarean breech delivery.

### OP9: The effectiveness of Multiple versus once-only membrane sweeping in uncomplicated primi gravida at 40 weeks of gestational age in a tertiary care hospital, Sri Lanka: A randomized controlled trial

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**Objective:** To assess the effectiveness and acceptability of twice versus once-only membrane sweeping

**Methods:** A randomized controlled trial was conducted among 240 primi-gravida, with a singleton live fetus at 40 weeks of gestation had intact fetal membranes and a Modified Bishop's (MBS) score  $< 5$ . 120 participant were allocated to each group according to predetermined block randomization. Both group received ASOM at 40 weeks and the experimental group received additional sweeping after 48 hours. The MBS was assessed at 40+5 days. In two groups who did not go into natural labor at 40+5 days were managed according to the ward policy. Discomfort, pain, acceptability, perinatal, maternal and labour outcomes were assessed.

**Results:** A change of MBS was 67.3% (n=31 of 46) in experimental group and 57.5% (n=38 of 66) in control group ( $p = 0.21$ , OR=1.52, CI = 0.6 -3.34). The probability of the SOL in

experimental group was 61.6% (n=74 of 120) 45% in control group (n=54 of 120) (p=0.01, OR=1.966, CI = 1.17 – 3.28 NNT = 5.99). Recommending ASOM to another and accepting ASOM for subsequent pregnancy among two groups were comparable. Need of formal induction in experimental group was 38.4% (n=46 of 120) in control group was 61.6% (n=66 of 120) (p=0.01, OR=0.5, CI= 0.3 – 0.8, NNT=6). Neonatal and labour outcome were comparable.

**Conclusions and Recommendations:** Twice sweeping of membrane reduced the need of formal induction and increases the chances of SOL at 40+5days. Acceptability of twice sweeping is not different from sweeping once. We recommend multiple membranes sweeping as first line for women at 40 weeks.

**Key words:** ASOM, SOL, Induction, acceptability

## OP10: An audit on duration of labour and post-partum haemorrhage at Sunshine Hospital - Melbourne, Australia

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**Objective:** To evaluate if duration of labour was a cause for primary post-partum haemorrhage (PPH).

**Method:** An audit on all deliveries excluding elective caesarean sections for the year 2015 in the Department of obstetrics at Sunshine hospital, Melbourne, Australia. PPH was defined as a blood loss of more than 500ml.

**Result:** A total of 4187 patients were included and of them 1051 (25.1%) had PPH and 298 (7.1%) had a PPH exceeding one litre. PPH numbers and % in vaginal deliveries 541/3012 (17.96%), forceps 145/363 (39.94)%, Kiwi 46/216 (21.3)% and emergency LSCS 319/596 (53.52)%. Basic characteristics of the PPH and Non-PPH group were as follows; age 30.9 (30.6-31.2), parity 0.87 (0.82-0.95), BMI-26.75 kg/m<sup>2</sup> (26.36-27.14) versus Age 30.6 (30.4-30.8), parity 1.06 (1.0-1.1), BMI 25.8 kg/m<sup>2</sup> (25.5-26.0) respectively.

The duration first stage of labour in nulliparous patients with PPH was 10 hours and 24 min (9hrs+52 min-8hrs+25 min) versus 8 hrs and 44 min (8hrs+25min-9hrs+4min) in the non-PPH group. The second stage of labour in the PPH group was 50.4 min (48.6 -51.6) versus 37 min (36.18-38.22) in the Non-PPH group. There was no significant difference in the third stage.

The duration first stage of labour in multiparous patients with PPH with was 5 hours and 50 min (5hrs+25min-6hrs+16min) versus 4 hours and 59 min (4hrs+48min-5hrs+11min) in the non-PPH group. There was no significant difference in second and third stages.

**Conclusions:** Duration of first stage of labour was strongly associated with PPH. Interestingly there was no association between PPH and second and third stages in multiparous women.

## OP11: Term versus preterm induction of labor: Does it change the outcome?

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**Abstract:** Induction of labour is important to timely deliver the fetus and minimize adverse perinatal outcomes to both the mother and the neonate. Therefore, comparison of the outcomes following induction of labour at term and preterm is invaluable to assess its benefits and detriments.

**Objective:** Compare fetal and labour outcomes following induction of preterm and term singleton pregnancies.

**Method:** This was a retrospective study carried out at North Colombo Teaching Hospital using North Colombo Obstetric Database (NORCOD) between March 2014 and May 2016. Six hundred and one singleton pregnancies that underwent induction of labour were included. Timing of induction of labor was categorized into preterm labor induction (<38 weeks) and term labour induction (38-42 weeks). Vaginal delivery rate and neonatal outcomes were compared.

**Results:** Out of 601 cases 18.5% (N=111) were induced preterm and 81.5% (N=490) were induced at term.

Vaginal delivery rates between the two groups were 71.2% (N=79) and 78.6% (N=385) (P>0.05).

Preterm induced deliveries had an APGAR <7 at 5 minutes in 3 babies (2.7%) and six term babies (1.2%) had an APGAR <7 at 5 minutes (P>0.05). Preterm induced pregnancies reported 28.8% (N=32) NICU admissions and term induced pregnancies had 14.9% (N=73) NICU admissions (P<0.05).

**Conclusion:** There's no significant difference in LSCS rates and low 5 min APGAR among two groups. However preterm induction significantly increases NICU admission of the newborn, which is expected due to the complications associated with prematurity of the newborn.

**Key words:** Preterm induction, Term induction, Labor outcomes, Foetal outcomes

## OP12: Effectiveness and Safety in keeping the intra uterine Foley catheter for 24 hours versus 48 hours for induction of labor (IOL): A Randomized Controlled Trial

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**Objective:** To compare the safety and effectiveness of keeping the intrauterine Foley catheter for 24hours versus 48hours for IOL.

**Method:** A RCT was carried out at DSHW, Colombo. Participants with singleton cephalic presentation with intact membranes and bishops' score of 5 or less at POG 40+5 were allocated to 24hours (n=107) and 48hours (n=94) intrauterine Foley induction groups. Pre-induction and post-induction CRP and Papanicolaou smears were carried out. Foley induction was done with aseptic precautions. Proportions of Spontaneous onset of labour (SOL) was compared. Placental histology for chorioamnionitis was carried out in those who experienced SOL. Apgar at 1min, 5min and 10 min, incidence of fever in neonates and SCBU admissions were compared.

**Results:** Thirty five (32.7%) experienced SOL in 24hours group, compared to 54 (57.4%) in 48hours group (mention p=<0.001, OR=2.78 CI=1.56 to 4.93). Ten (10.3%) in 24hours group, compared to 6 (6.7%) in 48hours group were found bacterial vaginosis in post induction Papanicolaou smears. Mean CRP increase was 4.08IU in 24hours group compared to 3.91IU in

48hours group. Among placentae, 5.7% in 24hours group and 11.1% in 48hours group were positive for chorioamnionitis. In 24hours group 8.4% babies and in 48 hours group 8.5% babies were found to have pyrexia. Compared to 16(15%) in 24hours group, 12(12.8%) in 48hours group were admitted to SCBU.

**Conclusions:** It was observed that significant difference in the onset of SOL when the Foley catheter is kept in for 48hours compared to 24hours. All other parameters evaluated, including infectious morbidity and neonatal outcome showed no significant differences.

### OP13: Use of prophylactic antibiotics for prelabour rupture of membranes at term early induction of labour - A randomized controlled trial

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**Introduction:** Prelabour rupture of membranes at term is associated with an increased risk of infectious related morbidity and mortality in mother and fetus. Available evidences on the necessity of prophylactic antibiotic are limited.

**Objectives:** To identify whether the use of prophylactic antibiotic; Cefuroxime in term PROM can reduce foeto-maternal and neonatal infections in early induction of labour.

**Study design:** Randomized controlled trial.

**Setting:** Professorial Obstetric ward of Teaching Hospital Peradeniya.

**Method:** Mothers with term pre-labour rupture of membranes who fulfill the criteria and consented were recruited.

Antibiotics were started after initial evaluation on one group(A); intravenous Cefuroxime 750 mg 8 hourly for 24 hours followed by oral cefuroxime 500 mg 12 hourly for 48 hours while no antibiotics to the other group(B).

Mothers were induced with oxytocin if labour was not started spontaneously by 12 hours of dribbling.

Development of chorioamnionitis, postpartum endometritis and neonatal infection were recorded.

**Results:** A total of 118 subjects were studied; 60 were in the intervention and 58 were in the control arm.

There were no statistically significant differences in age, BMI, period of gestation, proportion of primi gravida, durations of membrane rupture prior to participate, membrane rupture to delivery, labour, number of vaginal examinations, caesarean sections and birth weight in each group.

There were no significant differences in chorioamnionitis (A: n = 60, 1.67%, B: n = 58, 3.45%, OR-0.47, 95% CI 0.04-5.27), post-partum endometritis (A: n=60, 0%, B: n=58, 3.45%, OR - 0.19, 95% CI 0.01-3.88 ) and neonatal sepsis (A: n=60, 1.67%, B: n=58, 5.17%, OR-0.31, 95% CI 0.03-3.02) in the two groups.

Post-partum sepsis was not reported in both arms.

**Conclusion:** The study was unable to demonstrate any significant benefit of prophylactic antibiotics in mothers with term prelabour rupture of membranes on any of its outcome measures with early induction of labour.

### OP14: Evaluation of 'Decision to Delivery Interval' for Emergency Caesarean Sections in a Tertiary Care Centre

**Dr. MS Dangampola, Dr. PKI Wijegunawardana, Dr. AKP Ranaweera, Prof. HMS Senanayake, Prof. A Kaluarachchi**

**Objective:** To evaluate the decision to delivery interval in Category I and Category II emergency caesarean sections (LSCS) in ward 03 De Soysa Hospital for Women.

**Method:** From 1st October 2015 to 31st of January 2016 all emergency LSCS were included in the study. Category III and elective LSCS were excluded from the study. Descriptive statistics were used to analyze the data and results were expressed in percentages.

**Results:** From 55 emergency LSCS 27 Category III LSCS and 1 LSCS which no proper indication was documented were excluded. 27 Category I and Category II LSCS were selected for the study. From 09 Category I LSCS 77.7% (n = 07) were due to fetal distress, and 22% (n = 02) were due to failed instrumental delivery. For Category I emergency LSCS average decision to delivery interval was 44 minutes (ranging from 26 minutes to 60 minutes), 14% (n=01) were performed within 30 minutes. For category II emergency LSCS, average decision to delivery interval was 63.7 minutes (ranging from 35 minutes to 120 minutes), 73% (n=11) were performed within 75 minutes.

Decision to delivery interval was not documented in 18% (n = 05) of Category I and Category II caesarean sections.

**Conclusion:** Decision to deliver time for Category I LSCS was below the recommended standard of 30 minutes. However it was satisfactory for Category II LSCS which is 75 minutes. There was poor documentation in significant number of cases.

### OP15: A case of maternal death: A diagnostic dilemma following an unusual presentation of disseminated malignancy - Invasive duct carcinoma of the breast with no clinically palpable lesion

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**Introduction:** Breast Cancer is diagnosed in approximately 1/3,000 pregnancies, making it the second most common malignancy after cervical cancer. 'Pregnancy-associated breast cancer' (PABC) is defined as breast cancer diagnosed during pregnancy and up to one year post-partum, and is expected to rise as more women delay childbearing. The clinical diagnosis is already difficult due to physiological changes of pregnancy. When coupled with unusual presentations it renders a huge diagnostic challenge to the physician. We present an unusual case presented with chronic renal failure, later diagnosed to have disseminated malignancy posthumously.

**Case report:** A 29 year old para 3 with an unplanned pregnancy presented with lower back pain, B/L leg edema and vaginal bleeding at 23 weeks of POG. On admission she was haemodynamically stable, uterus was soft and non tender. Ultrasound scan revealed a single viable fetus, with a fundal placenta and there was no retro-placental bleeding. Subsequently she developed High BP (170/ 90), albumin became positive (++) and was managed as Pre-eclampsia. Her renal functions were grossly deranged (Scr -527(60-120)  $\mu\text{mol/l}$ , Bu - 22.4 mmol/l, eGFR-

14) with low hemoglobin (Hb – 5.2 g /dl). USS - KUB revealed Parenchymal Renal disease with B/L hydro -nephrosis and hydro-Ureter, even though the cause for obstructive uropathy could not be established. She was haemo-dialyzed six times, transfused four pints of blood and B/L ureteric stenting has been attempted. She also had deranged liver enzymes (AST/ALT ↑ (305/205) but ALP, bilirubins, PT/INR, ANA and C3/C4 enzyme levels were all within normal limits. Montoux test as well as the viral studies for hepatitis was negative. Repeat USS with rising LFT showed coarse Liver echogenicity and pancreas, spleen was normal with no evidence of pelvic or para-aortic lymphadenopathy. USS – neck, following a clinically enlarged cervical lymph node did not reveal any abnormality. Thyroid and parathyroid glands were normal. Repeated clinical examinations of the breasts were normal. Due to deteriorating maternal status baby was delivered by a cesarean section at 31 weeks. Following delivery, deranged renal and liver profiles persisted and the Contrast CT was carried out to find the cause for obstructive uropathy. Following the contrast CT she passed away in the ICU with renal encephalopathy. Subsequent Post-mortem revealed disseminated malignancy with multiple peritoneal, para aortic, Liver and pelvic deposits. Her nephropathy was due to metastatic deposits compressing ureters causing obstructive uropathy and so does the elevated liver Enzymes with liver metastasis. Subsequent histopathology report showed an invasive Duct carcinoma of the breast possibly being the primary site.

**Discussion:** This patient initially was managed as pre eclampsia. Her clinical picture did not tally with and the subsequent altered renal profile showed CRF. Persistently high liver enzymes could not be explained satisfactorily and repeated radiological investigations were negative making a diagnostic dilemma. Possibility of a contrast CT had to be postponed due to her inability to tolerate contrast with the worsening renal functions. Even though there were no clinically palpable lesions she has had a highly invasive duct carcinoma of her left breast spreading silently giving rise to multiple symptoms due to metastatic deposits including obstructive uropathy.

**Conclusion:** PABC is a rare clinical situation Causing diagnosis treatment and the follow-up challenging to the physician. When coupled with unusual presentations it makes it even more difficult requiring an extremely vigilant multidisciplinary approach.

### OP16: A case of three synchronous female genital tract malignancies with dissimilar histology: the ovary, endometrium and the cervix

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*National Cancer institute Maharagama*

**Introduction:** All though the simultaneous development of multiple primary cancers in the upper female genital tract is a well known phenomenon, presence of more than two synchronous tumors is rare. Carcinoma of the ovary and the endometrium can occur simultaneously in about 5% of endometrial malignancies and about 10% of ovarian carcinoma. Though the diagnosis either as a separate primary or as a metastatic tumor is difficult, careful assessment of gross, histological and immunohistochemical features becomes helpful. We present a rare event of synchronous tumors of the ovary, endometrium, and cervix

**Case report:** A 53 year old mother of one, menopausal for four years presented with abdominal distension, abdominal

pain and loss of appetite for three months. USS Pelvis revealed a thick walled, multi-locular complex cyst measuring 9×8 cm, with cystic and solid areas arising from the right ovary. Her CA-125 was 267 u/l. Since she had a high RMI index underwent a staging laparotomy. She had a right sided mucinous ovarian cyst, omentum, undersurface of the diaphragm and liver was normal. There were neither enlarged pelvic or para-aortic lymph nodes, nor the evidence of pseudo-mixoma peritonei. She underwent hysterectomy, bilateral Salpingo-oophorectomy, Infra-colic Omentectomy and Appendisectomy. The histopathology report revealed a well differentiated mucinous cystadenocarcinoma of the right ovary. Endometrium showed a mixed type picture - adenocarcinoma with papillary glandular architecture and foci of endometrioid squamous differentiation and was infiltrating up to 20% of the myometrium. Histology of the cervix showed an adenocarcinoma of the endo-cervical type with early stromal invasion. The appendix, Omentum and the contra lateral ovary were devoid of malignant involvement. She is currently on follow up and completed her first cycle of radiotherapy.

**Discussion:** The synchronous origin of carcinoma confined to the ovary endometrium and cervix was an unusual condition and presents a diagnostic and therapeutic dilemma. Differentiation between metastatic diseases and synchronous tumors is important because it influences on cancer staging, management, and prognosis. Relatively early presentation in this lady helped in early detection and treatment. It is thought that patients with synchronous dual primary carcinomas may have a more favorable prognosis than that with advanced metastatic carcinomas.

### OP17: Robotic surgery for cervical cancer – Results from a single institution

*Kannangara SU, Madhuri TK, Tailor A, Butler-Manuel SA*

**Introduction:** Surgery for cervical cancer plays a role only in early stage of disease and includes pelvic node dissection along with surgery for the central tumour. A robotics program for gynaecological cancers was started in our institution in 2010 and the experience on robotic surgical procedures for cervical cancers is reported here.

**Materials and Methods:** Retrospective, observational study in Department of Gynaecological Oncology, Royal Surrey County Hospital, Guildford, UK with 2 surgeons in the years of 2011 and 2012. Patient demographics, intra and post-operative data were recorded. Smoking status was also ascertained at pre-operative assessment (POA).

**Results:** A total of 202 Robotic surgeries were carried out in the department. Out of these 59 procedures were performed for women with a cervical lesion requiring surgical management.

Median length of stay was 1 day. The age range of these patients varied from 23-75 with a median of 39. The BMI showed nearly 70% of women are at least obese. Operation times in minutes ranged from 107 - 295 with median of 158. The procedures performed included simple hysterectomy, radical hysterectomy and radical trachelectomy for treatment of the central disease as well as pelvic and para-aortic node dissection. 'Two stage technique' for women with poor prognostic (high grade, LVSI) Stage 1B1 and patients with node positive disease were referred for chemo radiotherapy. Ovarian transposition was performed in 3 cases prior to chemo radiotherapy.

**Conclusion:** Depending on patient characteristics our previous experience included both open and laparoscopic surgery for



cervical cancer management incorporating both the single stage as well two stage approach.

Based on our experience, robotic surgery for cervical cancer is a safe procedure and offers better outcomes.

### OP18: Knowledge of Ovarian carcinoma risk factors and risk reducing strategies amongst cancer patients at National Cancer Institute Maharagama

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*National Cancer Institute, Maharagama*

**Objective:** Ovarian carcinoma has a high mortality due to its non-specific symptoms and presentation at an advanced stage. Lifetime risk of ovarian cancer is 1 in 70 per 100,000 women. Approximately 10% of ovarian carcinomas are familial. Risk reducing strategies may help to reduce the risk of ovarian carcinoma. Our objective was to assess knowledge on ovarian carcinoma risk factors and risk reducing strategies amongst cancer patients.

**Design:** A descriptive cross sectional study was conducted at National Cancer Institute Maharagama involving 60 patients. A self-administered questionnaire was provided. Data was analyzed with SPSS software.

**Results:** The mean age of participants was 49 years and majority (68.5%) had secondary education. Only 53.7% were aware of ovarian malignancy. Ovarian malignancy and its association with breast, endometrial and colorectal malignancy was known by 11.9%. Only 23.3% knew of familial ovarian carcinoma. Protective effect of oral contraceptive pill was known by 7.1% and 11.9% knew protective effect of breast feeding. Reduced risk of ovarian carcinoma with parity was known by only 3.3%.

**Conclusion:** Majority of patients were unaware of risk reducing strategies in ovarian carcinoma. Majority was unaware of familial predisposition to ovarian carcinoma and its association with other malignancies. Patients need to be more educated on risk factors for ovarian carcinoma and its risk reducing strategies.

### OP19: Correlation of knowledge regarding breast cancer and awareness and practices of cancer screening with the stage of the disease

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**Abstract:** Introduction: Early diagnosis is the key for better prognosis in breast cancer.

**Methods:** A descriptive cross sectional study was conducted among 116 randomly selected patients with breast carcinoma

referred to National Cancer Institute, Sri Lanka from May to July 2014. Prior knowledge regarding breast cancer and awareness and practices related to breast cancer screening were assessed using an interviewer administered questionnaire. Their association with the stage of the breast cancer at the time of diagnosis was evaluated.

**Results:** The population was aged 30-74 [mean(SD)=55.7(±10.7)] years. The mode(median) staging of the disease at diagnosis was IIA(IIB). Mean knowledge score was 40.8%(±33.9%). Only 57.8%(n=67) were aware of the term breast cancer. Education level positively correlated with the knowledge score( $r=.440, p=.000$ ). Of those aware of self breast examination (SBE)(41.4%,n=48),23.28%(n=27) had performed it at least once before the diagnosis. SBE technique score positively correlated with the knowledge score( $r=.394, p=.042$ ). Patients who had received formal instructions on performing SBE had a higher SBE score( $t(46)=3.103, p=.003$ ). Only 31.6%(n=37) were aware of clinical breast examination (CBE) and 24.3%(n=9) of them had undergone CBE. Of patients above 35 years,5.1%(n=6) had undergone screening mammography through self referral. None had undergone serial mammography. The education level, breast cancer knowledge score or SBE technique score did not correlate with the stage of breast cancer at the point of diagnosis( $p>.05$ ).

**Conclusions:** Knowledge and practice of breast cancer screening methods, especially mammography, is inadequate in our population. Professional guidance improves the SBE technique. In the study population, neither good knowledge on breast cancer nor practicing SBE lead to early diagnosis.

### OP20: Pipelle biopsy for endometrial sampling: Is it always the best option?

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**Objective:** Dilatation and curettage (D&C) is the conventional method used for endometrial sampling in most Sri Lankan Gynaecology units. The pipelle aspiration biopsy is available in some units but, this method is still not widely used in most units. The main objective of this study was to analyze whether pipelle aspiration could completely replace traditional curettage until hysteroscopy is widely available.

**Design, Setting and Methods:** A prospective descriptive study was done in base hospital Homagama. Data from all patients who underwent endometrial sampling for a period of 4 months from October 2015-January 2016 were collected and analyzed in 3 areas. The indication, histology and management were analyzed in pipelle and curettage groups.

**Results:** From 83 women underwent endometrial sampling during this period, 26 were offered pipelle and 60 underwent D&C. Mean age in the pipelle group was 49yrs (36-69yrs) and as for D&C it was 47yrs (28-74yrs). Inadequacy of sample as well as repeat sampling were significantly higher in pipelle group ( $p<0.05$ ) but, there is no statistically significant relationship between endometrial sampling method (Pipelle biopsy Vs Dilatation & Curettage) and obtaining a histology result that is highly suspicious of Endometrial Carcinoma ( $p>0.05$ ).

**Conclusion:** Although both pipelle aspiration and D&C are suitable for diagnosing endometrial samples with high suspicion of endometrial malignancy, pipelle aspiration has high incidence of obtaining an inadequate sample thus resulting in need for

repeat biopsy. If the ultrasound scan endometrial thickness is low and still sampling is indicated, a D&C is preferable to pipelle biopsy.

## OP21: An unusual presentation of a patient with OHVIRA syndrome: A case report

**SMSG Gunarathna, SB Uduwerella, JA Gunesingha, S Wijesingha, GRMUGP Jayawardena, YTMDe Silva**

**Introduction:** Uterine didelphys with obstructed hemivagina and ipsilateral renal agenesis is referred to as the Herlyn-Werner-Wunderlich (HWW) syndrome or OHVIRA syndrome. The reported incidence for this anomaly in general population is 0.1%–3.8%.

**Case history:** A 24 year old married patient was presented with purulent vaginal discharge for one year. On abdominal examination, she had mild lower abdominal tenderness and the vaginal examination revealed a purulent vaginal discharge. Ultra sound scan (USS) revealed a uterine didelphys, a fluid filled oval shape structure along the right side of the vagina; suspecting obstructed hemivagina and absent right kidney. That confirmed the diagnosis of OHVIRA syndrome. Speculum examination revealed normal vagina with a bulge right vaginal wall and a purulent discharge from a small dimple on the top of the bulge. A transverse incision was made over the right sided bulging area and resected much of the intervaginal septum; approximately 80 ml of pus drained suggestive of pyocolpos. After complete drainage, a normal right side cervix was visualized inside the vaginal opening. Bilateral tubal patency demonstrated at the same time by doing laparoscopic dye test.

**Discussion:** Early accurate diagnosis after menarche followed by excision and marsupialization of the blind hemivagina offers complete relief of symptoms and preserves reproductive potential. In conclusion, presentation of OHVIRA syndrome can be delayed for several years especially when there is a small communication between two vaginal cavities. When sexually active they get secondary infections and presented with pyocolpos and hence purulent vaginal discharge.

## OP22: Clomiphene citrate vs letrozole in the treatment of anovulatory infertility: a prospective randomized trial.

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**Objective:** To compare the treatment outcome of anovulatory infertile females by clomiphene citrate and letrozole.

**Materials and Methods:** A prospective randomized trial including two groups of anovulatory subfertile patients was carried out. Patients were randomized to either clomiphene citrate 50 mg or letrozole 2.5 mg daily from the 2nd to 6th day of the menstrual cycle. Follicle number on day 12, endometrial thickness, pregnancy rates and multiple pregnancies were assessed. The data were analyzed using MINITAB 14.

**Results:** Mean age of the clomiphene citrate and letrozole treated

patients groups were not significantly different ( $30.7 \pm 3.98$  and  $31.28 \pm 4.16$   $p=0.312$ ). The number of mature follicles number on day 12 was not significantly different in two treatment groups (clomiphene:  $1.323 \pm 0.935$  and letrozole:  $1.175 \pm 0.797$ ) However, the mean endometrial thickness of the letrozole treated patients ( $0.7691 \pm 0.0887$  cm) was significantly higher than the clomiphene treated group ( $0.695 \pm 0.134$  cm). The clinical pregnancy rate of the letrozole group was higher than the clomiphene treated group (49% vs. 38%) and there was no difference in the miscarriage rates (both 16%).

**Conclusion:** Letrozole treatment has enhanced the endometrial thickness compared to the clomiphene citrate treatment with higher clinical and ongoing pregnancy rates. Even though the both treatment resulted no difference in mature follicle number, the higher pregnancy rates with letrozole may be due to its favorable effects on endometrial thickness and the endometrial receptivity owing to absence of anti estrogenic properties of letrozole compared to clomiphene.

## OP23: Digital Obstetrics Record Assistant (DORA) – A computer programme to assist in antenatal management based on current guidelines

**Ranaweera AK Probhodana, Senanayake HM**

*Department of Obstetrics and Gynaecology, University of Colombo*

**Objective:** To develop a user-friendly computer software to assist in the management of pregnant women, which would also serve as a patient record and a digital prescriber.

**Method:** Microsoft Access Basic was used as the programming platform. The basic structure was formulated based on past experience and adapted to meet the needs that were identified following discussions with several obstetricians and midwives. Further improvements were made after pre-testing the program.

**Discussion:** The main feature of the programme is that it suggest recommendations for management based on current available guidelines and good practise points depending on the risk factors present. This feature acts as a checklist and helps the practitioner to streamline antenatal care.

Features of the stored patient records include three independent ways of searching for quick retrieval of patient information, easy access to details of past consultations, easy viewing of relevant details of the client, facilities for serial recording of SFH and blood pressure.

Features that aid management are ease of creating a management plan, risk stratification and review of the agreed management plan. Features for digital prescribing are ordering drugs at the touch of a few keys, easy ordering of investigations and ability to print prescriptions.

The program will also be a tool for data storage and research.

## OP24: Knowledge and attitude on preferred mode of delivery of their babies among antenatal mothers; Descriptive cross sectional study

**Dodamgoda A, Mampitiya I**

*Teaching Hospital Mahamodara*

**Abstract:** Introduction :Can mother decide the mode of delivery of her own baby?Although the clinicians recommendationsand guidelines are there, mother's preference for a caesarean section is gone up in the world's statistics.

**Objectives:** To identify the preference of antenatal mothers regarding the mode of delivery of their babies and reasons for their preference.

**Method:** Descriptive cross sectional study conducted on antenatal mothers(n = 402) at the antenatal clinics and wards at Teaching Hospital Mahamodara. Datacollected through a self administered questionnaire and analyzed by SPSS ver.21.

**Results:** 86.5% (328) of antenatal mothers preferred to deliver their babies by normal vaginal delivery. 13.5% (51)preferred Caesarean section.92.4%(157)of primigravidapreferred normal delivery.Mothers with previous vaginal delivery,95.5% (141) preferred to have vaginal delivery this time. 72.2% (13) of mothers who had elective LSCS preferred arepeat LSCS. 55.5% (44) of mothers with previous emergency LSCS preferred vaginal delivery this time. "Fear of surgery" was the reason for 134 motherswho preferred vaginal delivery.21mothers selected LSCS due to fear of vaginal delivery. Knowledge about LSCS and normal delivery of the mothers are not in a satisfactory level.Most of them believed the mode of the delivery need to be decided by the doctor himself alone.

**Conclusions:** Maternal preference for mode of delivery is more towards vaginal route. Vaginal Delivery is the preferred mode of delivery especially in primipare.

## OP25: Implementation of local maternity dashboard

**Bandara HGWAAK, Hemapriya S, Gnanarathna S, Niruthan T, Gunasingha ADHN**

*Department of obstetrics and Gynecology, Teaching Hospital Kandy*

**Introduction:** Improve maternal and perinatal health is a global effort and it continuously happening however, quality improvement demands quality measurementbut we can only improve things we can measure. The maternity dashboard (MDB) comes as a tool ofmonitoring above concept as it graphically represents changes over time in performsstatistics and quality indicators. As maternal mortality rate in Sri Lanka has been stagnant for last few years, to reduce itfurther and minimize the near misses in order to reduce the morbidity implementation of theabove concepts has a value.

**Objectives:** To adapt a MDB which suite the local use.

**Method:** Existing MDB reveled using internet, RCOG good practice 7 and St George's Maternity unit were taken as the model. Quality indicators identified by interviews relevant authorities. Local use slandered created and local chart formulated. Maternity unit staff was educated to maintain relevant records.

**Results:** Four types of quality indicators were considered including Organization (risk management meetings), Activity (number of births, preterm births, Instrumental delivery, C section rate, VBAC, Induction of labour), Clinical indicators (Maternal and neonatal, morbidity and mortality, risk management) and Complaints. Threshold level for green indicate data point <2SD from the target, amber 2 to 4 SD and red >4SD. Datacollected from labour room statistic book, PBU statistical record book, risk event notification book, complaint box.

**Conclusion:** Maternity dashboard was adapted and implemented from December 2015 onwards and continuation taking appropriate meashears when amber or red displayed and this need to asses monthly for quality improvement.

## OP26: Outcome of Laparoscopic Salpingectomy vs. Laparoscopic Salpingotomy – A Descriptive Cross Sectional Study

**Withanathanrhige MR, Silva KCDP, Fernando A, Jayawardene MAMM, Samarawickrama NGCL**

**Objectives:** To assess the difference in duration of surgery (after placement of ports), hospitals stay, return to normal work and patient satisfaction between Laparoscopic Salpingectomy vs. Laparoscopic Salpingotomy

**Design, setting and method:** Data were obtained from the ectopic register maintained in University academic unit, Colombo South Teaching Hospital from January 2015 and April 2016. During the period 46 patients diagnosed as ectopic pregnancies were managed by laparoscopic surgery. Out of them 28 were laparoscopic salpingectomies while 18 were laparoscopic salpingotomies. In addition to the surgical details, self-administered questionnaire design to assess patient satisfaction was completed on discharge and after two-weeks.

**Results:** Mean duration for laparoscopic Salpingectomy was 24 min compared to 42 min in Salpingotomy group, which is statistically significant outcome ( $P < 0.001$ ). Duration of hospital stay was not significantly different (2.3 and 2.5) for Salpingectomy and Salpingotomy groups respectively. Return to normal work was also not significantly different between two groups (7 days vs. 8 days). Patient satisfaction rates were significantly higher in Salpingotomy group (96% vs. 74%).

**Conclusion:** Even though laparoscopic salpingotomies take significantly more of hospital stay, return to normal activities were comparable to laparoscopic salpingectomy. Similarly it has provided better patient satisfaction when compared to laparoscopic salpingectomy.

## OP27: Proper documentation and interpretation of cardiotocography according to FIGO guidelines: A complete audit

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**Introduction:** Cardiotocography (CTG) is a widely used fetal monitoring tool in labour in Sri Lankan labour wards, but the understanding and correct interpretation of CTG is lacking due to unavailability of a standard uniform annual assessment exam for all labour ward staff for this purpose in our country. Currently the Sri Lanka Collage of Obstetricians and Gynaecologist recommends the use of FIGO guidelines for the interpretation CTG in Sri Lanka but this is still not widely adopted in most labour ward in the country.

**Method:** Professorial unit of teaching hospital, Peradeniya has implemented the FIGO guidelines for CTG interpretation and we audited completeness and correct interpretation of CTG before and after a successful teaching program on FIGO guidelines for

labour ward staff and doctors. A CTG interpretation Performa was developed to be attached to every CTG taken in labour

**Results:** Patient information was documented 90% in both occasions; maternal pulse documentation was increased 90% in post program CTG s. there was a 85% increase in abnormal CTG finding documentation, 60% increase in interpretation documentation, 55% increase in the documentation of action to be taken and 100% increase in documentation of the name designation and signature of the interpreter post teaching program.

**Conclusion:** Properly conducted education program about the FIGO guidelines and a Performa to be filled with every CTG will improve the legibility and proper interpretation of CTG and will help to improve the fetal outcome in labour. This should be audited in a regular basis.

## OP28: Knowledge, Practices and Attitudes on Family Planning Methods among various ethnic and religious groups of pregnant mothers coming to the Professorial Obstetric unit at De Soysa Hospital for Women

*Hettiarachchi KS, Samantha GGP, Randeniya C*

**Background:** Maternal and neonatal health is affected by spacing of pregnancy.

**Objectives:** To study knowledge, practices and attitudes on family planning methods among pregnant mothers coming to the Professorial Obstetric unit at De Soysa Hospital for Women.

**Methodology:** We interviewed 89 pregnant mothers using a pre tested self-administered questionnaire.

**Results:** Patient characteristics such as race, parity, and level of education were comparable in all ethnic and religious categories. Awareness and knowledge on family planning was significantly lower in Tamils compared to Sinhalese and Muslims ( $p < .05$ ). There was no significant difference between the educational level and the knowledge. All women in the study group preferred oral contraceptive pills irrespective of their race, educational level and parity. Preferences for other methods were as 25.8% ( $n=23$ ) for condoms, 22.5% ( $n=20$ ) for sub dermal implants, 15.7% ( $n=14$ ) for sterilization, 14.6% ( $n=13$ ) for DMPA and 12.5% ( $n=11$ ) for IUCD. Majority (21.1%,  $n=29$ ) had used OCP. Other practiced methods were; 15.6% ( $n=14$ ) DMPA, 14.4% ( $n=13$ ) condoms, 6.7% ( $n=6$ ) copper IUCD and 3.3% ( $n=3$ ) sub dermal implants. Majority (55.6%,  $n=50$ ) of the partners preferred their wives to use contraception.

**Conclusions:** Irrespective of race, religion, and educational level study population had a satisfactory knowledge, practice and attitudes regarding value of using contraceptive methods. The difference between knowledge of Sinhalese women and Tamil women may be due to sub categories of Tamils such as estate sector Tamils may be having lower education. Irrespective of the education when women are educated about family planning choices they can make informed choices.

## OP29: Outcome of pregnancies complicated by cardiac diseases according to the Modified WHO classification of cardiovascular risk (mWHO).

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*1. De Soysa Maternity Hospital for Women, 2. Department of Obstetrics and Gynaecology, University of Colombo*

**Objectives:** To describe the pregnancy outcome of pregnancies complicated with cardiac disease classified according to the mWHO and the usefulness of this classification for risk stratification of patients.

**Method:** A prospective study was conducted amongst the pregnant women with cardiac diseases admitting to the university obstetric unit of De Soysa maternity hospital, for a period of 6 months. A data collection tool was used to extract the information from the clinical notes.

**Results:** A total of 49 patients with cardiac disease received obstetric care. Commonest cardiac lesion within the study population was mitral regurgitation (53.1%) followed by mitral stenosis (30.6%), Atrial septal Defect (14.3%), Aortic Regurgitation (14.3%), Tricuspid regurgitation (14.3%) and Ventricular Septal Defect (12.2%). According to the mWHO criteria, 23 (46.9%) patients fell in to the Category-4 and 4 (8.2%) patients were in Category-3 while 15 patients (30.6%) were in Category-2. Ischemic Heart Disease was not included in mWHO criteria. There were 2 cerebro-vascular events while one suffered from a tachy-arrhythmia. Another 3 developed heart failure. Altogether there were 8 patients (16.3%) with adverse maternal outcomes including 2 maternal deaths in which five were from Category 4 and two were from Category 3. Mean birth weight was 2.612kg. Rate of vaginal, instrumental and caesarean deliveries were 11.6% ( $n=5$ ), 30.2% ( $n=13$ ) and 58.1% ( $n=25$ ) respectively. All were live births. Therapeutic terminations were done in four cases while two had spontaneous miscarriages.

**Conclusion:** mWHO categorization is an useful tool to risk stratification of patients with cardiac disease complicating pregnancies in the local setting.

## OP30: Audit on prevention and treatment of Fe deficiency anaemia (IDA) among pregnant mothers at District General Hospital (DGH) Mullaitive, Sri Lanka.

*Hiran Chaminda SH, Galappaththi W  
DGH Mullaitive*

**Objective:** To determine the proportion of pregnant women offered appropriate screening, prevention and treatment for IDA at DGH Mullaitive.

**Method:** A retrospective audit was conducted on all mothers delivered at DGH Mullaitive from 1st of May to 10th June 2014. Eight aspects of screening, prevention and treatment of IDA in pregnancy based on family health bureau guidelines, were audited. Expected standard was 100% for each point.

**Results:** Mean age of study population was 26.23 years (24.04-28.42) while mean parity was 1.8 (0.68-2.92). All mothers' Hb% was checked at booking visit with a mean value of 10.71g/dl (8.36-13.06). Rate of anaemia was 53.4% (47/87). Of the anemic, 44% (22/47) had Hb%  $< 10$ g/dl and 6% (3/47) had Hb%  $< 7$ g/dl. There was a significant ( $p=0.0006$ ) drop in rate of testing Hb% at 28 weeks 87.35% (76/87) compared to booking (100%). Mean Hb% at 28 weeks was 10.68g/dl (8.44-12.98). 98% (85/87) of the population was offered universal prophylactic iron while 96.55% (84/87) had received prophylactic antihelminthic medications. Once detected to be anemic, only 81.81% (18/22) was appropriately offered therapeutic dose of iron. All mothers

whose Hb% was <7g/dl were transfused. Coverage by health education sessions and educational leaflets was 0% each.

**Conclusions:** Rate of anemia at DGH Mullaitive was unacceptably high. Screening at booking visit has shown 100% coverage which has fallen significantly down by midtrimester. Offering therapeutic iron for the anaemic was not up to the standard. Formal health education was not existing, necessitating urgent attention.

### OP31: Case report: Paraparesis in pregnancy

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*DSHW, Sri Lanka*

**Introduction:** Paraparesis is defined as partial or complete loss of voluntary motor function of lower limbs. It is due to bilateral damage to corticospinal tracts, could be spinal lesions or cerebral lesions. Arterial venous malformations (AVM) of the spinal cord is one of the rare causes of spinal cord injury (SCI) which cause paraparesis. Autonomic dysreflexia (AD) is the life threatening complication and it will provoke during vaginal examinations, urinary retention and with uterine contractions.

**Case report:** 25 years old, mother of one child presented with bilateral lower limb weakness on her 22weeks of period of gestation (POA). Clinical features were suggestive of T6 level spinal cord lesion. MRI revealed vascular malformation of cervical and thoracic area with acute re-bleed and edema at T1- T4 level. Multi-disciplinary inputs were integrated on management. She had regular physiotherapy, leg compression stockings and advised to avoid provoking factors of AD. DVT prophylaxis not used because of spinal AVM. She had spontaneous labour at 38week and normally delivered baby even before the assisted second stage. During labour her vital parameters and clinical features of AD were monitored. Opioid analgesics given. Her post-partum was uneventful and she can walk with aid after 3 months of delivery.

**Discussion and conclusion:** In pregnancy venous congestion more pronounced and may worsen the spinal AVM. Management options for spinal AVM are surgical correction and embolization which were not recommended during pregnancy. Vaginal delivery with assisted second stage is recommended. Analgesia (spinal or epidural) should prevent AD by blocking the stimuli arise from pelvic organs.

### OP32: Knowledge on danger signals and preparedness for emergencies among antenatal mothers attending De Soyza Hospital for Women

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**Objective:** Awareness of danger signals and being prepared to handle such emergency situations is crucial for a successful outcome of pregnancy. Delay in reaching a health care institute is a main contributor for maternal mortality. Our study assessed the

knowledge on danger signals and preparedness for emergencies among antenatal mothers.

**Design, setting and method:** A cross-sectional study in a systematic sample of 113 antenatal mothers attending De Soyza Hospital for Women (DSHW). An interviewer-administered questionnaire on socio-demographic data, knowledge on danger signals and emergency-preparedness was used. Data was analysed using SPSS 21.0.

**Results:** Almost all mothers were introduced to the concept of danger signals during pregnancy, at the antenatal clinics of MOH or DSHW. Majority of the mothers named per vaginal bleeding (n=103,91.2%), severe headache/blurred vision (n=58,51.3%), severe upper abdominal pain (n=72,63.7%) and reduced fetal movements (n=86,76.1%), few could name having fits (n=19,16.8%), high fever (n=24,21.2%) and difficult breathing (n=14,12.4%) as danger-signals. About 53% could not name > 3 danger-signals. Of the mothers 101(89.4%) had a written plan and 91(81.1%) had a transport method in an emergency. Preparedness for emergencies in working place and during traveling was lower compared to home. Knowledge about danger signals and emergency preparedness were not significantly associated with socio-demographic factors (p>0.05).

**Conclusion:** Almost all mothers were aware of the concept of danger signals during pregnancy but sinister signals were missed by some. Emergency-preparedness at home was satisfactory but the preparedness for an emergency at the workplace or during traveling outside was not satisfactory and should be addressed during the antenatal period.

### OP33: Management Outcome of Cardiomyopathy in Pregnancy - A Srilankan Experience

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**Objective:** To assess the management-outcomes of cardiomyopathy in pregnancy

**Method:** A retrospective study of nineteen consecutive pregnant women with cardiomyopathy including peripartumcardiomyopathy (PCM) managed at a tertiary care unit from 2012-2016.

**Results:** N =19. Median age 33. 78% were ≥30 and 36.8% ≥35 years. Median gestations = 2, with five primigravidae.

PCM occurred in 8 (42.1%); others -dilated in 4 and hypertrophic in 7.

Six PCM patients were diagnosed during the index pregnancy, two during previous pregnancies with recurrence.

Median EF of PCM was 40%, hypertrophic 60% and dilated 50%.

Ten (52.63%) had EF ≥55%, 8(42.10%) ≤45%. Two patient had mild pulmonary hypertension.

Three (16.6%) developed gestational hypertension; another had chronic hypertension. Mitral valve regurgitation occurred in 9 (aortic); 01 (mixed); 2. Three had arrhythmias. one postpartum maternal death due to severe decompensated PCM.

IUGR occurred in three mothers with one having chronic hypertension; all others had adequate foetal growth.

All received multidisciplinary ICU/HDU care. Mean duration at hospital = 12.16 days (SD = 5.862), mean duration in ICU=3.58 (SD=1.98)days.

Pregnancy Outcome: Two were terminated for severe maternal decompensation.

Seventeen (89.4%) had live births – term 14 (82.4%) and preterm 3(17.6%). Nine (52.9%) had caesarean delivery and 08 vaginal deliveries. All received epidural anaesthesia.

Mean birth weight = 2.647kg (SD=0.518); 4 babies required Special Baby Care; with no perinatal deaths. Eight (42.1%) mothers underwent female sterilization.

Conclusion: With careful evaluation and multidisciplinary approach favourable outcome can be obtained in cardiomyopathy in pregnancy.

### OP34: Acute Graft rejection in pregnancy after renal transplant- A case report

*Tharindu EAD, Ruwanpathirana SA*

**Introduction:** Majority of the pregnancies are successful in renal transplant patients. However complications such as pre-eclampsia, fetal growth restriction and prematurity are high in pregnancies with renal transplant. Pregnancy has no significant impact on graft function or survival if the baseline renal function is within normal range. In addition immunosuppressant medications are continued within pregnancy in order to prevent graft rejection. In that case fetus is exposed to such medications can have adverse outcome.

**Case report:** A 31 year old primipara who had underwent renal transplant for End stage renal failure, referred to antenatal clinic for management of pregnancy. This was a planned pregnancy. Duration of kidney transplant to delivery is 1 year and 10 months. Immune suppressive medications were altered in pre conceptional period. After renal transplant she was on MMF, tacrolimus. But those were omitted and azathioprine started before conception. Her antenatal period was uncomplicated except worsening renal functions toward onset of third trimester. Maternal weight gain is satisfactory with 7kg gain. At 29 weeks of gestation, she had increased serum creatinine, oligouria, generalized oedema and breathlessness with basal lung crepitations. There was no fetal growth restriction detected by ultrasound scan. Mother was transferred to intensive care unit and haemodialysis was performed twice. Caesarean section was performed after steroids for lung maturity at period of gestation of 30 weeks. She delivered healthy baby with 1.5 kg baby. Baby was admitted to SCBU for monitoring only. Baby was kept in a SCBU till mother was in ICU ( 2 and half weeks). Baby received breast feeds prior to restarting potent immunosuppressives ( MMF). Total duration of hospitalization was 5 weeks (1 week antepartum and almost 3 weeks postpartum).

Her renal functions did not improve despite two cycles of haemodialysis, five cycles of plasmapheresis, intravenous immunoglobulin (IVIG) and methyl prednisolone. Renal biopsy on transplanted kidney showed acute antibody mediated immune reaction with T cell mediated graft rejection. Patient was put on full course of immunosuppressive drugs.

**Discussion:** Fertility may restore soon after successful kidney allograft in women. Kidney transplantation carries risk of pre-eclampsia, growth restriction and prematurity in pregnancy. Incidence of acute rejection in pregnancy varies from 9%-14%

according to some data. Graft rejection leads to deterioration of renal functions. Use of immune suppressive drugs may cause teratogenicity. Graft rejection warrants potent anti-rejection medications. Therefore, decision to deliver/terminate pregnancy should be carefully evaluated.

### OP35: Clinical audit on effect of staff education on intrapartum analgesic practice

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**Objective:** To assess the influence of staff education on intrapartum analgesia at Professorial Obstetrics unit Teaching Hospital Jaffna.

**Methods:** A retrospective audit was conducted to assess the intrapartum analgesia in the unit. Patients who had emergency caesarean were excluded. Data were collected from the maternity notes. Labour room Staffs were educated on intrapartum analgesia for three months. A prospective reaudit was conducted 9 months later.

**Results:** In the primary audit 43 labouring women were included. Mean age was 27.05 years (SD 6.4). Nearly half (51.2%) of them were primi and 88.4 % of them were at term. The majority 95.3% had normal vaginal delivery with balance were instrumental delivery. Only 34.9 % labouring women were given intrapartum analgesia. Among the multipara only 19% received analgesics while 80% of primi mothers received it and it is statistically significant (p=0.033). Pethidine was the main analgesic (80%). Rest had paracetamol.

In the reaudit 38 labouring women were included. Mean age was 27.08 years (SD 5.4). Only 36.8% was primip and 88.4 % were at term. All had normal vaginal delivery. After education only 42.11 % labouring women were given intra-partum analgesia. Among the multi-parity mothers 45.8% received analgesics while 35.7% of primi mothers received it and it is statistically not significant (p=0.542). Pethidine was the only analgesia used.

**Conclusions:** There is no significant increase in intrapartum analgesic use after staff education but there is significant rise among the multips receiving it. We need more staff education programs to improve intrapartum analgesic practice.

### OP36: VBAC, is it successful?

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*Department of Obstetrics and Gynecology, Teaching Hospital Kandy*

**Introduction:** Caesarean section is a major obstetric surgical procedure and it carry several risk to the mother as well as to the new bone. Rising the rate of LSCS is major health burden to the country and it is recommended to lower the Caesarean section rate as much as possible. Vaginal birth after Caesarean section (VBAC) is considered a safe alternative and is recommended all over the word and our effort whether it can apply to our local setup safely and whether it is effective.

**Objectives:** Is the VBAC successful alternative to reduce LSCS in our unit.

**Method and results:** An audit study was carried out in teaching hospital Kandy, ward number 05, over six month period. The unit policies included patient choice for decision to undergo VBAC and non-usage of medication either for induction or augmentation of labour. Patients were admitted 10 days prior to the due date and kept in the ward and wait until three days beyond term and do only the artificial separation of membranes as method of induction of labour. Total of 81 women with a previous one Caesarean section were selected to undergo VBAC during the study period. 42.1% of total study population sent to the labour ward but only 32.3% delivered vaginally. Among the success group 84% who had previous vaginal birth. One case of uterine rupture (1.2%) reported and we could save the mother and it was a still birth. Low APGAR scores at 5 minutes was observed in two neonates (2.4%) and both these were in the group with a successful VBAC.

**Discussion:** The success rate of VBAC on our study group (32.3%) was very much away to the RCOG standards (72 - 75%) and the rate of low APGAR at 5 minutes and perinatal death also away the recommended standards. Reasons may be we selected only small population and we were not using labour induction or augmentation. These figures along with the factors identified to be associated with the failure at VBAC should be used for patient counseling in our local setting. More in-depth studies should be carried out to find causes for low rate of undergoing VBAC and to determine effective ways to improve it.

### **OP37: Audit on Compliance with Postpartum Modified Early Obstetric Warning System (MEOWS) Charts in the Labour room in a Tertiary care Hospital**

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*Colombo South Teaching Hospital, Kalubowila, Sri Lanka.*

**Background:** Modified Early Obstetric Warning System (MEOWS) is a simple bed side screening tool for maternal morbidity. The 2003-05 Confidential enquiry into maternal and child health encourages routine use of national obstetric early warning chart. We audited the charts in our labour room to assess the compliance of the staff in recording the observations.

**Materials and methods:** The audit was conducted in two stages in the labour room of ward 18 during the months of October 2015 and May 2016 by analyzing the bed head tickets of 79 and 91 patients respectively. After the October 2015 audit the staff were educated on how to maintain the chart and the May 2016 audit was done.

**Results:** In the October 2015 and May 2016 audit, the percentage of recordings were as follows; Restless/drowsy (41.8%, 28.7%), Respiratory rate (54.4%, 61.8%), Systolic & Diastolic BP (54.4%, 64%), UOP (48.1%, 59.6%). Even the recording of basic data like Date and Time (36.7%, 33.7%), Mode of Delivery (27.8%, 25.8%) were extremely poor.

**Conclusion:** Our results show a worrying lack of documentation of the MEOWS charts in our labour room. One time intervention of educating the labour room staff on MEOWS charts has not improved the compliance significantly. The recordings of all the required observations need to be improved. Steps to improve compliance should be studied and implemented. Repeated audits, reinforcements and structured education programmes might be needed to improve the current status.

### **OP38: Effect of neonatal bilirubin levels following umbilical cord milking compared to delayed cord clamping in term infants**

*Piyadigama I, Devasurendra LC, Gunawardene K, Hemapriya S*

**Introduction:** Delayed cord clamping at the delivery is a simple intervention currently recommended to improve neonatal haemoglobin. It carries an increased risk of PPH and increases the operative time at caesarean sections. An alternative could be cord milking with early clamping since the umbilical cord has in average about 108ml of blood. Cord milking can damage the red blood cells leading to higher bilirubin values in neonates.

**Objectives:** To evaluate the effect on neonatal total bilirubin levels following umbilical cord milking compared to delayed cord clamping at caesarian section.

**Methods:** 60 pregnant mothers undergoing elective caesarian section at term in Kandy Hospital, from 1st February to 31st March 2015 were randomized to delayed cord clamping and cord milking. Control group had cord clamped after 2 minutes or once the cord pulsations had ceased. The intervention group had the umbilical cord milked towards the umbilicus of the baby in a standard method. Neonatal total bilirubin values were assessed after 24-48hrs.

**Results:** 27 subjects underwent delayed cord clamping while 33 subjects underwent cord milking. Due to errors in blood collection and fallouts only 22 samples from the controls and 24 samples from the intervention group were available for analysis. Main indications of the caesarian sections were past section (43.5%), past bad obstetric history (10.9%), short primi (8.7%), failed induction (6.5%), unfavourable cervix (6.5%), breech (6.5%) and other. All caesarian sections were performed under spinal anaesthesia. Mean birth weights of the neonates taken were cord milking group 2988.79 (min 2500, max 3450) and the delayed cord clamping group 2868.52 (min 2500, max 3450). There was no significant difference between the two groups. Mean total bilirubin values in the controls and intervention groups were 123.0mmol/l ( 34.99) and 111.8mmol/l ( 47.61) respectively. There was no statistical significance difference in bilirubin values in two groups (p=0.685). Reference range of neonatal bilirubin at 36hrs 119 mmol/l 40th to 153 mmol/l 75th percentile. All neonates participated had birth APGAR of 10 out of 10.

**Conclusions:** Umbilical cord milking does not increase the bilirubin levels in neonates compared to delayed cord clamping and is a safe alternative.

### **OP39: Knowledge of shoulder dystocia amongst labour ward staff at Castle Street Hospital for Women: An audit**

*Dissanayake AD, Silva GHSP, Ratnasiri UDP*

*Castle Street Hospital for Women*

**Objective:** Shoulder dystocia is an obstetric emergency causing significant maternal and fetal morbidity. Although shoulder dystocia is uncommon labour ward staff should know early identification and simple measures to overcome it. Our objective was to assess knowledge amongst labour ward staff on shoulder dystocia.

**Design:** A pretest questionnaire on shoulder dystocia was administered to thirty labour ward staff at Castle Street Hospital for Women. It was followed by a lecture, video demonstration and scenario role-play. A post test questionnaire was administered thereafter.

**Results:** Participants included midwives 4 (13.3%), nurses 8 (26.6%), intern medical officers 6 (20%) and medical officers 12 (40%). Identification of shoulder dystocia features was 26.6% in pretest, which improved to 89% in post test. Identifying risk factors for shoulder dystocia was 52% and 88.3% and correct delivery interval was 33.3% and 86.3% in pre test and post test respectively. McRoberts position was identified correctly by 66.6% in pretest and 100% in post test. Pre test and post test results for accurate sequence of management was 27.4% and 86.6%, correct method of supra pubic pressure was 46.6% and 98%. Correct documentation was known by only 72.3% in pre test. This improved to 95% in post test.

**Conclusion:** Despite shoulder dystocia being an obstetric emergency, knowledge in labour ward staff was inadequate and can be improved with lectures, drills and demonstrations. Similar activities should be conducted regularly.

#### OP40: Obstetric Shock Index – An early predictor of necessity of blood transfusion in post-partum haemorrhage

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**Objective:** To assess the validity of the Obstetrics Shock Index (OSI) as a tool for early detection of need of blood transfusion in Post-Partum Haemorrhage (PPH) using retrospective data from a tertiary care center in Sri Lanka.

**Method:** Data was collected from hospital records of women who suffered from PPH from 2013 to 2015. 44 mothers who were diagnosed having PPH and had blood transfusions were selected as cases while 44 mothers who had PPH but not transfused were selected as controls. OSI was calculated for each patient using systolic blood pressure and pulse rate within ten minutes after diagnosing PPH. Data was analyzed using Receiver Operating Characteristic (ROC) curve.

**Results:** The mean age of cases was 31 years and in controls 30 years. Mean OSI was 1.12 and 0.84 for cases and controls respectively. The ROC curves were prepared for 0.9, 1 and 1.1 cut off values. Cut off of 0.9 had an acceptable area under the curve of over 0.75 with a sensitivity of 78% and a specificity of 73%. The other 2 cut off values did not qualify as acceptable due to low areas under the curve.

**Conclusion:** According to this study the cut off value for blood transfusion would be considered as 0.9 of OSI for Sri Lankan mothers. Since the data used for analysis were retrospective no recommendation can be made at this stage for which a prospective study is required.

#### OP41: Comparing the outcome of second Twin baby in Vaginal Twin Delivery (NVD) and Cesarean Twin Delivery (LSCS)

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1. Professorial Obstetrics and Gynecology unit, Teaching Hospital, Peradeniya, 2. Department of Community Medicine, University of Peradeniya

**Introduction:** Twin pregnancies are high risk pregnancies. Second twin having higher risk than first twin. We have compared the outcome of 2nd twin in both vaginal and cesarean twin deliveries occurred at Teaching Hospital Peradeniya.

**Methods:** This is a retrospective study. We have analyzed the data which was collected from the Bed Head Tickets of the patients' who delivered twin babies at Teaching Hospital Peradeniya.

**Results:** Only 20% of the deliveries were NVD and 80% were Cesarean section, among those sections 50% were El/LSCS and 30% were Em/LSCS.

Out of 80 twin deliveries 8 first twin (10%) and 12 second twin (15%) babies were admitted to SBU. Low birth weight were 66.66% in 2nd twin and 50% in 1st twin and other indications were 33.33% in 2nd twin and 50% in 1st twin. 25% of admissions were by NVD, 25% were by Em/LSCS and 50% by El/LSCS. Comparing NVD and El/LSCS 18.5% of NVDs and 15% of El/LSCS were admitted to SBU, comparing NVD to LSCS 18.5% of NVD and 14.05% of Cesarean section were admitted to SBU.

60% of the babies were between 2000 to 2500g birth weight with mean gestational age of 37+2 weeks and 22.5% were more than 2500g with mean gestational age of 37+6.

**Conclusion:** Higher proportion of 2nd twin admitted to SBU than 1st twin. Couldn't find significant correlation between mode of delivery and SBU admission. But the sample size is not adequate to statistically prove the above result. Need to continue the study to get adequate samples.

#### OP42: Global validation of Sri Lankan growth charts with Intergrowth 21st reference charts

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Professorial Unit, Obstetrics and Gynaecology, CNTH, Ragama.

**Objective:** To validate Sri Lankan growth charts with Intergrowth 21st

**Method:** This was a prospective validation study done in uncomplicated singleton pregnancies at professorial obstetrics unit of North Colombo Teaching Hospital Sri Lanka. Fetal bi parietal diameter (BPD), head circumference (HC), abdominal circumference (AC) and femur length (FL) were measured at 24 weeks, 28 weeks, 32 weeks, 36 weeks and 40 weeks of period of gestation (POG) using hadlock formula. Means of each of the above parameters were compared with their respective means derived from Intergrowth 21st.

**Results:** When compared with Intergrowth 21st reference charts, significant differences in means ( $P < 0.05$ ) were observed for fetal biometry parameters in the local population during the third trimester, but not in the second trimester. Differences observed for BPD, HC, AC and FL at 40 weeks of period of gestation were 2.64 (95% CI: 0.57-4.71), 8.55 (95% CI: 1.80-15.30), 30.44 (95% CI: 18.7-42.18) and 2.02 (95% CI: 0.23-3.81) respectively

**Conclusion:** The findings of this study show that there is a significant difference between the means of the Sri Lankan population and the Intergrowth 21st reference charts. Therefore Intergrowth 21st charts cannot be used effectively in the Sri Lankan population.



### OP43: HAPO versus WHO 1999/DIPSI diagnostic methods – does it make a difference to pregnancy outcomes?

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**Objectives:** To determine pregnancy outcomes of gestational diabetes (GDM) based on diagnostic criteria

**Design:** Single center data of consecutive patients

**Setting:** De Soysa Hospital for Women, Colombo, Sri Lanka.

**Methods:** Prospective data of GDM patients from April, 2011 to October 2015

**Outcome measures:** diagnostic test, treatment method, pregnancy outcome.

**Results:** A total of 338 diabetics were studied where 183 (54.14%) were confirmed as GDM. Mean age = 31.33±6.1. Median POA at booking=12 weeks.

**Diagnostic methods:** DIPSI (75g Glucose Challenge Test=GCT) 76(42%) and fasting 75g OGTT 107(58%) -of whom 23/107 (12.6%) fulfilled HAPO criteria only; 16(8.7%) fulfilled WHO 1999 only and 68(37.2%) both.

Mean 2 hour BG in GCT and OGTT were 159.7±22.4 and 152.8±31.2 respectively.

**Interventions required:** Medical Nutrition Therapy (MNT) alone 144(78.7%), MNT and metformin 14(7.7%), MNT and insulin 17(9.9%) and all three 8(4.4%).

Mean POA at delivery was 38.8 weeks (95%CI 37.6-39.9), mode of delivery was vaginal 110(60.1%), forceps 3(1.6%), ventouse 1(0.5%), emergency LSCS 20(10.9%) and elective LSCS 37(20.2%). Preterm deliveries=10(5.5%).

Live births occurred 180(98.4%), perinatal deaths 2(1%). Mean birth weight 3.05±0.49kg; 3(1.6%) mothers had postpartum complications. 8(4.4%) developed PIH. 20(10.9%) neonates had complications.

HAPO versus DIPSI/WHO – were similar for management interventions required (p=0.189), mode of delivery (p=0.175), birth outcomes (p=0.784), birth weight (p=0.393), neonatal complications (p=0.448) and maternal complications (p=0.170).

**Conclusion:** Despite the use of 3 different criteria for the diagnosis of GDM, the management needs and pregnancy outcomes was similar in this single clinic setting.

### OP44: Long term outcomes of diabetic mothers and their infants (NIROGI Maatha - Sri Lanka)

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University of Colombo, 6. Department of Paediatrics, Faculty of Medicine, University of Colombo

**Introduction:** We pioneered long term follow up of mother-baby pairs managed for maternal diabetes and delivered in a single unit in Colombo, Sri Lanka

**Method:** Sample - Prospective cohort of consecutive diabetic and non-diabetic mothers.

All diabetics received specialist multidisciplinary antenatal care. Controls were medically and obstetrically uncomplicated.

Outcome measures - Maternal and neonatal outcomes and infant development beyond 6 weeks in both groups.

**Results:** Total 312 pregnancies - pre-pregnant diabetes (PGDM) 68, gestational diabetes (GDM) 143 and controls 101 were recruited.

Diabetics versus Controls: Median age - 33 versus 29 years (p<0.001). Median POA at delivery - 38 vs. 39 weeks (p<0.001).

Index pregnancy outcomes LSCS - 51% vs. 24% (RR 2.1 CI 1.4-3).

Preterm (<37 weeks) delivery rate - PGDM (13%), GDM (16.5%), controls (10%) p=0.368

PIH - PGDM (8.8%), GDM (5.6%), controls (4%) p=0.866

Other obstetric complications – similar.

Mean (SD) birth weight (kg) - PGDM 3.1(0.6), GDM 3.0(0.6) controls 2.8(0.6), p<0.001

Neonatal complications - Hypoglycaemia - PGDM (18%), GDM (5%), controls (2%), p<0.001; Hypocalcaemia - 2 (PGDM); Jaundice - PGDM (22%), GDM (18%), controls (13%), p=0.29.

Median 4.2 ± 4.2 months postpartum – maternal diastolic BP >90 mm/Hg - PGDM (19%), GDM (17%), controls (2%) p<0.001. Hyperglycaemia requiring treatment - 53% PGDM and 17% GDM. Developmental delay at 9 months - 3 (diabetic group).

**Conclusions:** Dedicated management of maternal diabetes and long term follow up is feasible in the state sector of Sri Lanka. Diabetic pregnancies are associated with greater complications for mothers and offspring. Substantial proportion with GDM has postpartum glucose intolerance and hypertension beyond 6 weeks postpartum.

### OP45: Universal screening for gestational diabetes (NIROGI Maatha Project – Sri Lanka) – results of community based early pregnancy screening

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**Background:** The quantum of glucose intolerance in early pregnancy among Sri Lankans is unknown. Nearly 95% of women in Sri Lanka have formal antenatal booking before 8 weeks of gestation. NIROGI Lanka Project aims for universal screening of pregnant women.

**Objective:** To determine the prevalence of previously undetected diabetes/pre-diabetes among South Asian women in the first trimester and compare with gestational diabetes detected in later pregnancy.

**Methodology:** Data was collected from five selected semi-urban centres in Colombo District of Sri Lanka. 75g Glucose Challenge Test of pregnant mothers (DIPSI) was conducted in field based maternity clinics. The glucometers were validated by the Medical Research Institute, Colombo and staff training provided under expert supervision.

**Results:** Between 07.02.2014 to 23.03.2015, a total of 3385 consecutive pregnant women were screened. Those with known diabetes at booking were excluded. Numbers screened were: 2163 in 1st, 880 in 2nd and 231 in 3rd trimesters. Two hour BG > 140mg/dl - 557 (25.75%) in 1st, 188 (21.36%) in 2nd and 41 (17.75%) in 3rd trimesters. 2h BG ≥ 153 mg/dl - 353 (16.32%) in 1st, 118 (13.41%) in 2nd and 27 (11.69%) in 3rd trimesters.

**Conclusion:** Prevalence of glucose intolerance in pregnancy is high among semi-urban Sri Lankan women in all three trimesters, while DIPSI method nearly doubled the detection rate. Specificity of the test cut offs requires further study with pregnancy outcomes.

The 2h BG cut off of 140mg/dl being unequivocal in detecting impaired glucose tolerance (IGT) in the first trimester, this data calls for urgent action to detect early pregnancy or pre-pregnancy IGT in the South Asian settings.

## OP46: The Relationship of Gestational Weight Gain and development of Gestational Diabetes Mellitus; A case control study

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**Objective:** To assess the effect of gestational weight gain and socio-demographic factors in women developing gestational diabetes mellitus (GDM) compared with mothers with normal glucose tolerance.

**Methods:** A retrospective case control study was carried out. Singleton mothers with GDM were selected as cases (n=51). Control group was selected in 1:3 ratio (n=153) matched with cases for known confounders; namely age (±2), parity, booking visit BMI (±2). Data were collected on socio-demographic risk factors for GDM, amount of weight gained during pregnancy and type of treatment for GDM. Total gestational weight gain, rate of weight gain per week during 1st and 2nd trimesters were the primary outcome data.

**Results:** Having a 1st degree relatives with diabetes had a significant association for development of GDM (p=0.033). No significant difference was observed in total weight gain (p=0.332), total rate of weight gain (p=0.099) or 2nd trimester weight gain (p=0.092) between control subjects and cases with GDM. However weight gain during 1st trimester was significantly higher among mothers diagnosed with GDM when compared with controls (0.166kg/week compared with 0.027 kg/week respectively, p<0.001). This was most significant among normal and overweight BMI categories (p<0.001). Out of the GDM group, the mean rate of weight gain was higher in mothers who required pharmacological treatment but this was not statistically significant compared with the group who was only on Medical Nutrition Therapy.

**Conclusions and Recommendations:** Gestational weight gain during first trimester was significantly higher among patients with GDM compared to normal glucose tolerant individuals, specifically who were in normal and overweight BMI categories.

## OP47: Clinical audit of screening for diabetes during pregnancy in a tertiary hospital

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**Introduction:** The prevalence of type 1 and type 2 diabetes is increasing globally. In particular, type 2 diabetes is increasing in certain minority ethnic groups (including people of African, black Caribbean, South Asian, Middle Eastern and Chinese family origin). Gestational diabetes may affect up to 18 in 100 women during pregnancy. National guidelines for screening for diabetes during pregnancy were published in 2013 & recommended universal screening at the booking visit unless already known diabetes. Those who are negative at booking visit should be screened at 24- 28 weeks. Recommended test were 75g Oral Glucose Challenge Test (OGCT) & three point 75g Oral Glucose Tolerance Test (OGTT). Objective was to audit the adherence rate to the national guideline recommended diabetes screening.

**Methods:** All antenatal clinic patients who attended to the Colombo south teaching hospital ward 17 antenatal clinic during 01/01/2016 to 31/01/2016 who has a POA of more than 30 weeks included in to the sample (127). Pre pregnancy diagnosed diabetes patient were excluded from the sample. Through clinic notes POA at booking & diabetes screening at booking & 24-28 weeks were assessed. Expected standard for screening was 100% at booking visit & negative women rescreen at 24-28 weeks 100%.

**Results:** Sample size was 127 patients and 28 (22.05%) of them made their booking visit prior to 12 weeks, 53 (41.73%) of them in between 12 to 16 weeks, 35 (27.56%) between 17 to 20 weeks & 11 (8.66%) above 20 weeks of gestation. Eighty four of them (66.14%) had undergone either OGCT or OGTT at booking visit. Among them majority (73.8%) has undergone OGCT at MOH clinic. Only five positive test results were found at booking visit and they were managed appropriately. At 24-28 weeks 102 patients out of 122 (83.61%) had screening with 75g OGTT. Thirteen positive tests were noted and they were managed appropriately. Adherence rate to the guideline recommended screening at booking visit was 66.14% & at 24-28 weeks was 83.61%.

**Conclusion & Recommendations:** This audit showed that adherence to the guidelines was suboptimal in the unit. The reasons for this are numerous: ignorance of the guidelines & sometimes the late onset of antenatal care at the hospital (36% of booking visits after 16 weeks of POA). Audit results were discussed at the audit meeting and unit staff was educated. Field staff was educated at monthly perinatal meeting. A re- audit needs to be done after 6 months to re-evaluate the situation.

## OP48: The Relationship of Gestational Weight Gain and development of Gestational Diabetes Mellitus; A case control study

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**Objective:** To assess the effect of gestational weight gain and socio-demographic factors in women developing gestational diabetes mellitus (GDM) compared with mothers with normal glucose tolerance.

**Methods:** A retrospective case control study was carried out. Singleton mothers with GDM were selected as cases (n=51). Control group was selected in 1:3 ratio (n=153) matched with cases for known confounders; namely age(±2), parity, booking visit BMI(±2). Data were collected on socio-demographic risk factors for GDM, amount of weight gained during pregnancy and type of treatment for GDM. Total gestational weight gain, rate of weight gain per week during 1st and 2nd trimesters were the primary outcome data.

**Results:** Having a 1st degree relatives with diabetes had a significant association for development of GDM ( $p=0.033$ ). No significant difference was observed in total weight gain ( $p=0.332$ ), total rate of weight gain ( $p=0.099$ ) or 2nd trimester weight gain ( $p=0.092$ ) between control subjects and cases with GDM. However weight gain during 1st trimester was significantly higher among mothers diagnosed with GDM when compared with controls (0.166kg/week compared with 0.027 kg/week respectively,  $p<0.001$ ). This was most significant among normal and overweight BMI categories ( $p<0.001$ ). Out of the GDM group, the mean rate of weight gain was higher in mothers who required pharmacological treatment but this was not statistically significant compared with the group who was only on Medical Nutrition Therapy.

**Conclusions and Recommendations:** Gestational weight gain during first trimester was significantly higher among patients with GDM compared to normal glucose tolerant individuals, specifically who were in normal and overweight BMI categories.

#### **OP49: A study on the rate of symptoms of pelvic floor dysfunction among healthy women in pre and post-menopausal age and its impact on their day-to-day life.**

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*Faculty of Medicine, University of Kelaniya, Ragama*

**Objectives:** Aim of the study was to analyze the rate of symptoms of pelvic floor dysfunction, the presence of pelvic organ prolapse and to study how the symptoms affect the day to day life activities in a population of women living in the Ragama Medical Officer of Health (MOH) area.

**Design, Setting and Methods:** A community-based cross sectional study was done in a study population of a larger ongoing longitudinal study named 'Ragama Health Study'. Randomly selected 951 women from Ragama Medical Officer of Health (MOH) area were included. The symptoms of pelvic floor dysfunction were elicited using a self-administered questionnaire and a vaginal examination was performed to assess the presence and grade of pelvic organ prolapse.

**Results:** Among the 951 women 881(92.6%) did not have symptoms of pelvic floor dysfunction. Among the symptomatic women (n=70), urgency was the commonest symptom (26.8%) while 23.5% admitted urinary incontinence and 16.1% of women experienced fecal incontinence. Among the women with such

symptoms of pelvic organ prolapse only 5.6% complained of these interfering with their sexual activities while 10.8% admitted them having an effect on their day-to-day activities. Pelvic organ prolapse was not elicited on clinical examination in 32.1% of symptomatic women while 60.7% had a prolapse up to the hymen and 7.2% had a prolapse beyond the level of hymen.

**Conclusions:** Rate of symptoms of pelvic floor dysfunction was around 7.5% among this sample of women in peri and post-menopausal age. Urinary incontinence and fecal incontinence were the most frequent symptoms. Only a few symptomatic women considered this to have an effect on their sexual function (5%) and day-to-day activities (10%). More than two thirds of women with symptoms had genital prolapse with over 7% having a significant prolapse protruding beyond the hymen.

#### **OP50: Prevalence of menopausal symptoms and their impact on daily activities: A community based longitudinal study in Ragama, Sri Lanka**

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*Faculty of Medicine, University of Kelaniya, Ragama*

**Objective:** To determine the prevalence and severity of menopausal symptoms among women.

**Design, Setting and Methods:** A community-based cross sectional study was done in a study population of a larger ongoing longitudinal study named 'Ragama Health Study'. Randomly selected 954 women from Ragama Medical Officer of Health (MOH) area were included. Data was collected using a self-administered questionnaire. Impact on daily activities by menopausal symptoms were scored using a scale from 1-10.

**Results:** Out of 954 women in the study, 814(85.3%) were post-menopausal. Age of the population distributed from 41-74 years with mean of 59.51 years. Mean age of onset of the menopausal symptoms was 52.16(SD=8.095) years. Among the symptoms inquired, the domain of sexual activity contained the most commonly experienced symptom, decreased libido, with a 65.4% (n=937) positive responses while 20.5% of women experienced vaginal dryness. Mean score on impact on daily activities by this was 7.79(SD 2.36). Psychosocial symptoms of forgetfulness, bad temper, irritability and poor concentration was present in 60.5%, 33.8%, 25.4% and 24.8% of positive responses respectively. Mean scores on impact on daily activities by psychosocial symptoms lied within the range of 4.55-5.52. Presence of experiencing hot flushes and increased sweating were 24.8% and 22.1% with a mean score of effect on daily activities at 5.24 and 5.65, respectively.

**Conclusions:** The rate of menopausal symptoms among this peri-menopausal age group was significant and the impact on daily activities in this population was comparable to the global context.

#### **OP51: Validation of the Tamil translation of the International Consultation on Incontinence modular Questionnaire on Vaginal Symptoms (ICIQ-VS)**

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**Objective:** To translate and validate the International Consultation on Incontinence Modular Questionnaire on vaginal symptoms (ICIQ VS) from English to Tamil.

**Method:** With permission, ICIQ-VS questionnaire was translated to Tamil and a validation study was done on women attending the gynaecology clinics at district general hospitals, Mannar and Vavuniya.

**Results:** The basic characteristics of women with prolapse (n=63) versus women without prolapse (n=83) were as follows; age 60.68 (SD 11.64), median parity=4 (IQ1-IQ3=3-5), BMI 23.90 kg/m<sup>2</sup> (SD 3.36) versus age 40.49 (SD 12.54), median parity=2 (IQ1-IQ3=1-3), BMI 25.84 kg/m<sup>2</sup> (SD 4.84) respectively. Content validity was assessed by the level of missing data which was less than 3% for each item. Internal consistency as assessed by Cronbach's coefficient alpha score was 0.83 (0.80-0.84). Kappa values for test-retest reliability of individual items ranged from 0.59 to 0.74. The questionnaire differentiated between patients and controls in vaginal symptoms score (VSS) (P<0.001), sexual symptoms score (SSS) (p<0.05) and quality of life (p<0.001). There was a positive correlation between pelvic organ prolapse quantification system (POP-Q) scores and VSS (rs=0.67, p<0.001), SSS (rs=0.26, p<0.05) and quality of life (rs=0.62, p<0.001). Vaginal symptoms (n=24) and quality of life (n=21) showed an improvement following surgery (Wilcoxon matched-pairs signed-rank test p<0.001 and p<0.001 respectively).

**Conclusion:** The preliminary results for ICIQ VS (Tamil) validation are satisfactory and once completed it will be invaluable to objectively assess vaginal and sexual symptoms in Tamil speaking population in Sri Lanka.

## OP52: Validation of the Sinhala translation of the International Consultation on Incontinence modular Questionnaire on Vaginal Symptoms (ICIQ-VS)

Ekanayake CD<sup>1</sup>, Patabendige M<sup>2</sup>, Wijesinghe PS<sup>3</sup>, Pathmeswaran A<sup>4</sup>, Herath RP<sup>5</sup>, Weerasinghe N<sup>6</sup>

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**Objective:** To translate and validate the International Consultation on Incontinence Modular Questionnaire on vaginal symptoms (ICIQ VS) from English to Sinhala.

**Method:** ICIQ-VS questionnaire was translated to Sinhala and a validation study was carried out among women attending the

gynaecology clinic at North Colombo teaching hospital, Ragama.

**Results:** Basic demographic characteristics of women with prolapse (n=64) versus women without prolapse (n=135) were as follows; Age 55.8 (SD 13.1) years, median parity 2.5 (IQ1-IQ3=2-4), BMI 23.8 kg/m<sup>2</sup> (SD 3.2) versus age 42.6 (SD 13.1), median parity 2 (IQ1-IQ3=1-3), BMI 23.2 kg/m<sup>2</sup> (SD 2.9) respectively. Content validity was assessed by the level of missing data which was less than 1% for each item. Internal consistency was assessed using Cronbach's coefficient alpha scores which ranged from 0.75 to 0.78. Test-retest reliability as assessed by kappa values ranged from 0.54 to 0.80, except for item, 'vagina too tight' which demonstrated moderate reliability (kappa 0.41). Construct validity was assessed by the ability of the questionnaire to differentiate between patients and controls. The questionnaire differentiated between patients and controls on vaginal symptoms score (VSS) (p<0.001), sexual symptoms score (SSS) (p<0.05) and quality of life (p<0.001). There was a positive correlation between pelvic organ prolapse quantification system (POP-Q) scores and VSS (rs=0.61, p<0.001), SSS (rs=0.22, p<0.01) and quality of life (rs=0.52, p<0.001).

**Conclusion:** The preliminary results for ICIQ VS (Sinhala) validation are satisfactory and once completed it will be invaluable to objectively assess vaginal and sexual symptoms in Sinhala speaking population in Sri Lanka.

## OP53: Outcome assessment of total abdominal hysterectomy versus ascending vaginal hysterectomy

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**Objective:** A comparative assessment of the post-operative outcomes of Sri Lankan patients subjected to Total Abdominal Hysterectomy and Ascending Vaginal Hysterectomy for benign uterine diseases.

**Methods:** A randomized controlled trial was conducted on 60 patients who underwent hysterectomy from July 2013 to June 2014, in a tertiary care hospital. Women those who were waiting for hysterectomy for benign uterine diseases within age 35-55yrs were included for the study. 30 patients were underwent total abdominal hysterectomy and 30 were underwent ascending vaginal hysterectomy. Five main variables were measured such as operative time, intra-operative blood loss, post-operative pain, post-operative pyrexia, and hospital stay. Data were entered and analyzed by SPSS 22.0.

**Result:** Age of participants was between 37 to 51 years of age. Mean age was 44.87 years among Vaginal Hysterectomy group (SD 3.4 years) and 44.71 years among Abdominal Hysterectomy group (SD 3.756 years).

The average time duration for two procedures (t=10.4; p<0.05), average post-operative hospital stay (t=10.1; df=58; p<0.05), post-operative pain (X<sup>2</sup> - 31.0; df=2; p<0.05) and average blood losses between two groups (t=14.97; df=58; p<0.05) were significantly different. Onset of fever was not significantly different in two groups (X<sup>2</sup>-0.48; df=1; p=.731).

**Conclusion:** When comparing abdominal hysterectomy and vaginal hysterectomy the time taken for the surgery and post-

operative stay at hospital following abdominal hysterectomy were higher than those of vaginal hysterectomy. Abdominal hysterectomy was associated with a significantly higher post-operative pain and blood loss. Onset of fever following surgery was not depend on the type of surgery.

**Key words:** Hysterectomy, abdominal, Vaginal, Time, blood loss, pain, fever

#### **OP54: Perception, pain score and operator feasibility between traditional method verses ring pessary inserter and retriever in periodic vaginal ring pessary replacement – A descriptive cross sectional study**

**Silva KC DP, Jayawardane MAMM, Samarawickrama NGCL, Senadeera D, Withanathanrhige MR**

About 50% of women will develop some form of pelvic organ prolapse (POP). Mechanical measure like vaginal ring pessary (RP) is one of the popular conservative methods in POP management. For some women, Periodic replacement of RP replacement is traumatizing and distressful. It is common

site to see women in pain following replacement of pessary in gynaecology clinic. The rigid nature of the pessary limit adequate folding thus RP replacement isn't a smooth procedure to both gynaecologist and woman.

**Objectives:** To compare the perception, pain score and operator feasibility between traditional manual method and vaginal RP replacement by using vaginal RP inserter and retriever

**Methods:** Descriptive cross sectional study carried out at Professorial Obstetrics & Gynaecology unit, Colombo South Teaching Hospital. Two separate specially prepared questionnaires were given to two groups of participants to inquire perception on the method used for pessary replacement. Operator feasibility on two methods was assessed.

**Results:** Age distribution is between 40 to 80 years (Average 61 years) and 90% of women are menopausal. 75% of the women had second degree uterovaginal prolapse. Pain score is significantly low with ring pessary inserter and retriever when compared to traditional method ( $p < 0.001$ ) with high patient satisfaction ( $p < 0.001$ ) and operator feasibility ( $p = 0.001$ ).

**Conclusion:** When considering statistics vaginal ring pessary inserter and retriever was the preferred choice for both patient and operator. The randomized controlled cross over trial which is planned to be carried out will give more weighted data over the new method.

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### P1: Wound infection Audit in Gynae-oncology Laparotomy wounds

**Kannangara SU, Madhuri TK, Ashbourne W, Tailor A, Butler-Manuel S**

*Department of Gynae-oncology Royal Surrey County Hospital Guildford*

**Introduction:** Midline Laparotomy is widely used in gynae-oncological surgery. Risk factors for wound infection include obesity, chemotherapy, diabetes mellitus and immune suppression. Preventive measures include skin preparation and prophylactic antibiotics. Different skin preparations, different skin closing methods, different wound dressing are wide used guided by preference of the surgeon.

**Methods:** Prospective collection of data in a data sheet, for two months September and October 2015.

**Results:** There were 19 laparotomies during two months. All were given prophylactic antibiotics. Staples were used in 7 and monocryl used in 12. Seven patients had hair removal and 12 had not. There were three wound infections. One patient deceased. One wound infection was after discharge and needed re-admission.

**Discussion:** The application of preventive measures is 100%. There are no observed rate of increase infection rate in one method of skin closure or dressings. Clinical observation of wound is paramount in detecting infections early.

### P2: Subclinical hypothyroidism and its associated factors among pregnant women at a tertiary care hospital in Sri Lanka.

**Costha NP<sup>1</sup>, Karunarathne SMG<sup>2</sup>, Weerasinghe UDTM<sup>3</sup>**

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**Objectives:** To assess the proportion of first trimester pregnant women with subclinical hypothyroidism and to assess its associated factors.

**Design, setting and Methods:** Subjects were randomly selected using birth register of Sri Jayawardenapura General Hospital. Antenatal records were studied and women who known to have prior history of thyroid disease before the pregnancy and who use the medication known to influence thyroid function were excluded. 417 samples obtained.

**Results:** Mean age was  $30.68 \pm 4.36$  (mean $\pm$ SD) years (n = 417, primigravida = 138, multi gravida = 279). Among them 15.6% (n = 65) were found to have subclinical hypothyroidism.

Significant associations with subclinical hypothyroidism were found between advanced maternal age more than 35 years (p = 0.013), multi gravidity (p = 0.024) and neonatal intensive care admissions (p = 0.002).

Significant association was not shown between subclinical hypothyroidism and history of sub fertility (p = 0.84), haemoglobin levels (p = 0.94), child's birth weight (p = 0.56), maternal BMI (p = 0.18), pregnancy induced hypertension (p = 0.39) and pre eclampsia (p = 0.54). Subclinical hypothyroidism was not associated with gestational diabetes mellitus (p = 0.94) however chronic diabetes mellitus was significantly associated with subclinical hypothyroidism (p < 0.001).

**Conclusion:** Considerable proportion of women were affected with subclinical hypothyroidism during first trimester of pregnancy. Advanced maternal age, chronic diabetes mellitus and higher number of neonatal intensive care unit admissions were found to be associated with subclinical hypothyroidism.

### P3: Awareness, attitudes and practices on cervical cancer and screening among married women in Udangoda Grama Niladhari Division, Rathnapura District, Sri Lanka

**Nandasena HMRKG<sup>1</sup>, Ekanayaka EMJSK<sup>2</sup>**

*1. Lecturer, International Institute of Health Sciences, Welisara, 2. Lecturer, Faculty of Allied Health Sciences, University of Peradeniya*

**Introduction:** Cervical cancer is a major public health problem throughout the world.

**Objectives:** To explore the awareness attitudes and practices among married women in age at or above 35 years.

**Methodology:** A descriptive cross-sectional interviewer administered questionnaire survey was conducted among 170 women in Udangoda Grama Niladhari Division, Rathnapura District in Sri Lanka.

**Results:** Mean age was 52.6, 54.7% (n=93) were passed O/L and 60% (n=160) were unemployed women. Almost 87.6% (n=149) had heard of cervical cancer (CC) and 87.1% (n=148) had heard cervical cancer screening (CCS). A small proportion of participants had heard of risk factors, signs and symptoms and link between HPV (Human Papilloma Virus) and CC, that is 2.3% (n=4), 11.2% (n=19) and 2.9% (n=5) respectively. Electronic Medias and midwives play great role in providing information on CC and CCS. Even though majority of them heard the disease and screening method; screening uptake was very low among the participants 19.4% (n=33).

This findings highlighted busy schedule in life 43.5% (n=74) and lack of knowledge 30.6% (n=52) were common barriers toward uptake of screening services. Age and educational level played key roles in determining the awareness and attitude of the women. Similarly proper awareness and positive attitudes were affected to determine the screening behavior of the respondents.

**Conclusion:** Proper awareness programmes and attitude changing are required to overcome low attendance for screening services in Sri Lanka.

#### P4: Evaluation of patient perception of maternity care in a tertiary Hospital

**KulathungaMM<sup>1</sup>, Rathnayake RMCJ<sup>2</sup>**

1. Faculty of Medicine, Peradeniya, 2. Departments of Gynecology and Obstetrics, Faculty of Medicine, Peradeniya

**Objectives:** This study was conducted to evaluate patient perception of maternity care in Teaching hospital Peradeniya.

**Design setting and method:** A descriptive cross sectional study was conducted among mothers admitted in antenatal and post natal wards in teaching hospital Peradeniya. Data, collected by self-administered questionnaires, was analyzed by Rstudio software.

**Results:** According to study conducted, only 57% of mothers planned their pregnancy and 50% of them got their knowledge on pregnancy through midwives. 59% of mothers were satisfied of the facilities available in our clinic and 85% of mothers had knowledge on indication for their investigations. 79% of mothers knew investigations for fetal complications. 43% of mothers got their knowledge on contraception through antenatal sessions. 66% mothers liked to undergo vaginal delivery and 75% of them preferred participation in decision making.

42% of mothers were satisfied regarding pain management during labor and 70% and 76% of mothers were satisfied regarding attitudes of labour room staff and labour room facilities respectively. 81% of mothers who underwent caesarian section were satisfied on their surgery. Prevalence of satisfaction on post natal pain management and mental health stabilization was 62% and 66% respectively. 84% of mothers were satisfied on our antenatal and post natal service as a whole and 86% would like to choose same hospital in next delivery.

**Conclusion:** We conducted this audit on our antenatal and post natal care services to identify deficiencies in our service delivery. Though overall our results are encouraging there is still potential to improve our services further.

#### P5: A serous papillary adenocarcinoma of ovary in Mayer-Rokitansky-Küster-Hauser Syndrome: A case report

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**Introduction:** Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome is a Müllerian anomaly that presents with varying degrees of utero-vaginal aplasia. These women have normal development of secondary sexual characteristics and normal 46, XX karyotype. They have normal functioning ovaries and they are having a normal risk of developing ovarian malignancy.

**Case report:** A 72 years old nulliparous Woman presented with a history of abdominal distension, loss of appetite and loss of weight for three months duration. On examination there was gross ascites. Gynaecologic examination revealed complete vaginal agenesis. She was phenotypically a female with pubic hair and breast development. Her serum CA-125 level was 3350 U/ml. Ultrasound scan showed free fluid in the peritoneal cavity with omental cake. Uterus and the ovaries were not visualized.

Computer tomographic scan showed multiple peritoneal deposits with a lesion in the pelvis measuring 7.6cm × 5.7cm. Primary bowel or gynaecology malignancy was suspected. But her upper and lower gastrointestinal endoscopies were normal with slightly elevated CarcinoEmbryonic Antigen levels (5.72mg/dl). Therefore primary peritoneal malignancy was suspected. Staging laparotomy was performed.

Disseminated malignancy was found with multiple peritoneal deposits, liver deposits, gross ascites and omental cake. In the pelvis, uterus and the right ovary was not identified. Left ovarian mass was noticed. Biopsy from the left ovarian mass revealed a serous papillary adenocarcinoma. She received chemotherapy six cycles. So this is a rare case report of undiagnosed MRKH syndrome with a disseminated ovarian malignancy in her existing ovary.

**Discussion:** It is one spectrum of Müllerian anomalies characterized by the congenital absence of a uterus and upper vagina in a genotypic and phenotypic females with a normal endocrine status. These individuals have complete uterine agenesis, 46xx karyotype with normal ovaries and regular cyclic ovulation. They have normal endocrine function resulting normal breast, pubic and axillary hair development. But the vagina is shortened or absent. In this case scenario she had single functioning ovary and shortened vagina with adequate capacity of sexual function.

**Conclusion:** Rarely ovarian carcinoma may be associated with MRKH syndrome. Their risk of developing gynaecological malignancies are same as that of normal female population.

#### P6: Fetal Acalvaria: A Case Report

**Casather DM, Chandrasiri DDMD, Fahim SM, Abeykoon W**  
Obstetric and Gynaecology Unit, Teaching Hospital, Kandy

**Introduction:** Fetal acalvaria is an extremely rare congenital abnormality characterized by the complete or partial absence of skull bones with complete but abnormal development of the brain.

**Case report:** A 27 year old Multiparous woman with previous cesarean section at term for fetal distress found to have anencephalic fetus at 20 weeks of gestation. At 36 weeks she had normal clinical obstetric examination and undergone fetal sonography for further evaluation. There was single live fetus in cephalic presentation with longitudinal lie. Ultrasound revealed well formed brain without cranium. Cerebral hemispheres, interhemispheric fissure, lateral ventricles and sulci were clearly identified. A thin membranous structure was covering the brain and its vascular Doppler activity was normal. Fascial structures were normal and no other anomalies were identified. There was normal amount of liquor and placenta was anterior with normal thickness. The movements of the fetal body parts were normal. Baby delivered by cesarean section at 37 weeks of gestation. The brain was slipped posterior due to absence of supporting skull bones posteriorly and brain was covered by a thick membrane. Facial structures, body and limbs were normal. Baby expired few hours after delivery.

**Discussion:** Acalvaria is an extremely rare lethal condition and only few cases were reported in world in literature. It is developed as a result of development anomaly of the membranous flat bones of the skull. Diagnosis of acalvaria can be made by ultrasound scan in early pregnancy by competent sonographer.

## P7: Successful Maternal and Fetal outcome following Acute Pancreatitis in Pregnancy: A case Report

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**Introduction:** Acute pancreatitis during pregnancy is a rare occurrence. It is estimated that acute pancreatitis occurs in 1 out of every 10,000 pregnancies with varying severity, and which has high risk of maternal mortality and fetal risk.

**Case report:** 28 year old primigravida at the period of gestation 36 weeks transferred from local hospital with severe continuous epigastric pain for two days. Patient complained fever, nausea and vomiting in addition to the diminished fetal movements for few hours. On examination pulse rate was 110 bpm. Blood pressure was 120/80 mmHg and temperature was 101.2 F. Considering the laboratory investigations her Hb was 10.6 g/dl and WBC was  $14.8 \times 10^6/\text{mm}^3$ . Liver functions were within normal range, except high alkaline phosphates levels 280 mg/dl (35-100mg/dl). Serum amylase was 1820 IU/L. Patient was managed in ICU with by keeping nil orally, intravenous fluids, antibiotics, analgesics, antipyretics and total parenteral nutrition with strict fetal as well as maternal monitoring. Since cardiotocography was not reactive, she undergone emergency caesarian section and delivered a baby weighing 2.9Kg. Mother and baby were discharged in good condition on post operative day 5. CT done at postpartum day twelve showed normal pancreas without pancreatic pseudocyst.

**Conclusion:** Eventhough pancreatitis can be occurred in any trimester it is more common in third trimester. Gall stones, hyperlipidemia are the most common causes for acute pancreatitis during pregnancy. Early diagnosis and proper management reduce the mortality risk associated with acute pancreatitis during pregnancy.

## P8: Fetal Amelia: A Case Report

**Casather D M, Chandrasiri DDMD, Abeykoon W**  
Teaching Hospital, Kandy

**Introduction:** The fetal Amelia is a extremely rare birth defect characterized by the complete absence of one or more limbs.

**Case report:** A 23 year old primigravida presented to us at 20 weeks of gestation for second trimester fetal scanning. Her husband was 26 years old and the couple was second degree relative. There was no teratogenic exposure during pregnancy. Ultrasound examination revealed absence of both lower limbs and both upper limbs except the abnormally formed short left humerus. Cranium was normal cerebral hemispheres were normal. Chest was broad and head and chest demarcation could not visualize properly. Biparietal diameter, head circumference, and abdominal circumference were compatible with her gestation. Routine antenatal care was given she was admitted to the ward at gestation at 38 weeks with diminished fetal movements. On examination there was no fetal heart beat intra uterine fetal death confirmed by ultra sound scan. She went into active labour same day of the admission and delivered a macerated male fetus weighing 2.6 Kg. On clinical examination, there were gross abnormalities in the facial structures and the chest. Two lower limbs and right upper limbs were absent. Left upper limb there was no lower arm and the forearm.

**Conclusion:** Amelia is often associated with major malformations of other organ systems. Eventhough Amelia thought to be a

sporadic anomaly the possibility of the recurrence of the Amelia has been documented in same families. Early prenatal diagnosis plays a major role in counseling parents regarding fetal anomalies.

## P9: Labial fusion causing voiding difficulty in middle aged women

**Casather DM, Chandrasiri DDMD, Abeykoon W, Fahim SM**  
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**Introduction:** Labial fusion is defined as partial or complete adhesions of the labia minora. It occurs most often in pre pubertal girls and usually associated with low oestrogen levels. Labial adhesions are rare in reproductive age group due to abundance of oestrogen. Here we present a case of near complete labial fusion in middle aged women presented with voiding difficulty.

**Case report:** A 36 year old unmarried woman presented with features of urinary retention for nearly 24 hours. Her menstrual cycles were regular since menarche at 13 years of age. Her medical history was unremarkable except that she had history of difficulty in passing urine and dysuria during menstruation since 2 years. On general examination she had normal secondary sexual characteristics and gynaecological examination she had densely fused labia minora extending anteriorly from the posterior fourchette and almost completely occluding the introitus. There was blood clot obstructing the common vaginal urethral orifice. Blood clot was dislodged and urinary retention was revealed. On pelvic ultrasonography there was retroverted normal size uterus without any adenexial pathology. There was no ultrasound features suggestive of haematocolpus or haematometron. Abdominopelvic MRI affirmed normal urogenital structures.

**Discussion:** The exact causes for labial adhesions are undefined in reproductive age group women. It may occur, secondary to the vaginitis and local trauma. Surgical adhesiolysis should become the first option for treatment in adult patient with complete labial adhesions.

## P10: Sigmoido-uterine fistula at the caesarian section scar: A case report

**Casather DM, Chandrasiri DDMD, Abeykoon W, Fahim SM**  
Teaching Hospital, Kandy

**Introduction:** A fistula is an abnormal connection between two epithelial surfaces. Entero-uterine fistula is a rare occurrence. In particular, sigmoido-uterine fistulas are very rare. We describe a case report of sigmoido-uterine fistula at the previous caesarian section scar.

**Case report:** A 62 year old post menopausal woman presented with the history of profuse vaginal discharge for 3 months duration. She had undergone caesarian section 25 years back. Her general condition was stable and speculum examination revealed fecal matter coming through the os with intact vaginal mucosa. On the basis of history and examination diagnosis of entero-uterine fistula was made and planned for exploratory laparotomy. On laparotomy sigmoid colon was found to be adherent to the anterior uterine wall to the previous caesarian section scar. The colonic segment involved in the fistula was dissected from the uterine attachment, and intestinal continuity was reestablished with primary bowel suturing. It was followed by total abdominal hysterectomy and bilateral salphingo oophorectomy. Recovery

was unremarkable and patient was discharged on the 7th post operative day. She was doing well with no vaginal discharge following one month after the laparotomy.

**Discussion:** Eventhough it is rare, uterine fistula can develop in relation to the bladder, colon and the small intestine. Enterouterine fistulas can occur following gynaecological injury, particularly following dilatation and curettage, inflammatory process and related to bowel malignancy. The sigmoido-uterine fistula at the caesarian section scar is a very rare occurrence. Management of entero-uterine fistula is surgical involving resection of the fistula tract.

## P11: Meig's Syndrome: A case report

*Casather DM, Chandrasiri DDMD, Abeykoon W, Fahim SM*  
*Teaching Hospital Kandy*

**Introduction:** Meig's syndrome is a very rare syndrome characterized by presence of benign ovarian lesion associated with simultaneous fluid effusions in the abdominal and chest cavities, the effusions disappears spontaneously when the tumor is removed. The benign ovarian tumor is most often a fibroma.

**Case report:** 64 years old patient admitted to the gynaecology ward with history of lower abdominal pain for 2 months duration. On examination there was regular firm mass palpable on the suprapubic area, which extended upto the umbilical level. The liver and spleen were normal. There was evidence of fluid in the right pleural cavity but no other respiratory abnormalities were demonstrated. The pleural effusion confirmed on chest X-ray; no tracheal deviation was seen. Ultrasound scan confirmed the diagnosis of ovarian mass and there was moderate amount of ascites in the peritoneal cavity. CA 125 was 17 IU/L. laparotomy was performed some days later and a large left ovarian tumor with few adhesions was removed. One liter of clear, straw-coloured, peritoneal fluid was aspirated. Right ovary and bilateral tubes and uterus were normal. Ovarian fibroma was confirmed by histology. Pleural effusion was resolved spontaneously.

**Conclusion:** Many aspects of the Meig's syndrome have never been satisfactorily explained. The mechanism of formation of fluid in body cavities remains unclear. It may cause a diagnostic problem as a clinical picture may mistakenly interpret as pulmonary tuberculosis or gynaecological malignancies with metastatic involvement in the chest.

## P12: Recto vaginal endometriosis with posterior fornix nodules; A rare cause for post coital bleeding

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*Obstetric and Gynaecology Unit, Teaching Hospital, Kandy*

**Introduction:** Rectovaginal septum is commonly associated with endometriosis. Women with rectovaginal endometriosis frequently present with severe secondary dysmenorrhea, deep dyspareunia, backache and chronic pelvic pain. Rectovaginal endometriosis may invade vaginal epithelium and present on uterosacral ligament or present as rectal or vaginal nodule.

**Case report:** A 28 year nulliparous women married for 3 years presented to us with post coital bleeding for 3 months duration, which was associated with deep dyspareunia. Her periods were regular and there was no heavy menstrual bleeding. The periods

were accompanied with severe secondary dysmenorrhea, which was outlasting for periods. She was subfertile for 2 years. On examination she was not pale; abdomen soft. On speculum examination there were few endometriotic nodules scattered in the posterior fornix. On vaginal examination cervix was firm, uterus normal size, there were bilateral adenexial tenderness. Her husband seminal fluid analysis was normal. Few days later she was undergone diagnostic laparoscopy. Laparoscopy revealed grade III endometriosis with rectovaginal patches. During surgery adhesions were separated and endometriotic patches were diathermized. Fallopian tubes were patent to dye. Patient was discharged on postoperative day 2 without complications. Plan was to give GnRH analogue for 3 months.

**Conclusion:** Eventhough, rectovaginal endometriosis is common presentation. Post coital bleeding due to posterior fornix nodular endometriosis is rare occurrence. As in the other sites rectovaginal endometriosis can be managed medically as well as surgically.

## P13: Recurrent Non Immune Hydrops: A Case Report

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**Introduction:** Incidence of fetal hydrops fetalis is 1 in 1000 live births and recurrent non immune hydrops fetalis is very rare occurrence. We reported case of recurrent non immune hydrops in a couple with second degree consanguinity.

**Case report:** A 26 year old woman in her third pregnancy with previous second trimester miscarriage and early neonatal death, presented to us at 20 weeks of gestation for ultra sound scan. Her fetal anomaly scan revealed generalized oedema with pleural effusion and ascites and there were no other detectable abnormalities of the fetus, placenta and cord. Fetal echocardiography pulsed and colour Doppler studies were normal and there were no arrhythmias. Following further investigations found that both parents had normal corpuscular volume and their blood groups were positive and no undetectable antibodies. Her first pregnancy terminated as second trimester miscarriage and according to the past documents, there were gross fetal oedema. In her 2nd pregnancy, second trimester ultra sound scan revealed generalized fetal oedema with bilateral pleural effusion. Viral serology markers for Toxoplasma, Rubella and Cytomegalovirus were negative for acute infections in her second pregnancy. Postmortem examinations were not performed for fetuses of past two pregnancies as parents were not consented.

**Discussion:** Following extensive investigations it has been postulated that recurrent non immune hydrops relative to the autosomal recurrence genes. Rare causes for hydrops should be excluded in recurrent non immune hydrops fetalis if there were no particular aetiology following routine investigations.

## P14: Uterine Didelphys with past uncomplicated term normal vaginal delivery: A Case Report

*Casather DM, Chandrasiri DDMD, Abeykoon W*  
*Obstetric and Gynaecology Unit, Teaching Hospital, Kandy*

**Introduction:** Uterine didelphys is a type of mullerian duct anomaly where there is duplication of uterus as well as cervix and

vagina. This development anomaly occurred as a result of failure to fusion of mullerian ducts. Each uterus has a single horn linked to the ipsilateral fallopian tubes. Incidence of uterine didelphys is approximately 1 in 3000 women.

**Case report:** A 34 year old mother of one child admitted to our gynaecologycausality unit with heavy menstrual bleeding for 2 months duration. She had undergone normal vaginal delivery 3 years back and delivered full term baby weighing 3.2 kg. She married for 4 years and the denied subfertility history. She had mild superficial dyspareunia earlier and which subsided in few months. She did not have any menstrual abnormalities before. On general examination she was pale, on abdominal examination there were no significant findings. Pelvic examination revealed double vagina and double cervix with thick membrane in between them. The transvaginal sonography confirmed the diagnosis of uterine didelphys. There were normal anteverted two uteruses with well defined two endometriums. No adenexial masses were found. Her menstrual problem settled with conservative management.

**Discussion:** Uterine didelphys associated with pregnancy complications such as spontaneous miscarriages, pre term labour, and malpresentations. Transvaginal sonography offers a reliable diagnostic method in predicting uterine anomalies in the early stages of pregnancy and which has greater importance for further management.

### **P15: Vaginal metastasis as an initial presentation of endometrial carcinoma - A case report**

*Makarim AHM, Gnanarathne DMST*

*Obstetrics & Gynaecology Unit, Teaching Hospital, Kandy*

**Introduction:** Endometrial carcinoma is the 4th most common gynaecological malignancy in developed countries. Abnormal uterine bleeding is the leading symptoms in 90% of cases, thus early presentation and detection of disease are possible. Incidence of stage IV disease is nearly 5-10% with a 5-year overall survival of less than 10%. Initial presentation of endometrial carcinoma as vaginal ulceration is extremely rare and unable to find a single reported case in literature review.

**Case history:** 55year old mother of three children, presented with two large painless vaginal ulcers for one month duration. She was menopausal for five years and denied post-menopausal bleeding. She has never undergone cervical cancer screening. Her BMI was 26 and there were two ulcers seen in lower one third of vagina. Speculum examination showed normal looking cervix. She had enlarged inguinal lymph nodes on both sides. Ultra sound scan showed thickened endometrium of 18mm and a fluid collection inside the cavity with loss of endometrial-myometrial demarcation. She underwent endometrial sampling and biopsies from vaginal ulcers. Histology revealed Grade 2 endometrial cancer with vaginal metastasis.

**Discussion:** This patient presented to us with Stage III B endometrial carcinoma. Inguinal biopsy had to be done to exclude its involvement. Commonest metastatic sites are cuff of the vagina with pelvic and para-aortic lymph nodes and lung. In advanced disease, the treatment options are total abdominal hysterectomy, bilateral salpingo-oophorectomy with or without pelvic lymphadenectomy followed by radiotherapy. Endocrine and cytotoxic therapies are available too.

**Conclusion:** Awareness of these kinds of rare presentations of common carcinomas should be made in order to avoid delay in

diagnosis which can make a huge difference in management and prognosis of the condition.

### **P16: Atypical presentation of HELLP Syndrome - Case report**

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**Introduction:** HELLS syndrome accounts for 0.2-0.6% of all pregnancies, 10% of the cases of severe preeclampsia & nearly 50% of eclampsia cases. HELLP syndrome typically occurs between week 27 of gestation and delivery, or immediately postpartum in 15%-30% of cases. It causes Maternal mortality ranges from 1%-3%, with a perinatal mortality rate of 35%. HELLP syndrome without proteinuria & normotensive is extremely rare

**Case history:** 32 year old P2C1 mother with past section due to PIH, presented with reduced fetal movement for 2 days at POA 30+5, & had non-progressive itching of palms & Body for 1/52. She was normotensive till admission. Had no PET symptoms, abdominal pain or fever. On admission she had mild oedema with BP 150/80mmHg, No albuminuria, PPBS 403mg/dl, high liver enzymes (ALT 1371, AST 666), marginally high LDH (447) with low platelets (123,000), other PET tests were normal. Obstetric scan showed live fetus with reverse diastolic flow of umbilical artery. So, emergency section done after dexamethasone injection. Post operatively she had high blood pressure with albuminuria. Serum bile was elevated on 2nd day. Liver enzymes of fetus too elevated & she recovered completely on 11th day of post-partum

**Discussion:** Obstetric cholestasis & acute fatty liver were differential diagnosis. Compromised fetus & high blood sugar excluded these condition respectively. Antenatal dexamethasone in HELLP syndrome improve the outcome in both mother & fetus. Though immediate delivery is the treatment in compromised fetus irrespective cause, proper diagnosis is far important for further management of mother & newborn.

**Conclusion:** In a patient presenting with any unexplainable laboratory abnormality of either elevated liver enzymes or low platelets, the index of suspicion for HELLP syndrome should remain high even in the absence of hypertension or proteinuria. HELLP syndrome has 2%-27% recurrence. So follow up in next pregnancy is too important.

### **P17: Unusual presentation of spontaneous uterine rupture in second trimester - A case report**

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*Ward-06, Obstetrics & Gynaecology unit, Teaching Hospital, Kandy*

**Introduction:** Uterine rupture is a rare life-threatening complication. The overall incidence in unscarred and scarred uterus is 0.07% & 0.3%, respectively (1.8% if it is past 2 section in labour). Commonly occur with onset of labour (either term or pre-term). Second trimester spontaneous uterine rupture extremely rare & only few cases reported.

**Case history:** 43 years old obese (BMI 32) pregnant mother with past 2 elective sections presented with sudden onset of dyspnea & upper abdominal pain at 27 weeks of gestation.

She was hemodynamically stable with high (308mg/Dl) blood sugar level. Abdomen was soft & Scan showed live fetus with 27 weeks maturity with no evidence of abruption or free fluid. Her saturation was dropping with persistent high blood sugar, tachycardia & tachypnic. ABG showed acidosis. She developed anuria. So insulin & Enoxaparin were given. Repeat abdominal scan after 8 hours showed moderate amount of free fluid in abdomen with live fetus. Despite of cardiac, pulmonary & renal support she deteriorated & went into shock. So she was intubated & undergone emergency laparotomy. Ruptured uterus from previous scar was noted with 1l of blood in cavity. Repair done & patient recovered without serious complication. Fetus (1.1Kg) expired on day 9 due to prematurity.

**Discussion:** Although Past 2 sections & advanced age are risk factors for uterine rupture, initial presentation was more favor for possible diabetic ketoacidosis or pulmonary embolism. Further deterioration with appearance of free fluid led to do laparotomy.

**Conclusion:** Uterine rupture can occur even in 2nd trimester without labour & this should be 1st ruled out in all pregnant women presented with acute abdominal pain regardless of their gestational age. Search for non-gynaecological causes in such clinical presentations can delay crucial obstetric surgical intervention that can lead to loss of obstetrics function, morbidity and mortality.

### **P18: Peripartum cardiomyopathy induced by possible systemic sepsis**

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*Professorial Unit, Teaching Hospital Peradeniya*

**Introduction:** Peripartum cardiomyopathy is a rare form of cardiomyopathy that presents with left ventricular failure in the last month of pregnancy or in the first five months postpartum. The etiology of this condition is still unknown; possibilities include myocarditis which might be due to viral infection, autoimmune or idiopathic. While none of the above etiologies are been proven, sepsis has also been postulated as possible culprit for this condition. We present a case of peripartum cardiomyopathy presenting in the first week, post caesarean delivery possibly induced by sepsis.

#### **Case description:**

A 34 year-old lady underwent uncomplicated caesarean section due to past section and was discharged routinely. Day 11 post delivery she was admitted with shortness of breath, chest pain, orthopnoea, bilateral leg swelling and high fever. On admission the heart rate was 115 per minute and blood pressure was 160/90 mmHg. Her blood investigations showed neutrophil leukocytosis with (18400/ml) with high CRP of 27mg/L. Arterial blood oxygen saturation was 68% and her 2D echo showed a global hypokinesia with impaired left ventricular function and an ejection fraction of 45%. Her ultrasound scan revealed a collection in uterine cavity with possible retained products.

Following resuscitation and stabilization with heart failure treatment her retained products were evacuated surgically and a pus collection was drained. Following this with broad spectrum antibiotics she had a complete recovery.

**Discussion:** Post partum should be considered a possible etiology for peripartum cardiomyopathy and the clinicians should be aware of this complication in women with post partum sepsis.

### **P19: Fallopian tube is capable of collecting ova from either side ovaries: A rare case proving this possibility**

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*1. Professorial Obstetrics and Gynaecology Unit, Teaching Hospital, Peradeniya*

**Introduction:** Ectopic pregnancy is a condition where the fertilized ovum is implanted outside the uterine cavity. The incidence of ectopic pregnancy is around 11 per 1000 pregnancies and more than 97% of them were tubal ectopics. Normally tubal ectopis result from the ova released from the same side ovary. We report a rare case of a tubal ectopic when there was an ipsilateral oophorectomy done in the past.

**Case description:** A 30-year-old primiparous woman presented at 5 weeks of gestation with severe abdominal pain and vaginal bleeding. She had undergone left sided oophorectomy five years ago due to ovarian torsion. On admission she was pale with severe left sided abdominal tenderness. Her haemoglobin was 7.3g/dl and ultrasound scan of the pelvis revealed most likely ruptured left sided tubal ectopic with moderate amount of haemoperitonium. An emergency laparotomy was performed and a ruptured left sided tubal ectopic was noted with 400cc haemoperitonium. There was no left side ovary as expected due to previous oophorectomy and right side tube and ovary were normal. A left salphyngectomy was performed and histology was consistent with tubal ectopic.

**Conclusion:** It is common to have unilateral tubal ectopic if there is an functional ovary in the ipsilateral side, but this proves that the fallopian tube is capable of collecting an egg from the contra lateral tube if the ipsilateral ovary is missing or diseased and clinicians should always be aware of this possibility if there is a patient with one sided tubal or ovarian disease.

### **P20: Severe early onset fetal growth restriction with large placental chorioangioma**

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*Professorial Unit, Teaching Hospital Peradeniya*

**Introduction:** Chorioangioma is a rare tumor arising from the placenta; it is defined as an abnormal proliferation of vessels arising from the Chorionic tissue. The reported incidence is 1% of all pregnancies and most are less than 3cm. large chorioangiomas are clinically important as these can be associated with pregnancy complications. We present a rare case of early onset severe fetal growth restriction (FGR) with a large chorioangioma.

**Case description:** A 28-year-old primiparous woman was admitted at 25 weeks of gestation with suspected FGR. Her ultrasound scan report revealed a severely growth restricted baby with abdominal circumference below the 5th centile and head circumference at the 50th centile. Her umbilical artery dopplers were abnormal with resistant index 0.86 and Pulsatility index 1.7. On further examination it revealed a large posterior placental mass measuring 10.7cm x 9.1cm x 6.7cm. With vascular studies it was concluded that she was having a large chorioangioma in the placenta. The dopplers were done every 3 days and she was managed inward. At 26 weeks, the umbilical artery doppler revealed absent diastolic flow with occasional reversing, the estimated fetal weight was 601g. It was decided to complete the steroids and deliver her by caesarean section.

**Conclusion:** FGR is a documented complication associated with placental chorioangioma, but it's very rare to have severe early onset fetal growth restriction needing delivery at 26 weeks of gestation with placental chorioangioma. This should be borne in mind when women present with severe fetal growth restriction in late second trimester.

## P21: Case report: Giant adenomatoid tumour of uterus mimicking like large leiomyoma

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**Introduction:** Adenomatoid tumours of uterus are rare benign neoplastic disorder of the female genital tract. Even though reported incidence is around 1-2% true incidence is probably more than that as they are not usually symptomatic. Most cases are under 3 cm in diameter, but giant variants up to 15 cm in diameter are also described. Here, we describe a case of giant adenomatoid tumor of the uterus that was managed surgically.

**Case history:** A 24-year-old nulliparous woman presented with abdominal distension, regurgitation and early satiety of five months duration. She did not have any menstrual disorders. Abdominal examination revealed a large pelvic tumour corresponding to 20 weeks gravid uterus. Ultrasonography revealed a large uterus with multiple fibroid. She underwent a laparotomy, a subserosal mass arising from the posterior uterine wall near the fundus and extending to the left uterine cornu was found. It was not a well-defined mass and consistency was firm in nature. Tumour was easily enucleated and sent for histology. Uterus was repaired into two layers. Post-operative recovery was uneventful. The histology report revealed as adenomatoid tumor of the uterus.

**Discussion:** Adenomatoid tumour arises from the germinal epithelium of abdomen and thorax. It is a variant of mesothelioma. They can be associated with fibroids and tend to mimic them clinically, making pre-operative diagnosis difficult. Macroscopically, most appear as nodular formations with ill-defined margins and can occur in ovary, mesentery, adrenal glands, and omentum. Rarely do they recur even after conservative surgery and so far no malignant transformation has been reported. Therefore, the recommended treatment is simple excision of the tumor, if possible.

## P22: A Case of Postmenopausal Pyometra Caused by Tuberculosis

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**Introduction:** Pyometra, an accumulation of pus in the uterine cavity has an incidence of 0.01%-0.5% in gynecologic patients. Apart from its association with malignant disease, spontaneous rupture of pyometra can result in significant morbidity and mortality.

**Case Report:** An 87year old patient presented to clinic with offensive vaginal discharge for three months. She doesn't have a

past history or contact history of TB. Pelvic examination revealed foul-smelling vaginal discharge without abdominal tenderness. TVS showed a dilated, fluid filled endometrial cavity. Under the guidance of thin sound, drainage was done successfully. Pipelle endometrial sampling was done. Acid fast bacilli detected in the drained pus. WBC 15030 with neutrophil 80%, ESR is 100mm/1st hour & mantoux test was strongly positive (30mm). CXR, FBS, RFT, LFT were normal. After completion of 6 months of the antituberculous medication, she was doing well and no longer displayed any symptoms of pyometra.

**Discussion:** Mycobacterium infection of the genital tract, manifesting pyometra in postmenopausal women, is extremely rare due to atrophic endometrium which has poor vascular support for Mycobacterium to grow. Mantoux test may be positive (specificity 80% sensitivity 55%), WBC, CRP & ESR may be raised in genital TB patients. USS helpful to demonstrate endometrial thickening, pyometra, ascites and pelvic mass. A chest X-ray is normal in most cases. Definitive diagnosis is the detection of tuberculosis bacilli in endometrial specimen cultures. A six- to nine-month regimen (two months of isoniazid [INH], rifampicin [Rifadin], pyrazinamide, and ethambutol [Myambutol], followed by four to seven months of isoniazid and rifampin is recommended as initial therapy for all forms of extrapulmonary tuberculosis.

## P23: A rare case of primary mediastinal B cell Lymphoma during pregnancy

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**Introduction:** Non-hodgkins lymphomas are rare tumors to occur in pregnant women. When they occur they tend to take as aggressive histology and widespread dissemination. We present a primary mediastinal B cell lymphoma which is a Non-Hodgkin's Lymphoma presenting in pregnancy with very poor prognosis.

**Case presentation:** 34-year-old multiparous women presented to her local hospital at 17 weeks of gestation with two week history of productive cough and shortness of breath. On examination she was ill looking with tachypnoea and reduced air entry on left side of the chest with stony dullness and trachea deviated to the right side. The chest X-ray showed a large mediastinal mass with a large pleural effusion. Non Contrast CT scan of the chest revealed same findings. An intercostals tube was inserted to relieve the dyspnoea and a mediastinoscopy guided biopsy performed. The histology revealed a primary B cell lymphoma. After discussion with the couple, both partners agreed on termination of pregnancy as the tumor was in advanced state. Medical termination was done and chemotherapy was initiated but she deteriorated and succumbed after the second cycle of chemotherapy.

**Case discussion:** Primary Mediastinal B cell lymphoma is a diffuse large cell non-Hodgkins lymphoma. The mean age at presentation is 42 years with a female predominance. It accounts for the 5-7% of the aggressive lymphomas. They are treated with combination chemotherapy. If diagnosed in the first trimester, termination of pregnancy is recommended but in second and third trimester treatment can commence without undue teratogenicity, but the prognosis is poor.

## **P24: Abnormal Thyroid Stimulating Hormone Level and Heavy Menstrual Bleeding: A Case Control Study**

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**Introduction:** Heavy menstrual bleeding is a common problem during the reproductive life which causes morbidity and affect the quality of life. The causes are several such as fibroid, polyps, adenomyosis, malignancies, coagulation and endocrine abnormalities. The prevalence of hypothyroidism in general population is 3% but the prevalence among the patients with heavy menstruation bleeding is unknown.

**Method:** A randomized case control study was conducted over a 8 months period. Fourty seven patients attend to ward 12 Gynaecology clinic, colombo south teaching hospital with the history of heavy menstrual bleeding were taken as control group once the other causes of heavy menstrual bleeding were excluded. Ninty four age matched women were selected as a control group from the well women clinic. Thyroid stimulating hormone (TSH) levels were measured in all.

**Results:** Five women (10.63%) in the cases had a TSH level above the normal range. Two women (2.12%) in the control group had TSH level above normal range. The p-value >.25 it is statistically not significant. All women who became positive in the cases and control groups were clinically euthyroid.

**Conclusion:** The prevalence of hypothyroidism in women with heavy menstrual bleeding attending to the ward 12 Gynaecology clinic colombo south teaching hospital was statistically not significant compared to the general population.

## **P25: Audit on postpartum neonatal care in the Labour Room**

**Raguraman S, Wickramaratne SS, Perera MAK**

*DSHW, Sri Lanka*

**Introduction:** Immediate post-partum neonatal care is vital for stabilization of newborn that is undergoing a transition from in-utero dependent life to an extra-utero independent existence. In Sri Lanka Neonatal mortality rate has been low throughout but the rate of improvement has diminished over the past decade. The External Review of Maternal and Newborn Health of Sri Lanka (Ministry of Health Care and Nutrition, 2007) specifically revealed that there is a need to plan for high quality newborn care service provision to island wide.

**Objective:** To evaluate current practice of post-partum neonatal care in local setting in comparison to the standards of post-partum neonatal care at National and International practice.

**Method:** A prospective audit, conducted in labour room of WD-05, De Soyza Hospital for women using an observational checklist according to a protocol adopted for postpartum neonatal care from 2016 march to 2016 may.

**Results:** 104 uncomplicated child births were observed. 90-99% of result was seen in stimulating the baby before clamping the cord, removing the gloves for cord clamping, establishing breast feeding within one hour and taking the body measurement after 1st feed. 80-89% seen in calling out the time of birth and delivering the baby on to the mother's abdomen. Putting the baby in between the mother's breast was 61.5%.

**Conclusion:** Postpartum neonatal care protocol of ward 5 DSHW was satisfactorily following by health care workers who attend delivery in labor room. Further education and training will improve neonatal care in future.

## **P26: Case report: Synchronous Endometrioid Carcinoma of the Ovary and Uterus in a young woman**

**Dissanayaka AD, Raguraman S, Senadheera DI, Ihalagama H, Hapuchchige C**

*Cancer Institute of Maharagama*

**Case report:** A 30 year old mother of one presented with heavy menstrual bleeding and abdominal pain for 3 months. On examination there was a 28 week size pelvic mass. Ultrasound showed an enlarged uterus 10cmx8cm with irregular endometrium with thickness of 15mm. A multilocular right sided ovarian mass 13cm x 10cm was present. Endometrial sampling revealed grade II endometrioid type endometrial adenocarcinoma. At laparotomy moderate ascites with a right-sided multilocular ovarian tumor and an enlarged uterus was noted. Left side ovary, bilateral tubes appeared normal. Pelvic and para aortic nodes were enlarged. Tumor deposits were on sigmoid colon, parametrium and undersurface of diaphragm. Clinical stage was IIIC. Total abdominal hysterectomy, omentectomy and bilateral salpingo oophorectomy was done. Histological examination showed a well-differentiated endometrioid ovarian carcinoma with well-differentiated endometrioid endometrial cancer. Her recovery was uneventful and she was referred for chemotherapy. Immunohistochemistry (IHC) studies are pending.

**Discussion:** Synchronous endometrioid carcinoma of the uterine corpus and ovary is an uncommon but well recognized event as an independent primary or as a metastatic tumor. Although 15% of endometrioid carcinoma is associated with endometriosis, in our case there was no previous endometriosis. It is necessary to identify synchronous primaries and metastatic tumors correctly for staging, prognosis and further management. Features in favour of metastasis to ovary from endometrial primary such as deep myometrial invasion, bilateral involvement of ovaries and small size ovarian tumor were absent in our case favouring simultaneous primary tumors. IHC will provide real confirmation.

## **P27: A study on influence of maternal weight gain during pregnancy in selected fetal outcome**

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*Teaching Hospital Kandy*

**Objective:** To describe the relationship between maternal weight gain with birth weight of new born and Apgar score at 5 and 10 minutes of birth

**Method:** A cross-sectional descriptive study was carried out in Kandy teaching hospital from September 2014 to May 2015. 425 mothers were recruited according to the inclusion and exclusion criteria. The data was collected by interviewer administered questionnaire and mothers antenatal records. Three weight gain categories were used according to the WHO and institute of medicine (IOM) recommendation to calculate the weight gain frequency percentages and which compared with WHO recommended birth weight and Apgar score of new born. Data analyzed by SPSS 17th version.



**Results:** Response rate was 100% (n=425) and contained mothers of all three categories including less than 11.3kg (74.6%), 11.3-15.8 (22.6%) and more than 15.8 (2.8%) and mean age of 27.67+/-6. There were no statistically significant association between all three maternal weight gain categories with birth weight of new born (chi square- 3.97, p=0.68) and Apgar score at 5 minutes (chi square- 5.3, p=0.71). Weight gain less than 11.3kg mothers had statically significant low Apgar score (4-7) at 10 minutes (chi square- 6.8, p=0.32).

**Conclusion:** Low birth weight and low Apgar score at 5 minutes were not significant in Low (less than 11.3kg) weight gain mothers, but it significant in low Apgar score at 10 minutes. Pre pregnancy planning and antenatal weight gain monitoring during pregnancy will improve fetal outcomes.

## **P28: Level of Satisfaction in Pain Management during and after Episiotomy of Mothers Undergoing Vaginal Deliveries in Castle Street Hospital for Women (CSHW)**

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2. Registrar in Community Medicine, Faculty of Medicine, University of Colombo

**Introduction and Objectives:** Episiotomy is defined as an incision made through the perineum during second stage of labor to facilitate the delivery of the baby. In some setting this is done under local anesthesia. This study aimed to assess the level of satisfaction in pain management during and after episiotomy among mothers undergoing vaginal deliveries at CSHW.

**Method:** A descriptive cross sectional study was carried out among 140 females who underwent vaginal deliveries in CSHW selected by multistage systematic sampling method. The association between factors and overall satisfaction in episiotomy pain management was analyzed using an interviewer administered questionnaire and data extraction sheets.

**Results:** Out of 137 respondents to the questionnaire, 75.2% were satisfied while other 24.8% were not satisfied. A significantly higher satisfaction was seen among mothers who has undergone vaginal delivery previously (p = 0.007), those who had experienced an episiotomy before (p = 0.009) and mothers who delivered babies less than 2.8 kg (p = 0.002). There was no association in maternal age, nationality, employment status or educational level towards the level of satisfaction. There was no significance between satisfactory level in those who were given analgesics and not given (p = 0.697). The level of satisfaction was not associated with the reported level of pain during episiotomy (p = 0.732).

**Conclusion:** The overall pain management for mothers who undergo normal vaginal delivery in CSHW is in a satisfactory level however, the factors identified as influencing the satisfaction of mothers should be addressed to improve the quality of care.

## **P29: Borderline ovarian mucinous tumour an adverse experience with fertility sparing surgery**

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National Cancer Institute, Maharagama, Sri Lanka

**Introduction:** Borderline ovarian tumours (BOT) comprise 15–20% of epithelial tumours & can be serous, mucinous, endometrioid, clear, and transition cells (Brenner). The first two variants include 95% of the total (Mucinous 32%). commonly present in third to fourth decade of life. 80% of cases limited to ovary at diagnosis. Has 90% ten years survival rate in the initial stages and 60–70% in the advanced stages. While the recommended treatment is a hysterectomy with double adnexectomy & conservative treatment of fertility may be a safe possibility in selected cases.

**Case history:** Our patient underwent laparoscopic right ovarian cystectomy at NICM for unilocular cyst 16x10x08cm at 25 years of age. Histology revealed mucinous BOT with multiple foci of micro-invasion FIGO stage 1A. She refused second surgery for unilateral salpingo-oophorectomy & appendicectomy. Defaulted follow up after one year (3 monthly USS surveillance). At 28 years founded left sided complex ovarian cyst 8x6x5cm while investigating for subfertility & undergone left/salpingo-oophorectomy in different unit. Histology revealed intestinal type mucinous BOT with capsular invasion FIGO stage 1C. She was given 6 cycles of chemotherapy & referred back to NICM. She was undergone debulking laparotomy with Right salpingo-oophorectomy, hysterectomy, omentectomy & appendicectomy.

**Discussion:** Fertility conservative surgery consists of removing the entire disease but preserving the uterus and at least a part of an ovary associated with risk of recurrence without impact on the overall survival rate. A meta-analysis from Cochrane on BOTs concluded that current evidence does not show any benefits in the use of adjuvant therapy (whether chemotherapy or radiotherapy) independently of the stage or tumour histology. Treatment of relapses needs surgical treatment with maximum cytoreduction.

## **P30: Hymenotomy for a girl with Imperforate Hymen: A case report**

Tharindu EAD, Ruwanpathirana SA

**Background:** Incidence of imperforated hymen varies between 1 in 1000 to 1 in 10,000 though it is the most common obstructive genital tract anomaly. Majority presents with primary amenorrhoea with cyclical abdominal pain. Half may complain urinary retention.

**Case report:** A 14 year old school girl presented with primary amenorrhoea had cyclical lower abdominal pain for two year duration. She intermittently had difficulty in passing urine. On examination she had secondary sexual characteristics with tender pelvic mass on abdominal palpation. Ultrasound scan revealed haematocolpos with normal uterus. Therefore diagnosis of Imperforated hymen was confirmed. Decision was made to perform hymenotomy/ hymenoplasty for the condition.

Vertical incision made on the imperforated hymen in collected blood was drained. Opening was dilated in haematocolpos was reduced. Oblique sutures were made to prevent reunion of edges of the hymen opening. On follow up patient had normal menstruation without obstruction.

**Discussion:** Imperforated hymen is one differential diagnosis in teenage girls presenting with lower abdominal pain or urinary retention without obvious urological pathology. Basically there are two 'standard' hymenotomy procedures done for this condition. One is cruciate incision technique and other vertical incision. Hymen preserving surgery is preferred in some regions due to social and cultural reasons.

### **P31: Case report: A case of caesarian scar pregnancy, successfully managed with ultrasound guided evacuation**

**Musthaq ACM<sup>1</sup>, Pallemulla LC<sup>2</sup>, Kodithuwakku KASUA<sup>3</sup>, Kumara BMB<sup>4</sup>, Raguraman S<sup>5</sup>**

*1,2,3,4. Castle Street Hospital for Women, 5. De Soysa Hospital for Women*

Caesarian scar pregnancy is a rare life threatening condition with the estimated incidence of 1/2500 caesarian deliveries. A delay in diagnosis and/or treatment can lead to uterine rupture, major haemorrhage, hysterectomy and serious maternal morbidity.

A 35 year old housewife with period of amenorrhea of 12 weeks, admitted with lower abdominal pain and per vaginal bleeding. It was her third pregnancy with previous two caesarian sections. Transvaginal ultrasound scan revealed a 2.5 cm size gestational sac implanted at previous scar. Serial Serum beta HCG levels were done and they were increasing. After confirming the diagnosis of live caesarian scar pregnancy, we planned to manage her medically and treated her with IM methotrexate 50mg/m<sup>2</sup>. Serum beta HCG levels were monitored and it gradually came down and reached a plateau level of 30 U/L in 4 weeks' time. Meanwhile, she developed features of early sepsis and was managed with intravenous antibiotics. We did ultrasound guided evacuation of the products as she had recurrent episodes of foul smelling vaginal discharge and features of persistence sepsis. During the procedure she developed heavy per vaginal bleeding (intra-abdominal bleeding excluded). It was managed with Foley catheter balloon tamponade. She had uneventful post-operative recovery. Balloon tamponade removed after 24 hours. Serum beta HCG levels reached normal levels in 6 weeks time and she developed menstruation 8 weeks after the evacuation.

Early diagnosis and treatment of caesarian scar pregnancy is essential to prevent complications, thus preserving the uterus and future fertility. Management plan should be individually tailored.

### **P32: Case report: A rare case of dual pathology Meigs' syndrome and pulmonary tuberculosis causing pleural effusion**

**Musthaq ACM<sup>1</sup>, Pallemulla LC<sup>2</sup>, Kodithuwakku KASUA<sup>3</sup>, Kumara BMB<sup>4</sup>, Raguraman S<sup>5</sup>**

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Meigs syndrome is defined as the triad of a benign ovarian tumor, ascites and hydrothorax, which usually resolves after resection of the tumor. While ovarian fibromas constitute a majority of cases of Meigs syndrome, this syndrome itself is a diagnosis of exclusion and ruling out of ovarian malignancy is mandatory.

A 56 years old teacher, a mother of 3 children was referred to Castle Street Hospital for Women for further management of a solid pelvic mass. She had a chronic cough and dyspnea on exertion, had been investigated previously and found to have right sided pleural effusion. During further evaluation she was diagnosed to have culture positive pulmonary tuberculosis and had been started on anti-tuberculosis therapy. Despite 4 months of treatment she had persistent right sided pleural effusion and further investigation revealed a 8cm x 8.8 cm size solid pelvic tumour with mild ascites. Her CA 125 level was 27 U/ml. We did exploratory laparotomy which revealed a right sided solid ovarian tumour. Other ovary and the uterus were normal. She

had mild ascites of about 100ml which was sent for cytology and we proceeded with total abdominal hysterectomy and bilateral salpingo-oophorectomy. She had an uneventful post-operative recovery. Subsequent histology findings were compatible with a right sided benign ovarian fibroma. A chest radiograph repeated in one week's time disclosed complete absorption of pleural effusion. Anti-tuberculosis therapy continued for a total of six months.

Though rare, Meigs syndrome must be considered when a female patient is having a persistent pleural effusion.

### **P33: Neonatal outcomes following prostaglandin induction. A comparison between single versus repeat cycle**

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**Objectives:** To study the neonatal outcomes following two cycles of prostaglandin (PGE<sub>2</sub>) induction of labour (IOL) in a tertiary care institute.

**Design setting & Methods:** A prospective study was conducted amongst pregnant women induced using PGE<sub>2</sub> at the university obstetrics unit of De Soysa hospital for women for 3 months. All the mothers with singleton cephalic pregnancies who were induced with PGE<sub>2</sub> were included. Information was collected from the clinical notes using a data collection tool.

**Results:** During the study period, 151 PGE<sub>2</sub> inductions were done. The commonest reason was past dates (n=41, 27.1%) followed by, oligohydramnios at term (n=29, 19.2%), fetal growth restriction (n=23, 15.3%) and diabetes mellitus complicating pregnancy (n=23, 15.2%). Vaginal delivery rate was 64.1% (n=97), while caesarean section (CS) and instrumental delivery rates were 27.2% (n=41) and 8.6% (n=13) respectively. 12% of the mothers underwent 2 cycles of PGE<sub>2</sub> induction. Fetal and neonatal outcomes of single versus repeat cycle of PGE<sub>2</sub> inductions were compared. Number of induction cycles had no effect on the mode of delivery (p=0.87), CTG anomalies (p=0.83), meconium stained liquor (p=0.48) or SCBU admissions (p=0.79).

**Conclusion:** Conventionally, maximum of 2 cycles of PGE<sub>2</sub> inductions are allowed with 2 doses of 3mg PGE<sub>2</sub> tablets six hours apart in each cycle with a 24hour delay between the two cycles. However many units are reluctant to continue into the second cycle of PGE<sub>2</sub>, fearing potential fetal complications. Second cycle of PGE<sub>2</sub> for induction seems to have comparable neonatal outcomes with single cycle induction. However a larger study is recommended for confirmation.

### **P34: A case of Adult type Granulosa cell tumor with early recurrence. In a pre-menopausal woman following cystectomy**

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*National Cancer Institute, Maharagama*

**Introduction:** The granulosa-cell tumor is a rare ovarian neoplasm, accounting for 2-5% of all cases. It is the most common type of sex cord-stromal tumor and the majority of patients are diagnosed at an early stage hence have a relatively

favorable prognosis. There are two types: juvenile (5%) and adult (95%). Adult GCTs frequently occur in postmenopausal women with a peak incidence between 50 to 55 years. We present an unusual case of adult type GCT which presented below the age of 30 years sub-optimally managed, delivered a baby and presented with tumor recurrence.

**Case report:** A 29-year-old unmarried lady had presented with abdominal distension, abdominal pain and Heavy Irregular periods for six months. USS pelvis had revealed a left sided unilocular, thin walled ovarian cyst measuring 12×15 cm. Her CA-125 was 11.2 u/l. She had undergone a mini laparotomy and cystectomy with ovarian reconstruction. Subsequent histopathology report revealed an adult GCT with Call-Exner bodies and no nuclear atypia or mitosis (Stage 1A). Immuno-histochemistry further confirmed the diagnosis with diffuse positivity for inhibin and CD 99. She had not attended further follow up following surgery. One year later following her marriage presented back to the clinic due to anxiety. Her ultrasound evaluation of the pelvis was negative; she was asymptomatic and was referred for general oncology opinion. Four months later she got pregnant and delivered a healthy baby with cesarean section at term and at the same time rightfully underwent left sided salpingo-oophorectomy and right sided ovarian biopsy. Histopathology report revealed left sided tumor recurrence with right sided normal ovarian tissue. Following this she was referred to us (gynae-oncology) for further management and she is currently awaiting CT-Pelvis, and to be started on Chemotherapy.

**Discussion:** All granulosa cell tumors have a potential for aggressive behavior. From 10-50% of patients develop recurrence even as late as 20-30 years. Surgical management is based on the stage of the tumor as well as age and fertility wishes. In postmenopausal women surgery consists of TAH and BSO. Patients presenting in the reproductive years with early stage disease are often managed with unilateral salpingo-oophorectomy in an attempt to preserve fertility. Tumors greater than 10-15 cm in diameter have been associated with high recurrence rates and shorter progression-free survival, independent of stage. Stage is the most important prognostic factor, with 10-year survival of 84-95% for stage I. Patients with low risk stage I tumors should be kept on observation. Patients with high risk stage I disease associated with large tumor size ( $\geq 10$ -15 cm), stage IC, poorly differentiated tumor, high mitotic index, or tumor rupture might be considered for adjuvant chemotherapy. This patient should have been followed up and undergone left sided salpingo-oophorectomy rather than a cystectomy following initial diagnosis before the pregnancy. For patients with stage II-IV granulosa cell tumors, postoperative treatment is recommended, but the survival benefit is still not known due to rarity of these tumors and lack of randomized trials.

### **P35: Knowledge of cervical cancer screening program of Sri Lanka in cancer patients at National Cancer Institute Maharagama**

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**Objective:** Cervical cancer is the commonest gynaecological malignancy in Sri Lanka. Early detection through screening can have complete cure. Despite the presence of a National cervical cancer-screening program and an effective screening test of Papanicolaou smear (pap test), it is underutilized. Our objective was to assess the knowledge and practice of cervical cancer screening amongst cancer patients.

**Design:** A descriptive cross sectional study was done at Cancer Institute Maharagama involving 60 patients. A self-administered questionnaire was provided. Data was analyzed with SPSS software.

**Results:** The mean age of participants was 49 years and majority (68.5%) had secondary education. Although 70% of the participants knew of cervical malignancy only 60% had known about use of Pap smear for cervical cancer screening. Patients obtained information regarding Pap smear from midwives (52.17%), doctors (34.78%), nurses (4.34%), media and other sources (8.69%). Only 40% had undergone a Pap smear and only 30% had attended a well woman clinic. Of those who had undergone a Pap smear only 33.3% had undergone a Pap smear within last 5 years. Of participants 66.6% were aware of Pap smear screening interval of 5 years.

**Conclusion:** Despite awareness of cervical cancer and cervical cancer screening through Pap smears in the majority, many women have not had a Pap smear test. Education via media and health care providers is less and needs improvement.

### **P36: Knowledge of cardio pulmonary resuscitation in pregnancy among obstetric health care providers at a tertiary care hospital**

*Silva GHSP, Dissanayake AD, Ratnasiri UDP  
Castle Street Hospital for Women*

**Objectives:** Maternal cardio pulmonary arrest is not commonly encountered. Therefore exposure of healthcare workers in obstetrics to cardiopulmonary resuscitation in pregnancy is limited. The knowledge and skills of obstetric health care workers regarding maternal cardio pulmonary resuscitation, which is a life saving procedure, is not frequently assessed.

**Design:** A descriptive observational study was conducted through a self-administered questionnaire on cardiopulmonary resuscitation in pregnancy. The questionnaire was given to health care workers in obstetric units and given a mark out of 100. Informed consent was obtained. Following the questionnaire a workshop on cardiopulmonary resuscitation in pregnancy was conducted.

**Results:** Study included 30 participants, which included 2 Registrars (6.6%), 2 senior house officers (6.6%), 8 Intern medical officers (26.6%), 2 Nursing Sisters (6.6%) and 14 Nursing officers (46.6%) and 2 midwives (6.6%). The response rate was 92%. The mean score was 62.05%. All knew of left lateral tilt during cardiopulmonary resuscitation in pregnancy. Only 76.6% knew the correct ratio of chest compressions to ventilation and chain of survival was known correctly by 60%. Correct depth of chest compression was known by 54.5% and indications for defibrillation were known by only 43.3%. Only 34.4% knew the correct interval of switching roles in two-rescuer resuscitation.

**Conclusion:** The knowledge among obstetric health care workers regarding maternal cardio pulmonary resuscitation is not up to date. Regular training and workshops at unit level to update knowledge is recommended.

### **P37: Case report: Early abdominal ectopic pregnancy**

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**Introduction:** An abdominal pregnancy is a pregnancy that occurs in the abdominal cavity outside of the female reproductive organs (implantation sites- uterine serosa, pouch of Douglas, omentum, bowel and mesentery etc) accounts for 01% of all ectopic pregnancies. Mortality rates are 7.7 times higher than in tubal pregnancy, and 89.8 times higher than in intrauterine pregnancy. There are no pathognomic symptoms of abdominal pregnancy, thus a high index of suspicion is necessary for diagnosis. The tool of choice for diagnosis is ultrasound but it only gives 50% accuracy when used along with clinical evaluation.

**Case Report:** A 32 year old P3C2 with previous 2NVD at POA of 15 weeks admitted with lower abdominal pain & mild pv bleeding for 3 day. She was just registered with MOH clinic. Her blood group was O positive. On admission she is haemodynamically stable & had 16 week size pelvic mass. Both abdominal & vaginal scans revealed an extra uterine pregnancy in the POD without foetal cardiac activity. CT scan also suggestive of abdominal pregnancy. During ward stay patient monitored regularly using MEOWs chart. After family counseling we manage her surgically with the help of multidisciplinary team. There was an abdominal pregnancy attached to the posterior surface of uterus, POD & left mesosalpinx. We manage to remove the abdominal pregnancy with left sided fallopian tube. During surgery she was given one unit of blood. She was discharged post-operative day 5.

**Discussion:** Abdominal pregnancies can be classified as early (before 20 weeks) or late (after 20 weeks) based on the gestational age of presentation. Maternal mortality with EAP is high because they typically implant on highly vascularized surfaces, and can separate at any time during the gestation, resulting in heavy blood loss. The most important factors that influence survival and management modality include maternal haemodynamic status and gestational age at time of presentation. Medical management is commonly used where potential life-threatening bleeding is anticipated, such as EAP of the liver and spleen. After medical management patients are kept under surveillance because they might need surgery for haemorrhage. No uniform guidelines & no strong clinical predictors for successful medical therapy. Angiographic arterial embolisation can be used as first line treatment of EAP with the aim of avoiding surgery.

### **P38: A rare case of advanced vulval cancer in a patient with a transplanted kidney**

*Piyadigama I, Rajaguru S, Dissanayake AD, Hapuarachchi C*

**Introduction:** Vulval cancers are rare. Therefore management is mostly dependent on case series. Vulval cancer in a kidney-transplanted patient is extremely rare. Radiotherapy is an integral part of management of advanced vulval cancer and it is very challenging in the context of a transplanted kidney.

**Case presentation:** Mrs. KGM had renal transplant at the age of 27 years due to end-stage renal disease. With immunosuppressive medications at the lowest doses she had well preserved kidney functions. At 46 years of age she presented with itching of the vulva for 1-year duration. Vulval biopsy was carried out which revealed a well-differentiated invasive squamous cell carcinoma of the vulva.

She underwent vulvectomy. The histology showed a moderately-differentiated squamous cell carcinoma of the vulva with 4mm stromal invasion. Clitoral resection margins showed in-situ squamous cell carcinoma while the rest of the margins were free of tumour. Specimen showed lymphovascular emboli. Therefore

bilateral groin node dissection was carried out. Since four out of nine lymph nodes from the left groin showed extensive tumour deposits she was referred for radiotherapy.

**Discussion:** Lymph node positive vulval cancer requires adjuvant radiotherapy with high doses to the inguinal nodes coupled with moderate doses to the pelvic lymph nodes. Kidneys are highly sensitive to radiation. This patient had only one functioning kidney in the left side of her pelvis, which needed to be spared from radiation completely. Tumour deposits were at the ipsilateral groin which challenged left pelvic lymph node irradiation. Therefore we decided to give radiotherapy to inguinal lymph nodes while withholding pelvic irradiation in view of the transplanted kidney.

### **P39: An unusual case of chronic per vaginal discharge with a benign growth in the vaginal wall**

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**Abstract:** A 46 year old nulliparous woman presented with a history of profuse per vaginal discharge of 2 years duration. It was colorless, not itchy and not offensive. She didn't have urinary symptoms or burning sensation over the vulva. On examination there was a profuse watery vaginal discharge. Speculum examination revealed erythematous spots on the vaginal wall and the cervix. Right side of the vaginal wall was irregular and nodular. Transabdominal ultrasound scan and cervical smears were normal. Examination under anaesthesia revealed an irregular growth mainly on the right side of the vaginal wall. Histology report of the biopsies taken from the growth showed clusters of endocervical cells and was negative for intraepithelial lesion or malignancy. Dilatation and curettage was performed and histology report was suggestive of early secretory endometrium. Patient was referred to the sexually transmitted disease controlling clinic and investigated. A trial of broad spectrum antibiotics was started since the investigations were inconclusive. There was no improvement and she defaulted treatment. There are no literature suggestive of similar cases. One may postulate that at the time of fusion of müllerian ducts some endocervical cells have migrated to the sinovaginal bulb and got activated under the influence of oestrogen. Patient's commitment to her occupation and her own way of managing this problem is by frequent douching. The only suggested curative treatment is either local excision of these nodular tissue or partial vaginectomy.

### **P40: Solid ovarian tumour in premature menopausal woman - Case report**

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**Introduction:** The overall incidence of solid ovarian tumours is 23% of all the ovarian tumours of which 15% are benign and 85 are malignant. Ovarian steroid cell tumors are very rare type of sex-cord tumors comprising less than 0.1% of all ovarian tumors. Of which 1/3 is malignant. These tumors may cause precocious puberty in children and virilization (50-60%) in adult but unable

to find a single reported case in literature review of lipoid tumour with premature menopause.

**Case history:** 40 year old P1C1 patient presented with secondary amenorrhea & male type voice changes for 1 year with wage abdominal pain for 3/12. She had irritability & vasomotor symptoms, but had no pregnancy symptoms or dyspeptic symptoms. TVS showed R/S vascular solid ovarian mass (4.2cmX4.5cm), S. Testosterone (1.8), LDH (410), CA 125 (21), hCG (0.1). FSH & LH level confirmed the menopause. CT scan did not give any additional information. Laparotomy performed & Oophorectomy done. Capsulated solid mass with no free fluid & otherwise normal pelvic structures seen. Histology revealed lipid (lipoid, steroid) cell tumour. Wax specimen was sent for immune-histochemistry.

**Discussion:** In the presence of solid ovarian tumour in premature menopause woman with marginally elevated androgen, it is recommended to investigate systematically in order to determine whether the origin is adrenal or ovarian. Mainstay of treatment is surgery using total abdominal hysterectomy, bilateral salpingo-oophorectomy, and complete surgical staging. However, in young patients, unilateral salpingo-oophorectomy is adequate but this practice requires a mandatory follow-up evaluation with sex hormone level. Our patient underwent surgical treatment and current follow-ups have not detected any residual tumors or recurrences yet.

**Conclusion:** This is a case of a virilizing lipid cell tumor of the right ovary in a patient with premature menopause. Prompt diagnosis and treatment are emphasized in this potentially malignant and disfiguring androgenic tumor that is readily amenable to surgery. An awareness of this kind of rare entity will extend the appreciation of knowledge in gynaecology.

#### **P41: Case Report; Ureteric polypoidal endometriosis causing hydronephrosis without compromising renal function**

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**Introduction:** Endometriosis affects about 10% of the general population and 50% of subfertile women. It can affect almost any organ in the body. The disease commonly affects the pelvic structures. rarely can occur in other places of the body.

**Case presentation:** A 27 years old married woman presented with severe dysmenorrhoea and dyspareunia and physical examination revealed a nodule in the posterior fornix suggestive of an endometriotic nodule. There was mild hydronephrosis and hydroureter on left side detected by abdominal ultrasonography which was confirmed by a CT urogram. Further evaluation by ureteroscopy show an endometriotic lesion at 5 cm from the lower end almost completely obstructing the lumen. Patient was given intramuscular injections of DMPA monthly for 3 months and left side ureteric stent inserted and medical therapy continued for another 6 months and follow up USS showed no hydronephrosis. Stent removed after a year no recurrence detected.

**Discussion:** ureteral endometriosis is a rare form of endometriosis. If not diagnosed early can lead to obstructive renal failure. There are two type- the intrinsic and extrinsic. intrinsic type is commoner (80%). Left lower ureter is commonly involved. Examination will not find any positive results USS will help in diagnosis intravenous pyelogram and CT will help in diagnosis.

The symptoms vary depending on the severity of the obstruction. Usually managed with medical and surgical therapy with temporary ureteric stenting. minimally invasive procedures like ureterostomy, laparoscopic ureterolysis and re implantation are necessary for more extensive disease.

#### **P42: A rare case of Partial mole with well formed fetus, bilateral ovarian hyperstimulation and pulmonary metastases**

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**Introduction:** Gestational trophoblastic disease (GTD) is an uncommon complication of pregnancy. The term describes a group of inter-related diseases, including complete and partial molar pregnancy, choriocarcinoma and placental site trophoblastic tumor, which vary in their propensity for local invasion and metastasis. Worldwide, the incidence of GTD varies between 0.5 and 8.3 cases per 1000 live births.

**Case presentation:** A 20 years old mother primi presented at 20 weeks of gestation with sudden onset of abdominal discomfort and difficulty in breathing with no fetal movement. Examination revealed she was mild pale, dyspnoic, distended abdomen with a soft mass and a 20 weeks gravid uterus. Ultrasonography confirm the bilateral hyperstimulated ovaries, dead fetus with maturity around 20 weeks with left sided pleural effusion and markedly enlarged placenta with a possibility of a partial mole. HCG level was very high. Patient spontaneously delivered a well formed male fetus histology of the placenta confirm the partial molar pregnancy, as it was not affordable to the patient genetic studies were not done. CT shows pulmonary metastases, pleural effusion and bilateral hyperstimulated ovaries and other systems were unremarkable. Patient given ICU care for respiratory difficulty for 2 days. USS guided aspiration of the ovaries done cytology revealed no malignant cells. Patient transfer to oncology unit for chemotherapy.

**Discussion:** Partial moles usually have recognizable embryonic and fetal tissues with placental changes. Generally they are triploid, 2-3% of Partial moles can become malignant. Well respond to chemotherapy. Because of early diagnosis and treatment the current mortality is almost zero.

#### **P43: Rectal carcinoma presenting as pyometron: a case report**

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Bleeding per rectum is the most common symptom of rectal cancer, occurring in 60% of patients. Other common presenting symptoms include change in bowel habits (43%), colicky abdominal pain and bloating (20%). Uncommon presentations include bowel obstruction due to a high-grade rectal lesions (9%), surgical emergencies such as peritonitis from perforation (3%) or jaundice, which may occur with liver metastases (< 1%). Per vaginal discharge in absence of vaginal or uterine pathology, as a presenting feature of rectal cancer is extremely rare.

We present a 70 year old unmarried lady, who presented with vaginal discharge for one month duration and found to have a rectal carcinoma infiltrating the uterus on further evaluation. She didn't volunteer about any bowel symptoms or per rectal bleeding. The Ultrasound scan revealed a pyometron. Examination under anaesthesia revealed an enlarged uterus which was fixed in the pouch of Douglas. The pyometron was drained and an endometrial and cervical biopsies were taken for histology. A CT scan was done suspecting an advanced endometrial cancer and that showed a rectal carcinoma infiltrating into the uterus with liver metastasis. On endometrial histology, there was evidence of pyometron and the cervical biopsy was normal. A surgical referral was done and they found an upper rectal lesion which was biopsied to reveal an adenocarcinoma of the rectum.

Though rare, rectal carcinoma can infiltrate the uterus and a pyometron may be the only presenting feature. There for a rectal examination is warranted in suspicious cases to exclude this kind of rare possibilities.

#### **P44: Low birth weight; proportion and associated factors of babies delivered at two selected hospitals in Colombo district**

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**Abstract:** OBJECTIVES: Low birth weight is defined as a new born weighing less than 2500g at birth. It has a spectrum of complications from fetal life to later adult life. The main objective of this study was to determine the proportion of low birth weight and factors associated with low birth weight of babies delivered at two selected hospitals; Castle Street Hospital for Women (CSHW) and De Soysa Maternity Hospital (DMH) in Colombo district, Sri Lanka.

**Methods:** This is a descriptive cross-sectional study conducted on mothers admitted to post-natal wards in CSHW and DMH. Participants were selected by cluster sampling method and were assessed using an interviewer administered questionnaire and a data extraction form. The data analysis was done using IBM SPSS 21.0 version statistical analytical software.

**Results:** The proportion of low birth weight was 26.5% among the babies delivered at those two hospitals. Prematurity and multiple pregnancy showed significant association with low birth weight ( $p < 0.05$ ). Study revealed maternal age, maternal employment, higher socio-economic status, prenatal infection, gestational diabetes mellitus, pregnancy induced hypertension, primiparity, history of low birth weight, past history of miscarriage, maternal bronchial asthma; inadequate weight gain; low physical activity and lower mental status; tobacco exposure and poor family support were associated with a higher proportion of low birth weight.

**Conclusion:** The proportion of low birth weight in both CSHW and DMH was twice as much as that of overall Sri Lankan population (12.4%) which necessitates the provision of care for high risk mothers as twice as much of the care provided in a peripheral maternity hospital.

#### **P45: Translation and validation of generic questionnaire on lower urinary tract symptoms for females (ICIQ-FLUTS) in Tamil language**

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**Objective:** Lower urinary tract symptoms are often under-reported by women. Therefore, we wanted to translate and validate the International Consultation on Incontinence Modular Questionnaire on female lower urinary tract symptoms (ICIQ FLUTS) from English to Tamil language.

**Method:** With permission, the ICIQ-FLUTS questionnaire was translated to Tamil using the standard procedure. A validation study was carried out among women attending the gynaecology clinic at district general hospital-Mannar.

**Results:** Basic characteristics were as follows; patients with incontinence ( $n=33$ ) age 50.8 (SD 14.8), median parity=3 (IQR 1-4), BMI 25.8 kg/m<sup>2</sup> (SD 5.2), patients with voiding symptoms ( $n=15$ ) age 60.6 (SD 11.6), median parity=4 (IQR 1-4), BMI 24.8 kg/m<sup>2</sup> (SD 3.5) and controls ( $n=74$ ) age 42.8 (SD 15.1), median parity=2 (IQR 1-3), BMI 25.4 kg/m<sup>2</sup> (SD 4.4). Content validity was assessed by the level of missing data was less than 3% for each item. For the internal consistency, Cronbach's coefficient alpha scores ranged from 0.79-0.83. Kappa values for test-retest reliability in all items were 0.56 to 0.79. Construct validity was assessed by the ability of the questionnaire to identify patients with incontinence from controls ( $p < 0.001$ ) and those with voiding symptoms from controls ( $p < 0.001$ ). Patients with incontinence ( $n=10$ ) and voiding symptoms ( $n=9$ ) showed an improvement with treatment (Wilcoxon matched-pairs signed-rank test  $p < 0.01$  and  $p < 0.05$  respectively).

**Conclusion:** The preliminary results of the Tamil validation of the ICIQ FLUTS are satisfactory and once completed it will be invaluable to elicit female lower urinary tract symptoms in Tamil speaking patients.

#### **P46: Case report: Giant adenomatoid tumour of uterus mimicking like large leiomyoma**

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**Introduction:** Adenomatoid tumours of uterus are rare benign neoplastic disorder of the female genital tract. Even though reported incidence is around 1-2% true incidence is probably more than that as they are not usually symptomatic. Most cases are under 3 cm in diameter, but giant variants up to 15 cm in diameter are also described. Here, we describe a case of giant adenomatoid tumor of the uterus that was managed surgically.

**Case history:** A 24-year-old nulliparous woman presented with abdominal distension, regurgitation and early satiety of five months duration. She did not have any menstrual disorders. Abdominal examination revealed a large pelvic tumour corresponding to 20 weeks gravid uterus. Ultrasonography revealed a large uterus with multiple fibroid. She underwent a laparotomy, a subserosal mass arising from the posterior uterine wall near the fundus and

extending to the left uterine cornu was found. It was not a well-defined mass and consistency was firm in nature. Tumour was easily enucleated and sent for histology. Uterus was repaired into two layers. Post-operative recovery was uneventful. The histology report revealed as adenomatoid tumor of the uterus.

**Discussion:** Adenomatoid tumour arises from the germinal epithelium of abdomen and thorax. It is a variant of mesothelioma. They can be associated with fibroids and tend to mimic them clinically, making pre-operative diagnosis difficult. Macroscopically, most appear as nodular formations with ill-defined margins and can occur in ovary, mesentery, adrenal glands, and omentum. Rarely do they recur even after conservative surgery and so far no malignant transformation has been reported. Therefore, the recommended treatment is simple excision of the tumor, if possible.

#### **P47: A Rare case of acute kidney injury after cesarean section**

**Ethayaroban E, Wattuhewa DY, Senthilnathan G**

*De Soysa Hospital For Women*

**Introduction:** Acute kidney injury (AKI) is rare in pregnancy (5 in 100,000) but transient renal impairment (mild to moderate) is common. This condition mostly presents in the postpartum period. In the developing world it remains the recognized cause of maternal mortality and morbidity.

**Case report:** A 32 years old previously healthy mother readmitted on her postoperative 4th day after elective cesarean section with abdominal distension, reduced urine output and difficulty in breathing for two days duration. On admission she was haemodynamically stable with mild generalized body swelling. Ultrasound scan revealed gross ascites with no evidence of bladder or ureteric injury. The appearance of liver and kidneys were normal.

Her biochemical investigations showed very high values of serum creatinine and blood urea. 2.5L peritoneal fluid tapped and analysis confirmed ascitic fluid as transudation. There is no evidence of infection, her post operative haemoglobin is normal in range. Blood picture and other investigations reports helped to exclude haemolytic uremic syndrome (HUS), HELLP syndrome, acute fatty liver in pregnancy and pre eclampsia. She was managed with the help of consultant nephrologist. She was completely recovered without dialysis.

**Conclusion:** Most of the causes for AKI in this patient were excluded and only remaining is drugs induced kidney injury. AKI by NSAID and antibiotics (Cefuroxime) are due to acute hypersensitivity interstitial nephritis.

Management depends on the underlying causes, but in all cases accurate assessment of fluid balance is essential. AKI is reversible and supportive management is continue until recovery is apparent. Dialysis may be necessary to prevent or treat complication like uremia, acidosis or fluid overload.

#### **P48: An audit on the use of aspirin in patients at risk of developing preeclampsia**

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**Objective:** The NICE guideline "Hypertension in pregnancy" describes the use of aspirin in the prevention of pre-eclampsia. An audit was carried out to assess the prescribing patterns of aspirin.

**Method:** The audit was performed among postnatal women (n= 245) in ward 20 teaching hospital Jaffna from February to March 2016. Data was obtained from clinical notes and direct questioning. The criteria assessed were parity, age, inter-delivery interval, BMI at booking visit, family history of pre-eclampsia, multiple gestation, history of pregnancy induced hypertension or pre-eclampsia in the past, chronic kidney disease, autoimmune diseases, preexisting diabetes and chronic hypertension.

**Results:** We identified 17 women with high risk criteria out of 245 women interviewed. Of these, 13 had at least one high risk factor, and the remaining four were deemed high risk due to a combination of two or more moderate risk factors. Eleven women were prescribed aspirin. There was no documentation in the notes to suggest that the use of aspirin had been discussed with any of the women who did not receive it. None of them were had any contraindications for the use of aspirin. Three (27 %) were prescribed aspirin from 12 weeks gestation onwards and four before 12 weeks and continued up to 36 weeks of gestation. Other three were prescribed aspirin after 12 weeks of gestation. One woman was prescribed a daily dosage of 150 mg.

**Conclusion:** This audit demonstrated 65% adherence to the NICE guidelines in prescribing aspirin to women with risk factors in developing pre-eclampsia. This audit demonstrated that aspirin is currently not prescribed to a proportion of women who would have benefitted by it. This requires a change from current practice, and a re-audit will be necessary to ascertain that these guidelines are correctly incorporated into clinical practice.

#### **P49: A Case of benign ovarian cyst with portal vein thrombosis**

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*Teaching Hospital Jaffna*

**Introduction:** Portal vein thrombosis with superior mesenteric and inferior mesenteric vein thrombosis is a rare condition. These patients can present with acute and serious symptoms. Most symptoms are nonspecific so that prompt diagnosis and treatment is not possible in many instances. They have higher mortality rate than patients with portal vein thrombosis alone.

**Case report:** A 35 years old previously well lady presented with acute onset of abdominal pain and distension for one week duration. Ultrasound abdomen revealed moderate amount of free fluid with septated cystic mass in pouch of Douglas measuring 5 cm X 6 cm. Appearance of liver and kidneys were normal. She underwent explorative laparotomy. During the surgery Moderate amount of free fluid with left sided simple ovarian cyst were found. Omentum, liver surface and pelvic peritoneum appeared normal.

She was re admitted on post operative 5th day with the complaint of abdominal distension with epigastric pain. Contrast enhanced CT abdomen showed portal vein, superior mesenteric vein and splenic vein thrombosis with splenic infarction.

She was treated with anticoagulation therapy (LMWH), broad spectrum antibiotics and total parenteral nutrition for three weeks duration.

Her histopathology report revealed benign ovarian cyst.

**Conclusion:** This Patient successfully treated by early initiation of anticoagulation therapy without surgical or radiological

intervention. Emergency laparotomy may be required if there is signs of peritonitis, transmural bowel infarction or if patient is clinically unstable. Follow up of this patient required lifelong anticoagulation with warfarin and haematological evaluation should be done to find out the cause for thrombosis.

## **P50: An audit on accuracy of visual estimation of blood loss in obstetric haemorrhage**

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*De Soysa Hospital for Women*

**Introduction:** Obstetric haemorrhage is one of the leading causes for maternal morbidity and mortality worldwide. Visual method is the main way of estimation of blood loss after vaginal or abdominal delivery in developing countries. Inaccurate visual estimation by medical team can end up with hazardous complications such as disseminated intravascular coagulation and hypovolumic shock.

**Objectives:** To determine the difference between visual estimation and actual blood loss

**Methodology:** Obstetric ward staffs were given questionnaire with multiple choices to assess visual estimation of blood volume of sanitary pad (soiled -30ml, fully soaked -100 ml), small swab (20ml), large gauze swab (200ml), Kidney tray (500ml) and soaked cotton linen on delivery bed (1000ml)

**Results:** Fifteen doctors, twenty nursing officers and fifteen midwives were participated. 87% of doctors, 75% of nurses and 100 % of midwives have seen patients with obstetric haemorrhage. Out of six stations, significant underestimation of actual blood loss occurred in two stations (soiled sanitary pad and soaked cotton linen in the delivery bed). Only 33% of doctors, 40 % of nurses and 17% of midwives correctly evaluated the soaked linen in the delivery bed (1000ml). Blood volume in the kidney dish was correctly identified by more than 90 % of participants.

**Conclusion:** Overall visual estimation of blood loss by the participants is unsatisfactory. For the recognition and management of massive obstetric haemorrhage there should be suitable pictorial and written algorithms which will help to improve the timely resuscitation of these patients. Re audit will be done after three months of time.

## **P51: Audit on current practices of induction of labour at a tertiary care hospital**

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**Objective:** Induction of labour (IOL) is a common obstetric intervention done for several reasons. Most importantly, induction of labour has a large impact on the health of women and their babies and so needs to be clearly clinically justified. Yet it is also important to perform regular audit of this practice on account of ensuring risk-free medical practice. Thus, current practice of IOL was examined to assess the indications and outcomes of IOL.

**Method:** This audit was carried out from January 2016 to April 2016 in obstetric professorial unit of Colombo north teaching hospital Ragama. Data on all women admitted for IOL was collected using data collection sheet. The processes of IOL

were tested against the WHO clinical guideline. It was aimed to determine the IOL rate, reasons, and outcomes.

**Results:** Out of the 1423 deliveries during those periods 377 were induced (26.49%). Mean maternal age was 28.08-years and mean gestation was 39-weeks. Number of successful induction was 286. The most common indications for IOL were: prolonged rupture of membranes (29.4%), prolonged pregnancy (20.7%) diabetes complicating pregnancy (12.2%), hypertensive disorders (9.8%), and small for gestational age (5.1%). Reason for IOL was not documented in 20% and rests of the IOL were due to social, IUD and other medical disorders. The most common indications at <37 weeks were prolonged rupture of membranes (52%) and small for gestational age (17%). Emergency caesarean section was 19.3% for lack of progress and fetal distress. Seventeen percentages of neonates were admitted for NICU and 96% had APGAR more than 7 at 7 minutes.

**Conclusion:** Our unit IOL proportion is lower than national figure (35.5%). One fifth of the IOL indications were not documented and this highlights the deficiency in the documentation. Checklist for IOL has been decided in the unit meeting to enhance proper documentation.

## **P52: Neglected symptoms of heart failure presented as peripartum cardiomyopathy: a case of maternal near-miss.**

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**Introduction:** Peripartum cardiomyopathy (PPCM) is a rare obstetric emergency affecting women in late pregnancy or up to five months of postpartum period. It occurs in the absence of an identifiable cause or recognizable heart disease prior to the last month of pregnancy. The aetiology of PPCM is unknown. It has potentially devastating effects on mother and fetus if not treated early. The signs, symptoms and treatment of PPCM are similar to that of heart failure. Early diagnosis and proper management is the corner stone for better outcome of these patients.

**Case report:** A 41 year old woman in her fourth pregnancy with two vaginal deliveries followed by a first trimester miscarriage presented with cough and exertional dyspnoea for two weeks duration at 31 weeks of gestation. History also revealed features of orthopnoea and paroxysmal nocturnal dyspnoea. Her pregnancy was uncomplicated up to this. On admission, she was dyspnoeic with clinical signs of acute heart failure and pulmonary oedema and blood pressure of 170/122 mmHg. Arterial blood gas showed metabolic acidosis and 64% of oxygen saturation. She was transferred to ICU and intubated with continuous positive airway pressure followed by synchronized intermittent mechanical ventilation and multi-disciplinary care. Echocardiography revealed dilated cardiomyopathy with ejection fraction of 20% and improved only up to 35%-40% favouring diagnosis of PPCM over pre-eclampsia. With initial resuscitation, intravenous antibiotics and heart failure therapy her condition improved. Ultrasonography revealed an intrauterine death. Since she was receiving ICU care with sepsis and also caesarean section does not confer any benefit over vaginal delivery, induction was done with prostaglandin E2 followed by misoprostol. She was discharged with a plan of sterilization.



**Discussion:** Third trimester is the most vulnerable period for most of the maternal and foetal lethal events. Proper education regarding earlier medical advice for uncommon symptoms in late pregnancy may help to reduce the occurrence of these maternal near-misses. Although PPCM has a higher chance of mortality, rational and evidenced-based management can save these mothers. Since it carries a higher risk of recurrence in subsequent pregnancies, sterilization is required.

### P53: Heterotopic pregnancy in natural conception

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**Introduction:** Heterotopic pregnancy is defined as the coexistence of intrauterine and extra uterine gestation and the incidence is very low. The incidence was originally estimated on theoretical basis to be 1 in 30,000 pregnancies, however, more recent data indicate that the rate is higher due to assisted reproduction and is approximately 1 in 7000 overall and as high as 1 in 900 with ovulation induction.

**Case report:** A 33-year-old woman, in her second pregnancy with 8 weeks of amenorrhea was admitted to the ward complaining abdominal pain. Ultrasound scan revealed both intrauterine and extra-uterine live pregnancies and two corpus luteal cysts. The patient underwent emergency laparotomy and ectopic pregnancy removed without manipulation the uterus or the cysts. The intrauterine live gestation was allowed to continue and delivered a healthy live baby at term.

**Discussion:** It is very rare with normal conception, assisted reproduction with ovulation induction is the major contributory factor to develop heterotopic pregnancies. The hydrostatic forces generated during embryo transfer may be contribute to the increased risk especially with assisted reproductive techniques. Heterotopic pregnancy can have various clinical and biochemical presentations. Combination of clinical picture with sonographic findings is the best way of diagnosis the condition. Most commonly, the location of ectopic gestation in a heterotopic pregnancy is the fallopian tube. However, cervical and ovarian heterotopic pregnancies have also been reported. The treatment of a heterotopic pregnancy is laparoscopy/laparotomy for the tubal pregnancy.

**Conclusion:** A heterotopic pregnancy, though extremely rare, can still result from a natural conception; it requires a high index of suspicion for early and timely diagnosis; a timely intervention can result in a successful outcome of the intrauterine fetus.

### P54: Hydrops fetalis secondary to parvovirus B19 infections

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**Introduction:** The hydrops fetalis (HF) is defined as fluid accumulation in two or more fetal compartments include ascites, plural effusion, pericardial effusion and skin edema. The cause can be either immune or non-immune and the latter is more common.

Etiology of non-immune are congenital anomalies including cardiac, fetal anemia, hypo proteinemia, and liver disease, ect. Parvovirus B19 (PVB19) is one of the causes of fetal anemia. Anemia due to PVB19 may resolve spontaneously or may need intrauterine transfusion. With the use of high resolution USS can diagnosed HF even in early pregnancy and some of the etiological causes like cardiac anomaly, diaphragmatic hernia, ect.

**Case history:** A 27 year old prime gravida who was not known to be a diabetic, positive Rh or consanguinity. HF noted at 22 weeks of anomaly USS without any obvious other congenital anomaly who had normal dating USS previously. Fetal echo cardiogram performed and found normal functions. Further investigation revealed positive for Parvovirus B19 and negative for Toxoplasma and Cytomegalo virus. Follow-up USS found improvement of HF and after four weeks all features of HF disappeared, therefor cord blood hemoglobin or fetal blood transfusion was not performed. But later on she developed pre-eclampsia and baby was delivered at 34 weeks of POA.

**Conclusion:** Detection of PVB19 is important in managing HF. The critical period for the development of HF is when maternal PVB19 infection is acquired between the 13th and 16th week of gestation. Most pregnancies complicated by maternal parvovirus infection result in healthy outcomes but some need fetal blood transfusions.

### P55: A case of postpartum exacerbation of Graves' disease

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**Introduction:** Among the thyroid disorders in pregnancy, hyperthyroidism occurs in 0.2 % and thyrotoxicosis resulting from hyper function of the thyroid gland. During puparium who had previous thyroid problems may develop exacerbations as post-partum Graves' hyperthyroidism. The importance of assessing thyroid status in mothers who are presenting with several clinical problems in puparium is important because post-partum hyperthyroidism may often be confused with other non-thyroid diseases.

**Case report:** A 36 year old mother in her second pregnancy presented for confinement and she was investigated during antepartum period for an asymptomatic diffuse goitre while having subclinical hyperthyroidism. She was observed without pharmacotherapy throughout her pregnancy. Baby was delivered vaginally without post-partum complications. She became symptomatic with palpitations, tachycardia and exophthalmoses on second post-partum day. Thyroid profile showed marked elevation of free T4 23pg/ml. She was treated with beta adrenergic blockers and anti-thyroid drugs which made gradual recovery of the patient.

**Discussion:** A successful pregnancy requires alterations in the maternal immune system to allow survival of the fetus. The maternal immune response is suppressed during pregnancy by several mechanisms and post-partum Graves' disease triggered following delivery with reset of immunity is a classic example for that. Unless hyperthyroidism is treated adequately, pregnant women are at increased risk of severe preeclampsia, preterm delivery, heart failure, and post-partum cardiomyopathy.

**Conclusion:** Patients with a history of thyroid disease, even

asymptomatic throughout the pregnancy, should be kept under surveillance postpartum for early detection of possible acute relapses.

### **P56: Post-Preeclampsia Acute Myocardial Infarction during Puerperium in a Woman with Normal Coronary Vessels**

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**Introduction:** Hypertension is the most common medical disorder (10 – 20%) complicating pregnancy and pre-eclampsia is the versed thing which cause maternal and perinatal, morbidities and mortality worldwide. Ischemic heart disease in pregnancy is rare (1 in 10000 to 30000) but becoming more common as maternal age and obesity increases with other common risk factors. Acute myocardial infarction (MI) has been reported at any stage of pregnancy and especially during the puerperium period because so many cardiovascular events happening during the pregnancy period.

**Case history:** A 34 years old woman, was admitted to our unit with full blown eclampsia. Patient was resuscitated and emergency caesarean section was done within half an hour but it was a stillbirth. Patient was managed in the ICU, during eight hours of the puparium there was ECG changes suggestive of ischemic changes. The diagnosis of myocardial infarction was confirmed by Troponin I and 2D Echo. The patient was admitted to the coronary care unit and received complete anti-ischemic treatment. Ejection fraction recovered gradually from 30% to 50% and coronary angiogram was done at day 8 post ischemic attack and it was completely normal and she was discharged once symptoms free.

**Discussion:** Preeclampsia is a placental disease, with secondary functional changes in many systems and organs. It is characterized by aberration of the penetration of the trophoblast in the spiral arteries, occlusion of vessels by fibrinogen clots and increased production of oxygen radicals, mainly by the lymphatic tissue of the deciduas. Myocardial infarction during the puerperium include constriction or thrombosis of the coronary vessels and arterial dissection, of the left anterior descending artery in 80% of cases and of the right coronary artery. In this situation vasoconstriction is observed as well as micro vascular thrombosis.

**Conclusion:** In the present case the normal coronary findings, can be explained mainly by the diffused contraction of the vessels rather than the atheromatosis condition, because of the preexisting preeclampsia and the patient's age.

### **P57: Audit of reviewing antibiotic prophylaxis for caesarean sections**

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**Introduction:** Surgical site infections are a major source of hospital-acquired infections, causing significant morbidity and mortality. In appropriate cases, surgical antibiotic prophylaxis is essential in preventing such infections; however, this comes with

increased risks of antibiotic resistance and antibiotic-associated diarrhea and specially our type of countries the cost. This audit evaluates the adherence to the prophylactic surgical antibiotic policy at ward number 5, T.H.Kandy with a greater understanding of the current use of prophylactic surgical antibiotics to improve patient care while minimizing the development of antibiotic resistance and reducing the cost.

**Objectives:** to implement proper antibiotic policy to the ward.

**Methods:** Data collected from all patients who were undergone elective LSCS during November 2015 to January 2016. During that period we gave two antibiotics for 24 hours (three doses) and the observation was wound infections. According to the national guideline we changed the prophylaxis antibiotic to give single antibiotic, prophylactic dose and single dose. Instruction distributed to all levels of the staff and re-audit was done one months later from March to May 2016. All data collected and analyzed using descriptive statistics.

**Results:** During the first survey 257 patients included and three patients developed wound infections during the hospital stayed period and one patient readmitted with wound infection. During the second audit cycle two patient developed wound infection during hospital stay and two patients readmitted with wound infections. There was no significant deference in wound infections in both regimes.

**Conclusion:** Single dose of prophylactic antibiotic is enough to prevent surgical wound infections and I wish to apply this for major gynecological surgeries.

### **P58: An audit proper usage of partogram**

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**Introduction:** National partogram which is designed by the Ministry of Health and SLCOG has been designed to monitor maternal condition, fetal condition, labour progression and post-delivery monitoring. Partogram developed from cervicograph which mesheared cervical dilatation by rectal examination. In an attempt to utilize midwives efficiently in a hospital and clinic service, where doctors were in short supply, developed a partogram from this original cervicograph. However, poor utilization of the partograph was found in the hospitals which reflect poor monitoring of mothers in labour and results poor pregnancy outcome.

**Objectives:** To assess whether partogram use effectively and whether needed and modification to the national partogram.

**Method and results:** Women delivering at T.H.Kandy ward number 05 during one month were included and collected data were analyzed using simple graphs and percentages and interpreted. During the time period 213 partograms were analyzed. Recording of personal details were satisfactory and it was 196 (92%) but only 21 papers (10%) mentioned the gravida correctly. Recording of special instructions mentioned only in 43 papers (21%). Time of vaginal examination recorded in 205 papers (96%). Fetal heart rate tracing in 1st stage was recorded correctly in 209 cases. CTG recording only in 24% observed (53/213). Contraction plus duration of contraction recorded in 21% of papers. Oxytocin dose and drop rate mentioned only in 56% papers. Cervical dilatation recording was good, it was 98%. Vaginal decent recorded only in 60 (28%) papers. Liquor, position, caput, and molding recorded in 23 (10%) papers. Maternal vital parameters recorded in 83% of cases. If we got

an action for the patient depend on the partogram recorded only in 120 (56%) papers. Second stage recordings were very poor, time of fully dilatation and commenced pushing recorded only 5 papers, 2.3%. Second stage time and heart rate recording only in 12 papers (5%). When we considering the post-partum modified early warning system, birth time mentioned in 92% of papers and mode of delivery, birth weight and sex mentioned in 91% of papers. Post- partum vital signs including orientation, respiratory rate, pulse and blood pressure recording was 98%. But urine output mention only in 5% of papers. Uterine condition including consistency, level of fundus, bleeding PV recorded in 96% of papers. Condition of bladder, PV and PR not mentioned in any papers (0%). During that period maternal and fetal outcomes were recorded. No maternal death or no severe maternal morbidity. One cases with post-partum hemorrhage detected and it was managed well. No intra partum still birth during that period and 9 cases of lack of progression detected and 13 cases of fetal distress detected. Intervention taken for those patients and no maternal of fetal morbidity noted. During the period 5 babies admitted to the PBU for observation but they were not stayed in the PBU for long time.

**Discussion:** Our national partogram contain so many details but some are not using frequently. Though we not recorded all data, the outcome was not affected. Some areas documented poorly because poor knowledge in staff regarding those areas like gravidity and parity. Other than that basic information recording is satisfactory. CTG recording raw does not give clear instructions how to document. That space not enough to record CTG findings. Contraction free interval plus duration of contraction raw is confusing how to record. Vaginal examination recordings were poor that may be due to this is done by medical officer and they are not recording it in the chart but record it in the BHT only. Second stage recordings should be 100% because this period is the most critical phase to record. Post-partum monitoring were good in most occasions but I observed that part was not filled on time.

**Conclusions:** This study showed a poor completion of partographs during labour in some areas and some areas completed satisfactory. Labour staff should be educated how to maintain this chart and should be educated how important of this chart. Some confusing parts should be changed and should be simple form to fill rather than complicated form. Post partum monitoring system should include colors as original design. I will conduct re audit after conducting training programs to labour ward staff and see the improvement.

### **P59: Case report: A vein of Galen aneurysmal malformation (VGAM), a rare intracranial vascular anomaly detected perinatally**

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**Introduction:** A vein of Galen aneurysmal malformation (VGAM) is a rare intracranial vascular anomaly typically found in the pediatric population. The anatomic landmark of VGAM is the presence of multiple arteriovenous shunts draining into a dilated median cerebral venous collector. This median vein corresponds to a persistent embryonic channel, the median prosencephalic vein of Markowski (MProsV), which is normally absent at the adult stage. Although rare, it has been estimated that VGAM represent approximately 30% of the pediatric vascular malformations. The majority of cases (94%) diagnosed in the

neonatal period will therefore present with high-output cardiac failure.

**Case Report:** A 32 year old P2C1 presented to our casualty with infrequent abdominal pain at POA of 37weeks + 6days. She had delivered a healthy boy vaginally four years ago. This was a planned pregnancy. She had taken periconceptional folic acid. Her booking visit at 08 weeks of POA dates were confirmed by USS. Her blood group is A+ & booking visit investigations were normal. She had uncomplicated T1&T2. She is not in labour. SFH – 37cm, longitudinal lie, cephalic presentation 2/5 of head palpable abdominally, FHS 140/min. Vaginal examination OS 1cm, Cx- 1.5cm axial, Station -1. CTG normal. TAS anechoic intracranial lesion Doppler showed turbulent blood flow within the lesion, situated in the midline, and a possible diagnosis of vein of Galen aneurysmal malformation (VGAM) was suggested. Rescan done by the consultant radiologist & possibility of VGAM suggested without pericardial effusion or ascites.

Consultant neonatologist, neurologist & neurosurgeon informed about the patient & plan to deliver the baby by elective LSCS in a morning session with the presence of neonatology team. Family counseling done possible neonatal outcomes were explained to the parents. At 38 weeks + 3 days, a male neonate was born by elective cesarean delivery weighing 3020 g with Apgar scores of 9 and 9 at 1 and 5 min, respectively. Few hours after delivery baby become tachypnic & needed CPAP. The diagnosis of vein of Galen malformation was confirmed by postnatal transfontanelle sonography. Echocardiogram shows pulmonary hypertension & heart failure. Baby was ventilated on day 2 despite inotropic support baby expired on day 8 postpartum. Parents refused postmortem. Breast milk suppression done with cabogoline. She was discharged on postpartum day 8 after counseling.

**Discussion:** The MProsV can normally be identified from the 8th to the 11th weeks of gestation, a window during which the events leading to the development of a VGAM are believed to occur. The mechanism of formation of the arteriovenous shunts remains unknown. As a consequence of the shunts, the anterior segment of the MProsV, instead of regressing, progressively enlarges under the stress produced by high-pressure inflow from the choroidal feeders. A VGAM is a cluster of arteriovenous fistulas draining into a persistent and dilated MProsV of Markowski.

Three groups of arterial feeders classically participate in the vascularization of a VGAM:

- (i) the anterior and posterior choroidal arteries
- (ii) the pericallosal artery
- (iii) transmesencephalic branches arising from the basilar tip and the proximal posterior cerebral arteries.

Most of these feeders are choroidal arteries. Classification proposed by Yasargil has the double advantage of clinical usefulness and simplicity. It also recognizes the existence, besides the “pure” forms of direct shunts (type I) and network-like shunts (type II), of a third configuration combining direct shunts and arterial network (type III). In addition, Yasargil included in his classification a type IV describing cerebral arteriovenous malformations (AVM) secondarily draining into an enlarged vein of Galen.

When symptomatic, newborn infants typically present with severe cardiorespiratory alterations at or shortly after birth. Infants diagnosed during the fetal period may already demonstrate signs of cardiac failure prior to delivery, including hydrops. In these children, the volume overload imposed by a VGAM with high-flow shunts (Yasargil type I) is such that it can rapidly induce cardiovascular and respiratory distress syndromes. The majority

of cases (94%) diagnosed in the neonatal period will therefore present with high-output cardiac failure. Severe pulmonary hypertension may be a complicating factor. In the past, the mortality rate for this group was close to 100%. Recent advances made in the management of these patients, in particular the use of endovascular techniques in a dedicated neonatal intensive care environment have significantly altered this dismal prognosis.

### **P60: Ovarian steroid cell tumor not otherwise specified; Hirsutism in postmenopausal age**

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**Objectives:** Few case reports regarding ovarian steroid cell tumor not otherwise specified (NOS) are available so far in PubMed search. Among them very few were reported in post-menopausal women. We report a case of a post-menopausal woman who presented with hirsutism. The patient had high androgen levels with normal FSH, LH and cortisol levels.

**Results:** Patient underwent total abdominal hysterectomy and bilateral salphingo-oophorectomy. Histology of the tumour revealed well circumscribed homogenous solid mass with trabeculated growth pattern. Tumor cells are round to polygonal. In Immuno histochemistry tumor cells were positive for inhibin and vimentin. Final pathological conclusion was steroid cell tumor not otherwise specified, negative for malignant features. Following surgery her serum testosterone returned to normal.

**Conclusions:** Any postmenopausal women presenting with features of hyperandrogenism need to be thoroughly investigated.

### **P61: Trends in Birth weights and Mode of Deliveries between first quarters of 2010 and 2015 in a tertiary care unit in central province**

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**Objectives:** To compare the birth weights and trends of mode of delivery during the first quarter of 2015 and 2015

**Design:** Birth weights and Mode of Deliveries in all term live single deliveries in the tertiary care unit in first quarter of 2010 and 2015 which recorded in birth register were included in the study. Mean birth weights were calculated and compared. Percentages of Mode of Delivery compared.

**Results:** Total number of 2119 deliveries included in the study. The mean birth weight increased from 2.9205Kg in 2010 to 2.9595Kg in 2015.(crude mean difference 0.3894; 95% /CI -0.1044to.00259). So there is no significant difference in mean birth weights in 2010 and 2015.

In 2010 59.05% of deliveries were assisted vaginal deliveries, 14.9%are Elective caesarian sections, 24.613% are Emergency Caesarian sections and 1.434% was instrumental deliveries.

In 2015, 59.37% of deliveries were assisted vaginal deliveries, 23.947%are Elective caesarian sections, 15.689% are Emergency Caesarian sections and 0.990% were instrumental deliveries.

**Conclusions:** There is no significant increase in mean birth weight between first quarters of 2010 and 2015.

Assisted vaginal delivery rate remains same and Elective Caesarian sections were increase while EmergencyCaesarian sections were reduced significantly from 2010 to 2015.

### **P62: An audit on the completeness of partograms in two obstetric units in two separate teaching hospitals in Sri Lanka**

*Liyanapatabandi D<sup>1</sup>, Bhabu B<sup>1</sup>, Krishoban B<sup>1</sup>, Wenurajith BK<sup>1</sup>, Karunasinghe J<sup>1</sup>, Jayasinghe KS<sup>1</sup>, Jayawardena GRMUGP<sup>2</sup>, Gunarathne SMSG<sup>2</sup>, Herath Rasika<sup>2</sup>*

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**Introduction:** A systematic approach to labour is needed to make sure serious mistakes and variations are not made in management and cost effectiveness maintained. . We undertook an audit in two separate teaching hospital settings to assess thecompleteness of partogram maintenance in labour.

**Methods:** Retrospective analyses of partograms were done in non consecutive bed head tickets from January to April 2016. The research was conducted at Obstetric wards in the Colombo North Teaching Hospital and Colombo South Teaching Hospital. Anonymised data were entered into a database.

**Results:** A total of 72 and 81 bed head tickets were analysed in the two wards postnatal sections respectively. The completed partogram was available in 48 (66.7%) and 59 (72.8%) respectively with completeness of personal data as follows; name (100%, 97.5%), age (100%, 98.8%) parity (100%, 91.7%), bed head ticket (100%, 100%) and blood group (91.6%, 96.3%). Interpartum labour monitoring was documented as follows; fetal heart sounds (100%, 70.4%), contraction (37.5%, 43.2%), dilation (54.1%, 35.8%), alert and action lines (50%, 42%), descent (12.5%, 14.8%), liquor (50%, 66.7%), position (8.3%, 12.3%), caput (12.5%, 8.6%), and molding (8.3%, 4.9%).

**Conclusions:** Both maternal and labour parameters show high levels of incompleteness which destroys the true use of a partogram which is early identification and prompt intervention in the instance of maternal or labour complications.

### **P63: Magnesium Sulphate for Fetal Neuroprotection: A Comparative Analysis of Protocols Across Sri Lankan Tertiary Care Obstetrics Units**

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**Background:** Magnesium Sulphate (MgSO<sub>4</sub>) has been recommended to reduce the cerebral palsy in preterm labour. The study was done to analyze the current practice of MgSO<sub>4</sub> for preterm neuroprotection across the island.

**Methods:** An online survey was conducted from 01st of March 2016 to 30th April 2016. Web link to the survey was sent to an identified clinician in each obstetric unit of teaching hospitals (n=25).

**Results:** Out of 21 responses, 3 maternity units did not use MgSO<sub>4</sub> as a neuroprotective. Ten units (55.6%) had a local protocol for MgSO<sub>4</sub> use. Two units (9.5%) used the National Institute for Health and Care Excellence guideline. One unit uses the American Congress of Obstetricians and Gynecologists guideline. 17 units (89.5%) practice a loading dose of 4 g intravenous with a maintenance dose of 1g per hour intravenous for 24 hours. One unit practices a loading dose of 4 grams intravenous without a maintenance dose. Significant variation was seen in the minimum (24 weeks to 32 weeks) and maximum gestational age (32 weeks to 36 weeks) to be eligible for MgSO<sub>4</sub> administration. None of the units practiced repeated doses of MgSO<sub>4</sub>. Feto-maternal monitoring was routinely practiced by 17 units (89.5%).

**Conclusions:** MgSO<sub>4</sub> administration was consistent across units with regards to dosage regimen and monitoring except for gestational age cut-off. Adaptation of a Sri Lankan guideline would maximize uniformity of practice.

#### **P64: Antibiotic Sensitivity Pattern in Asymptomatic Bacteriuria in Pregnancy - A Descriptive Cross sectional study**

*Samarawickrama NGCL, Silva KCDP, Withanathanrhige MR, Jayasundara PGCM, Fernando A*

Prevalence of Asymptomatic Bacteriuria in Pregnancy (ABP) is 2%-10%. Main stay of screening for ABP is Mid-Stream Urine Sample for culture & ABST. Even with some limitations it remains the best screening tool because it's high sensitivity & specificity. Detection of ABP incorporated in developed countries health protocols, but routine screening is not practice in developing countries. Under treatment, usage of unacceptable and inappropriate broad spectrum agents gives rise to unwanted outcomes. In developing countries antimicrobial abuse has been increased.

**Objectives:** To assess the types of organisms & their antibiotic sensitivity pattern in asymptomatic bacteriuria in pregnancy.

**Methods:** A Descriptive cross sectional study. Pregnant women (n=98) who pose inclusion criteria, at antenatal booking visit at Professorial Obstetrics & Gynaecology unit, Colombo South Teaching Hospital from June 2015 to April 2016 were recruited & assessed by urine culture & ABST.

**Results:** Commonest organism found was coliform species (70%). The second commonest was streptococcus species (16%). Nitrofurantoin found to be the drug of choice when compared to other antimicrobials ( $P < 0.001$ ) with no resistances from any type of organisms. Other than 3rd generation cephalosporin,  $\beta$  lactams and other generations of cephalosporin had around 50% of sensitivity for coliform species. Quinolones had moderate to good sensitivity for ABP.

**Conclusion:** Results showed statistically significant reduction in sensitivity rates for  $\beta$  lactams and cephalosporins (except 3rd generation). This may be due to liberal and unscreened usages of these antibiotics with resultant emergence of resistant strains. Even though less tolerable Nitrofurantoin significantly effective in treating ABP.

#### **P65: Does experience count in Pipelle Sampling? A Reaudit carried out in Professorial Gynaecology Unit, Colombo South Teaching Hospital, Sri Lanka**

*Samarawickrama NGCL, Fernando A, Silva KCDP, Jayasundara PGCM, Withanathanrhige MR*

In abnormal uterine bleeding, Hysteroscopy & Biopsy is the gold standard but lack of free availability is a limitation. Dilatation & Curettage (D & C) or Endometrial Sampling with Pipelle device therefore has a major role. Pipelle sampling has high sensitivity and specificity provided adequate samples.

**Objectives:** To assess sample adequacy & outcome of Pipelle sampling performed by senior medical officers & to assess whether experience is a major determining factor on outcome of the procedure.

**Method:** Retrospective audit compare outcome of Pipelle sampling performed by senior medical officers with outcome of previous retrospective audit results of Pipelle sampling performed by Intern House Officers (IHO) in Professorial Gynaecology Unit, Colombo South Teaching Hospital from 2014 January to 2016 January.

**Results:** Total of 68 women underwent Pipelle sampling, 50 were pre and perimenopausal & 18 were postmenopausal. Mean age is 52 years & mean endometrial thickness was 7.6 mm. 97.06 % of the samples (n= 66) were adequate for histological assessment where 2.94 % samples (n=02) were inadequate for histological analysis. From all histological reports, 2.94% (n=02) were account for inadequate samples when compared with 40.67 % (n=24, total of 59) when procedure was performed by IHOs.

**Conclusion:** Percentage of inadequate samples was extremely low when compared to results from previous audit where the sampling was performed by IHOs. Reaudit finding supports the high sensitivity & specificity of Pipelle sampling. Inexperience of IHOs to identify the adequacy of samples and sub optimal procedure techniques is attributable to these outcomes.

#### **P66: Empowering the women to make a decision on their postpartum contraceptive – An experience from Eastern Province**

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**Background:** Sri Lankan prenatal healthcare package is designed to address the need of postpartum contraceptive use at three different levels; at family planning class in maternal clinic, by one to one counseling on contraception with a healthcare professional and by distributing family planning leaflets. It is based on the theoretical concept that a good postpartum care should begin during antenatal period.

**Objectives:** Main objective of this study to assess the proportion of expectant mothers arriving at a decision of postpartum contraceptives and associating factors.

**Method:** Prospective descriptive study conducted with 42 randomly selected pregnant women who admitted for the confinement to the obstetrics ward of General Hospital of Ampara. Pretested self-administered questionnaire used for the data collection.

**Results:** Significant majority (73.8%) has received education beyond Ordinary Level examination. However their financial status were low as 54.8% of them had a monthly income less than rupees 20,000. Arriving at a decision of postpartum contraceptive method at the time of confinement was satisfactory (71.4%). However preference for long acting reversible contraceptives (LARC) is 35.7%. Midwives were among the best source of information for the contraceptive knowledge. However documentation of counseling for the post-partum family planning was extremely poor (zero percent).

**Conclusions:** The good educational background of these expectant mothers may have helped for effective postpartum contraceptive counseling. Field level maternity care team has enabled to reach the target population irrespective of barriers in this area like poor transport facilities, wild elephant attacks etc.

### **P67: Sudden maternal death following undiagnosed perforated peptic ulcer**

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**Introduction:** Peptic ulcer disease is a rare cause of mortality in pregnancy.

**Case:** A 29-year-old woman from Colombo 15, in her second pregnancy presented at 2 am on 2/6/2013, at POA of 32+ weeks, complaining of severe vomiting and epigastric pain for 4 hours. She had good fetal movements throughout and denied a history of vaginal bleeding, change of bowel habit, or melena. On admission, examination was normal with unfavorable cervix so she was symptomatically managed.

She has had uninterrupted shared care from 7 weeks POA, where she had never complained of past history or symptoms of peptic ulcers disease.

Maternal and fetal monitoring was normal up to 7 hours admission, where she developed severe back pain and epigastric tenderness. However she was haemodynamically stable with negative urine albumin and normal CTG. An urgent ultrasound scan of the abdomen and pelvis revealed no evidence of placental abruption or free fluid. Blood counts, urinalysis, electrolytes, liver and renal function and amylase was normal. The episodes resolved spontaneously. Two episodes of brief backaches followed.

After 2 episodes of brief backaches where both maternal and fetal parameters were found to be normal, at 27 hours admission she had another associated with sudden cardio respiratory collapse. Attempt of resuscitation failed and she was confirmed death by 6 am. Perimortem caesarian section was not attempted due to absent fetal heart sounds.

Post mortem examination revealed, perforated 2 cm non malignant fundal acute gastric ulcer causing chemical peritonitis and shock leading to death. There was no hemoperitoneum or evidence of placental abruption.

**Conclusion:** In pregnancy, peptic ulcer disease detection warrants strong degree of suspicion.

### **P68: Rare Case of Spontaneous Uterine Rupture Due to Placenta Percreta in the First Trimester**

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**Introduction:** Placenta percreta is a placental invasion anomaly due to abnormal adherence of the placenta to the uterine wall, where chorionic villi perforate the uterine serosa and also sometimes into adjacent organs such as the urinary bladder and the anterior abdominal wall. Commonest predisposing factors include prior cesarean sections and placenta praevia. Placenta percreta is a serious obstetric complication which can cause severe haemorrhage, hypovolaemic shock and death. This case is a very rare spontaneous uterine rupture and severe intra-peritoneal haemorrhage due to placenta percreta at nine weeks of pregnancy.

**Case Report:** 36 year old mother with her second pregnancy was admitted to our gynaecology ward with history of per vaginal bleeding and abdominal pain for one day duration at POA of 9 weeks. Her first pregnancy was a cesarean section due to breech which was done 7 years back. Her current pregnancy was uncomplicated. She was haemodynamically stable with her blood pressure being 100/70 mm Hg and heart rate being 86 beats/min. Her hemoglobin level was 9.3 g/L and platelet level was 265,000/mm<sup>3</sup>. Departmental scan found triple intrauterine sacs (with 2 live fetuses and one collapsing sac) and significant amount of free fluid. An emergency laparotomy was performed. Approximately one Liter of blood was removed from the peritoneal cavity. There was a uterine rupture at the isthmus level, and the placenta was protruding from the ruptured area and adhered to the bladder. Placenta was detached from the bladder (bladder mucosa was intact) and bladder was repaired. Subtotal hysterectomy was performed due to severe bleeding from the ruptured uterine area.

**Conclusion:** Estimated incidence of spontaneous uterine rupture is 1/5,000 pregnancies. Majority of uterine rupture occur in third trimester and first trimester uterine rupture is extremely rare. However, the differential diagnosis of acute abdomen due to internal haemorrhage during early pregnancy should include placenta percreta induced uterine rupture in the presence of high risk factors like previous cesarean sections and lower lying placenta.

### **P69: Rare Case of Anterior Vaginal Wall Endometriosis: A Case Report**

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**Introduction:** Endometriosis is defined as the presence of endometrial glands and stroma abnormally located outside the uterine cavity. It is a benign gynecological disorder affecting 10–15% of all women of reproductive age. Extra-pelvic endometriosis have been described in almost every tissue and organ and common locations of endometriosis are the pelvic organs (mostly the ovaries and Fallopian tubes), the utero-sacral ligaments, the recto-vaginal septum and the pelvic peritoneum. Presence of endometriosis in anterior vaginal wall is uncommon.

**Case Report:** A 48 year old mother with previous four normal vaginal deliveries presented to the gynaecology clinic with the symptom of lump at vagina, which is gradually enlarging over last few months. Not associated with pain. She has regular

menstrual cycles, which is not complicated by dysmenorrhea or menorrhagia. Examination revealed acyst in the anterior vaginal wall underneath the vaginal wall, measuring roughly 2cm by 2cm. Trans-vaginal scan showed suspected haemorrhagic cyst. She underwent excision of the cyst. Histology confirmed the diagnosis of endometriotic tissue with the presence of endometrial glands. Patient was followed up at gynaecology clinic in three months' time and found to have asymptomatic.

**Conclusion:** Management of endometriosis includes medical and surgical interventions. Medical treatment using progesterone, Danazol, and GnRH analogs has not shown reliable results. Almost 70% of patients required surgical treatment. Surgical excision of the lesion is the ideal treatment of vaginal wall endometriosis.

### **P70: Abducens Nerve Palsy in Gestational Hypertension – A Case Report**

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**Background:** Cranial neuropathies are rare manifestations in pregnancy, most frequently involving the seventh nerve followed by the sixth nerve. Only few cases have been reported in the world. The possibility of preeclamptic neuropathy must be considered early in the course of the disease.

**Case presentation:** A previously healthy 21 years old female in her second pregnancy presented at 35 weeks of period of gestation with a history of double vision for two days. She was free of other neurological symptoms and symptoms of severe preeclampsia. There was no clue of ongoing or recent infection. She denied any history of trauma. Her pregnancy had been free of complications other than having dichorionic diamniotic twins.

Examination revealed moderate hypertension (150/98mmHg) and weakness of lateral rectus muscle of left eye. Rest of the examination including fundoscopy was normal. Urinary protein was absent with normal biochemical investigations. Fetal wellbeing was satisfactory.

Consultant neurologist confirmed isolated left sixth cranial nerve (Abducens nerve) palsy suggested conservative management unless worsening of the symptoms or progression. Her blood pressure remained stable with oral antihypertensive.

She delivered two healthy babies vaginally after a week. Hypertension resolved postpartum but not the diplopia. Contrast Computed Tomography was normal. She was reassured and discharged with oral steroids. Diplopia resolved completely in 9 weeks.

**Conclusions:** The exact cause of abducens nerve palsy in gestational hypertension remains unknown. Complete recovery has been seen in all the reported cases though the time taken varies. Clinical monitoring may be sufficient if no radiological abnormalities.

### **P71: Place of vasopressin in laparoscopic management of interstitial ectopic pregnancies – A case series**

*Samarawickrama NGCL, Silva KCDP, Withanathanrathige MR*

**Introduction:** Incidence of ectopic pregnancy is around 11/1000 pregnancies. Even though advancement of diagnostic techniques & increased awareness of health care providers, the morbidity and mortality ratios are extremely satisfactory, some ectopic pregnancies are surgically challenged due to their site of location. Interstitial ectopic pregnancies account for 2-6% of all ectopic pregnancies which carries high maternal morbidity even at present.

**Case reports:** We managed three patients diagnosed to have interstitial ectopic pregnancy by laparoscopic approach. Mean gestational age of these pregnancies is 10 weeks. All are right side unruptured interstitial ectopic pregnancies. One patient had history of left side interstitial ectopic pregnancy which managed by performing a laparotomy. It is known fact that bleeding is very much higher when surgically managing interstitial ectopic pregnancies. Thus prior to excise the ectopic we inject vasopressin to the uterine myometrium. Following ingestion of vasopressin ectopic pregnancy became well demarcated from the surrounding uterine musculature. Normal uterine musculature becomes significantly pale relative to the ectopic pregnancy as shown in the pictures. After excision the defect repaired by interrupted Polyglactin. Vasopressin facilitates the excision of the ectopic with minimal blood loss where the mean blood was < 50 ml.

**Conclusion:** Usage of Vasopressin in managing Interstitial ectopic pregnancies will significantly reduce the blood loss during the procedure as well as it facilitates the demarcation of the ectopic pregnancy which assists in proper and complete excision. This demarcation of the tissues is largely due to the trophoblastic invasion pattern of the pregnancy.

### **P72: Induction of labor in women over 35 years: How does it affect the outcome?**

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**Objective:** Compare fetal and labor outcomes following induction of labor in singleton pregnant women over 35 years (>35) with women between 20 to 30 years (20-30)

**Method:** This was a retrospective study carried out at North Colombo Teaching Hospital using North Colombo Obstetric Database (NORCOD) between March 2014 and May 2016. Two hundred and ninety six singleton pregnancies that underwent induction of labor were included. Women had been categorized into two groups based on their age. They were 20-30 years (20-30) and above 35 years (>35). Two groups were matched against their booking visit body mass index. Labor and fetal outcomes of each group were assessed.

**Results:** Lower segment Caesarean section (LSCS) rates observed in 20-30 and >35 groups were 16.2% (N=24) and 17.6% (N=26) respectively (P>0.05).

Newborns of induced pregnancies of 20-30 mothers had an APGAR <7 at 5min in 1.4% (N=2) and 2.7% (N=4) babies of women >35 had an APGAR <7 at 5 min (P>0.05). Induced pregnancies of 20-30 mothers reported 16.2% (N=24) NICU admissions and >35 years group had 20.3% (N=30) NICU admissions (P>0.05).

**Conclusion:** There is no significant difference between the two groups in terms of LSCS rates, low 5 min APGAR and NICU admissions.

**Keywords:** Induction of Labor, Maternal age, Labor outcomes, Fetal outcomes

### P73: Case of Müllerian anomaly leading to poor fetal outcome

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**Objective:** Uterine didelphys occurs due to absence of müllerian duct fusion during embryogenesis. It accounts for 11% of uterine abnormalities and known to have adverse obstetric implications including early pregnancy losses and preterm labour. We present a case of pregnancy with uterine didelphys carried to term, complicated with intra uterine growth restriction and oligohydramnios.

**Case report:** 25 year old primigravida presented to us at 8 weeks of gestation for booking visit. She didn't have a history of subfertility. During dating scan she was found to have uterine didelphys with viable fetus in right hemiuteri. Examination revealed double vagina and two cervixes. Basic investigations were normal. Anomaly scan was normal with an anteriorly placed placenta. She was closely followed up and fetus was found to be small for gestational age at 34 weeks. Serial growth assessment was done. Growth velocity was maintaining and Doppler study was normal throughout. At 38 weeks found to have severe oligohydramnios and planned for cesarean delivery. Presentation was cephalic. Following a targeted course of corticosteroids an elective cesarean section was performed at 38 weeks 2 days. Birth weight was 2190g. During surgery aberrant vessel was noted running along left border of right hemiuteri.

**Conclusions:** Uterine didelphys can lead to small for gestational age fetuses probably due to physical restriction for growth. Close follow up with growth assessment and Doppler studies combined with timely delivery can minimize adverse outcome.

### P74: A Case of Mayer Rokitansky Kuster Hauser (MRKH) Syndrome associated with a horse shoe kidney and skeletal malformations

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**Abstract:** A 26 year old unmarried lady admitted to the gynecology ward for avaginoplasty. She initially presented with primary amenorrhea with secondary sexual characteristics at 15 years of age. She had not had cyclical monthly abdominal pain. There were no recurrent urinary tract infections. Her hearing was normal. There were no features of androgen excess. She does not have a family history of MRKH syndrome. She is going to get married in near future. Both partners have a good understanding about this condition. On examination she is a short lady with a height of 126cm and she has got scoliosis, wide carrying angle and hypoplasia of right thumb. No other features suggestive of Turner's syndrome. Cardiovascular, respiratory and abdominal examination findings were normal. No abnormalities were found on external genital examination. Imaging was performed using trans-abdominal ultrasound scan, computed tomography (CT

scan) and later laparoscopy. They confirmed that there were absent uterus, cervix and upper vagina. Bilateral ovaries appeared normal but reduced in volume and were located above the pelvic brim. A horse shoe kidney was found. Karyotyping was 46XX. Serum FSH, LH hormone levels and renal functions were also normal. Vaginoplasty was postponed due to lack of operation theatre time.

### P75: A possible progression of an atypical leiomyoma to a leiomyosarcoma

**Ekanayake CD<sup>1</sup>, Liyanage AK<sup>2</sup>, Herath RP<sup>3</sup>, Fernando WS<sup>2</sup>, Mahendra BAGG<sup>4</sup>**

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**Background:** The spectrum of uterine smooth muscle cell tumours can range from leiomyoma to leiomyosarcoma. Atypical leiomyomas are a group of tumours with cellular atypia and a mitotic index of up to 5/HPF that are classified between the innocuous leiomyoma and leiomyosarcomas. The absence of coagulative necrosis helps to differentiate it from leiomyosarcomas. Traditionally atypical leiomyomas are thought to have a low recurrence rate.

**Case details:** A 41-year-old woman underwent a myomectomy for an anterior cervical fibroid. Histology revealed a smooth muscle tumour (SMT) with diffusely scattered hyperchromatic large cells. The maximum mitotic count was 5/10 HPF. There was no coagulative necrosis or atypical mitotic figures. It was classified as an atypical leiomyoma and had close follow up. However, 30 months later she developed heavy menstrual bleeding. The ultrasound scan revealed an anterior fibroid. She underwent a total abdominal hysterectomy with ovarian conservation. The specimen showed a well-defined myometrial nodule of 7cm with haemorrhagic areas, compressing the cervix. It was a SMT with high mitotic activity (11-12/HPF), atypical cells with bizarre nuclei and focal coagulative necrosis confirming a leiomyosarcoma (FIGO 1B).

**Conclusion:** As atypical leiomyomas have a low risk profile and are mostly found in younger women, it invariably leads to treatment that offers fertility preservation. This case challenges the generalisability of this currently held viewpoint and recommends more extensive surgery or further heightened surveillance.

### P76: Uterine Perforation And Bowel Damage As A Rare Complication Of Dilatation And Curettage

**Ekanayake SB, Jayalath JAVS, Padeniya T**

*Department of Obstetrics and Gynaecology, Teaching Hospital Kandy*

**Introduction:** According to published data, uterine perforation occurred in 0.16% of all dilatation and curettage (D & C) procedures. Uterine perforation can be associated with injury to blood vessels and surrounding viscera (including bladder and bowel), which can cause severe morbidity and even mortality.



**Case Report:** A 70 year old mother admitted with per vaginal bleeding following a D & C done one week back. On examination she had mild to moderate bleeding through cervical OS and transvaginal scan revealed a polypoidal mass (10mm X 10mm) in endometrium surrounded by area of fluid (22mm X 20mm), which was not seen in the scan done prior to first D & C. Repeat D & C was planned and while trying to do the polypectomy, piece of bowel tissue was extracted. Two possibilities for the bowel damage were new uterine perforation with damage to the bowel or previous perforation with bowel / mesentery herniated in to the endometrial cavity which illustrated as an endometrial polyp in the scan and which damaged during the procedure. Emergency laparotomy with end to end bowel anastomosis and hysterectomy was performed. Patient was recovered completely.

**Conclusion:** Patient should be adequately counseled and informed consent should be obtained regarding the procedure, the risk of uterine perforation and the probable need for additional procedures (laparoscopy or laparotomy), that may arise. Clinical examination should be meticulously performed to confirm the size and position of the uterus. Previous history should be thoroughly assessed. The procedure should be performed carefully and high index of clinical suspicion is needed to early recognition and prompt management.

### **P77: Advanced maternal age more than 38 years and pregnancy outcome**

**Lehwal TM, Wijesekara WDNT, Rajapakse DSD, Rodrigo WN**  
Fetal Medicine Clinic, Asiri Surgical Hospital, Colombo, Sri Lanka

**Objective:** To describe the adverse fetal and maternal outcomes associated with advanced maternal age more than 38 years

**Method:** 47 cases of advanced maternal age more than 38 years were detected from January 2015 to May 2016. 29 have completed their pregnancy and others are still being followed up. Pregnancies are followed up with high risk fetal-maternal assessment and serial ultrasound scans up to their delivery.

**Results:** In this study group 29 have completed their pregnancy and 46% were term pregnancies while 25% were pre term deliveries. 9% of patients in the study group had diabetes mellitus and 15% had hypertension. 11% in this study group had undergone assisted reproductive techniques for sub fertility Miscarriage rate was 29%. 11% had congenital anomalies. 7% had placental abruption. In this group 11% had oligohydramnios. 11% had GDM while 9% had PIH.

#### **Conclusions:**

1. Advanced maternal age is associated with adverse maternal and fetal outcomes.
2. Women should be counseled regarding adverse effects on pregnancy with advancing maternal age.
3. Pre pregnancy medical optimization should be done where appropriate.
4. Adverse outcomes should be anticipated and high risk management should be provided to these women.

### **P78: Practice and knowledge in Documentation of newly introduced National Partogram in the Labour ward: an Audit**

**Janakan S, Jayasundara DMCS**

Professorial Obstetrics and Gynecology unit, Teaching Hospital, Peradeniya

**Introduction:** Maintenance of the partogram is an essential component in proper management of labour. Until recently the labour wards in Sri Lanka were using the Partogram designed by WHO but the Health Ministry with collaboration of SLCOG has introduced the National Partogram. Our objective was audit the proper documentation of partogram before and after a teaching program on maintenance of partogram.

**Methods:** A complete practical teaching session was conducted to labour ward staff regarding maintenance of partogram in teaching hospital Peradeniya. 20 partograms each, which were maintained before and after the partogram training, were analyzed to assess the improvement in documentation.

**Results:** Basic information, fetal heart rate (FHR), frequency and strength of contraction were 100% documented in both pre and post lecture partograms. Maternal parameters and cervical dilatation were documented in 75% and 85% in both pre and post training partograms. Colour of liquor, recording of CTG, dose and rate of Oxytocin and abdominal descent were documented 55%, 55%, 80% and 0% of cases in pre lecture partogram and increased to 85%, 70%, 85% and 10% in post lecture partograms. Position, Caput and Moulding were not documented in both pre and post lecture partograms

**Conclusion:** Overall maintenance of partograph was poor except for some sections like FHR monitoring. Reluctance of adopting to maintain a new version of the partograph may be a reason for this. More comprehensive multiple teaching sessions to cover the entire labour ward staff will help in improving proper documentation in the partogram.

### **P79: Leaving the cerclage in situ in a patient with ruptured membranes at the time of rescue circlage**

**Perera MAK, Samarakkody SN, Sirisena PLA**

**Case report:** She is a 25 year old mother who was in her 2nd pregnancy, at 17 weeks and four days gestation, admitted with mild lower abdominal pain for two days duration. In her 1st pregnancy she had a spontaneous 2nd trimester miscarriage. On examination abdomen was non-tender and the cervix was dilated by 4cm with membranes bulging into the vagina. She remained afebrile with no evidence of infection in a specimen of urine and in a high vaginal swab and a serum C-reactive protein. An urgent rescue cerclage was attempted on the same day of the admission.

At the time of the surgery the membranes were bulging into the introitus and the cervix was 8cm dilated. The membranes were gently pushed and held in place with a swab on holder and the cervical edges were grasped with Green-Armytage forceps. A rescue cerclage was attempted and the membranes ruptured during the procedure. Liquor colour was clear and the procedure of the cerclage was continued despite the ruptured membranes using McDonald suture technique with 1' nylon as the procedure was almost completed by the time membranes were ruptured.

Post-operatively oral nifedipine, intravenous antibiotics and progestins were commenced. Fourteen hours following the procedure the patient developed a fever spike of 99.4 °F. Her white cell count was 14.4 x 10<sup>9</sup>/L and the C-reactive protein 8 mg/L. Ultrasound was performed and revealed a live foetus with

markedly reduced liquor. Considering the risk of infection the decision was made to remove the cerclage at 16 hours following the surgery. Antibiotics were continued and the septic screening was performed.

Patient aborted the foetus in the following day and found to have retained placenta. The manual removal of the placenta was performed and subsequent ultrasound revealed retained products of conception and the decision was made to perform evacuation of retained products of conception. The post-operative haemoglobin was 7.5g/dL and two packs of red cells transfused. The patient remained afebrile since the removal of the cerclage. The patient was discharged on the day five of the admission.

## **P80: An audit on perineal pain felt following childbirth: level of pain experienced and degree of analgesia used**

*Jayawardena GRMUGP<sup>1</sup>, Gunarathne SMSG<sup>1</sup>, Jogarasa K<sup>2</sup>, Herath R<sup>3</sup>*

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**Background:** Perineal pain is a common symptom following vaginal childbirth. Reducing of the degree of pain experienced has been shown to improve maternal wellbeing and normal functioning within the family.

**Methods:** We performed the audit in the professorial ward of the Colombo North Teaching Hospital. Participants perception of pain was assessed using a verbal numeric rating scale.

**Results:** All participants had experienced some degree of perineal pain. However significantly reduced levels of pain were experienced in those who had received analgesia.

**Conclusion:** Perineal pain is a common symptom among women following childbirth. However such pain can be significantly reduced with appropriate interventions.

## **P81: What is the end point prior to radiotherapy in persistent dysplasia in cervical cancer surveillance? – A case report**

*Samarawickrama NGCL, Ihalagama H, Hapuarachi C, Premarathne S, Jayasinghe K*

**Introduction:** Persistent severe dysplasia with high grade lesion (Cervical Intraepithelial Neoplasia (CIN) 111) invariably behaves as premalignant lesion. Both ablation and excision techniques have cure rate of around 90% and the advantage is to avoid extended procedures like hysterectomy and post-operative (chemo) radiation which carried significant morbidity.

**Case:** A 56 year old G2 P2 C2 who presented with post-menopausal bleeding and continuous mucous vaginal discharge. Clinically no macroscopic lesions and cervix appears healthy. She never underwent cervical cytology screening thus Pap test was performed. Result of the cytology was CIN 111. Patient underwent Cone biopsy which was hyperactive squamous epithelium with moderate to severe dysplasia (clear excision margins). Thus plan was to repeat the cervical cytology in six month where the

results came as CIN 111 with severe dysplasia. Patient underwent Wertheim's hysterectomy with B/L Salpingo-oophorectomy. A vault smear taken after six months which was High Grade Dysplasia with presence of atypical cell thus vaginoscopic biopsy was taken. The result was hyperactive squamous epithelium with moderate to severe dysplasia. Thus patient underwent colpectomy where histology came as hyperactive squamous epithelium with mild to moderate dysplasia with clear margins. A repeat vault smear was taken after six months which again came as High Grade Dysplasia thus repeat vaginoscopic biopsy was taken which found full thickness dysplasia (Carcinoma in situ). Therefore patient underwent total colpectomy.

**Discussion:** Even though Excision is curative in non-invasive forms of cervical cancer, tumor recurrence is possible and unpredictable. Thus the surveillance is utmost important in managing such patients.

## **P82: Case history: a case of morbidly adherent placenta involving the bladder**

*Pathiraja RP, Silva KCDP, Marasinghe MANP, Ruwanpura LP, Wickramasinghe JB*

Colombo South Teaching Hospital, Kalubowila

**Introduction:** Morbidly adherent placenta is becoming more common among mothers with previous sections and increasing maternal age. Morbidly adherent placenta (MAP) carries very high morbidity and mortality to the both mother and fetus. MAP has 3 main types according to the degree of invasion placenta accreta, increta and percreta. Placenta percreta is a serious complication of MAP and it is rare. This is a case report of Mrs. Silva that had a morbidly adherent placenta end up with a caesarean hysterectomy and right side salpingo-oophorectomy.

**Case history:** A 32 year old mother in her third pregnancy with 2 past sections, presented at 36+6 days of gestation due to labour pains. This was a planned pregnancy with no complications until anomaly scan showed lower lying placenta at 24 weeks of gestation. At 32 weeks she had no bleeding episodes but ultrasound (USS) showed lower lying placenta infiltrating into the uterine wall with bladder involvement but Magnetic resonance imaging (MRI) showed no bladder involvement. During the emergency surgery bladder involvement separated down well but she developed torrential uterine bleeding and ended up in caesarean hysterectomy with right salpingo-oophorectomy. Postoperative period was uncomplicated.

**Discussion:** Previous section with a lower lying placenta carries a very high chance of MAP. A high index of clinical suspicion is the key to diagnose. USS is a very good diagnostic tool in trained hands. MRI can aid the diagnosis but has high chance of false negative results. Delivery plan at 36 weeks is needed to avoid unnecessary emergency surgeries which will carry high morbidity and mortality.

## **P83: Audit on decision to delivery interval for unplanned caesarean section**

*Pathiraja R, Ruwanpura LP, Wickramasinghe J, Marasinghe P*  
University Obstetrics Unit, Colombo South Teaching Hospital

**Objectives:** To audit decision to delivery interval of category 1 & 2 caesarean sections (CS).

**Design:** Continuous audit over period of four months.

**Setting:** University obstetric unit of Colombo South Teaching Hospital.

**Methods:** All category 1&2 CS were assessed to see whether recommended time interval is achieved.

**Results:** During the audit period we assessed 10 (8.9 %) category 1 CS and 102 (91.07 %) category 2 CS. Mean time interval for category 1 CS was 28.6 minutes with a range from 10 minutes to 42 minutes. 4 out of 10 (40%) women delivered in 30 minutes.

For category 2 CS mean time was 59.7 minutes and the range was 25 minutes to 135 minutes. 4 out of 102 (3.9%) women delivered within 30 minutes. 62 out of 102 (60.8%) women delivered in 60 minutes while it was 84.3% (86) for 75 minutes cut off value.

Main reason for delay was unavailability of theater facilities and miscommunication regarding the urgency.

**Conclusions:** Recommended decision to delivery time for category 1 CS is not being achieved while it was satisfactory for category 2 CS. Proper communication about the urgency of unplanned CS & dedicated theater facilities will be helpful in achieving recommendations.

#### **P84: Teething problems of establishing multidisciplinary team for management of heart disease in pregnancy**

**Samantha GGP<sup>1</sup>, Hettiarachchi KS<sup>1</sup>, Randeniya C<sup>2</sup>**

1. Preintern research Assistant in Department of Obstetrics and Gynecology, Faculty of Medicine, University of Colombo,  
2. Associate Professor of the Department of Obstetrics and Gynecology, Faculty of Medicine, University of Colombo

- Date – 2016. 06. 03
- Venue – De Soyza Hospital for Women. Medical clinic
- Medical team -
  1. Dr. Ruwanpathirana (VOG) Ward 16
  2. Dr. Gamini Galappaththi (Consultant cardiologist)
  3. Prof. C. Randeniya, Dr. Prabodana (Professorial Obstetric unit)
  4. Dr. Harshani Liyanage
  5. Dr. Saroja Jayasinghe
  6. Dr. Sathis (Consultant Physician)
  7. Dr. Nipunika Senadheera (Consultant Haematologist)

A 29 year old pregnant mother in her 4th pregnancy, at a POA of 31 weeks, presented with breathlessness of 1 month duration. She is a diagnosed patient with immune thrombocytopenic purpura at the age of 10 years, lymphoma at the age of 13 years,

SLE at the age of 15 years and pulmonary TB at the age of 18 years. TB has been treated completely. Then at the age of 25 years she has developed 2 SLE relapses, gastric ulcer disease and pneumocystis carinii pneumoniae and lupus nephritis. During the same year she was diagnosed to have APLS and has had a missed miscarriage and ERPC has been done. Lupus nephritis has progressed to stage IV when she was 28 years of age and at the same time she has had two miscarriages. ERPC has been done in both times. Now she is having NYHA class 2 type breathlessness. ECG and echocardiography were done and found to be normal.

Indexed case we had problems of communicating in Tamil. Getting all the specialists and other machines and equipment needs to be addressed. Apart from these constraints this type of complicated case is immensely benefited physically as well as emotionally.

#### **P85: Knowledge in medical ethics related to Obstetrics and Gynaecology among a group of final year medical students**

**Samantha GGP<sup>1</sup>, Hettiarachchi KS<sup>1</sup>, Randeniya C<sup>2</sup>**

1. Preintern research assistant in Department of Obstetrics and Gynecology, Faculty of Medicine, University of Colombo,  
2. Associate Professor of the Department of Obstetrics and Gynecology, Faculty of Medicine, University of Colombo

**Introduction:** Concept of medical ethics is important to maintain standards in the medical field and to provide best care to the patient as well as to the society while practicing medicine. Therefore it should be well understood before passing out from the medical school.

**Objective:** The objective of this study was to assess the knowledge in medical ethics related to the Obstetrics and Gynaecology among a group of final year medical students.

**Methodology:** We collected data from a sample of 55 final year medical students of Faculty of Medicine University of Colombo following the professorial obstetrics and gynecology appointment, using a pre tested self-administered questionnaire. Knowledge was assessed in the fields of autonomy and consent, end of life decisions and doctor-patient relationship.

**Results:** Mean knowledge score was (72.72% ± 7.3%); Mean knowledge score on autonomy and consent section was (80.14% ± 12.71%), end of life decision was (55.55% ± 15.11%), and doctor patient relationship was (93.16% ± 9.71%).

**Conclusion:** The study group had a satisfactory knowledge on medical ethics related to the subject of Obstetrics and Gynaecology.



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**References:** 1. Fadi Ghazi Mirza, Ameet Patki, and Claire Poxman-Fieth. Dydrogesterone use in early pregnancy 2016. *Gynecol Endocrinol*. Early Online: 1–10. # Data on File. † Schindler AE. Progestational effects of dydrogesterone in vitro, in vivo and on the human endometrium. *Maturitas*. 2009;65(1):S3–S11. \*In utero Exposure of Foetuses.

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available data are described in section 4.8 and 5.1, but no recommendation on a posology can be made. Contraindications: Known hypersensitivity to the active substance or to any of the excipients. Known or suspected progesterone dependent neoplasms. Undiagnosed vaginal bleeding. Contraindications for the use of estrogens when used in combination with dydrogesterone. Warnings and Precautions: Before initiating dydrogesterone treatment for abnormal bleeding, the etiology for the bleeding should be clarified. Breakthrough bleeding and spotting may occur during the first months of treatment. If breakthrough bleeding or spotting appears after some time on therapy, or continues after treatment has been discontinued, the reason should be investigated, which may include endometrial biopsy to exclude endometrial malignancy. Pregnancy and Lactation: Pregnancy: It is estimated that more than 10 million pregnancies have been exposed to dydrogesterone. So far there were no indications of a harmful effect of dydrogesterone use during pregnancy. Some progestogens have been reported in the literature to be associated with an increased risk of hypospadias. However due to confounding factors during pregnancy, no definitive conclusion can be drawn regarding the contribution of progestogens to hypospadias. Clinical studies, where a limited number of women were treated with dydrogesterone early in pregnancy, have not shown any increase in risk. No other epidemiological data are hitherto available. Effects in non-clinical embryo-fetal and post-natal development studies were in line with the pharmacological profile. Unfavourable effects occurred only at exposures which exceeded the maximum human exposure considerably, indicating little relevance to clinical use. Dydrogesterone can be used during pregnancy if clearly indicated. Breastfeeding: No data exist on excretion of dydrogesterone in mother's milk. Experience with other progestogens indicates that progestogens and the metabolites pass to mother's milk in small quantities. Whether there is a risk to the child is not known. Therefore, dydrogesterone should not be used during the lactation period. Fertility: There is no evidence that dydrogesterone decreases fertility at therapeutic dose. Adverse Reactions: The most commonly reported adverse drug reactions of patients treated with dydrogesterone in clinical trials of indications without estrogen treatment are migraines/headache, nausea, menstrual disorders and breast pain/tenderness. Undesirable effects that are associated with an estrogen-progesterone treatment: Breast cancer, endometrial hyperplasia, endometrial carcinoma, ovarian cancer • Venous thromboembolism • Myocardial infarction, coronary artery disease, ischemic stroke. Issued on: 3/4/14. Source: Prepared based on full prescribing information (version 03) dated 13/03/2015.

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