



2019/2020 Council Issue 1

EMBRACING, ENGAGING & INFORMING

XY FEMALES -What are the causes of discrepancies

Missed Obstetric Anal Sphincter Injuries

Laparoscopic Partial Bladder Cystectomy for Bladder Endometriosis -A Combined Cystoscopic and Laparoscopic approach

A publication by the Obstetrical and Gynaecological Society of Malaysia

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FIGO Classification for the Clinical Diagnosis of Placenta Accreta Spectrum Disorders

27th International Congress of the **Obstetrical & Gynaecological Society** of Malaysia



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OGSM Council Profile



President Dr Harris Njoo Suharjono

Dr Harris Njoo Suharjono @ Njoo Thwan Bing is a Senior Consultant Obstetrician & Gynaecologist and Reproductive Medicine Specialist attached to Sarawak General Hospital. He is Head of the Department of O&G.

"The things you do for yourself are gone when you are gone, but the things you do for others remain as your legacy."

President-Elect Dr Muralitharan Ganesalingam

The healthcare industry produces a tremendous amount of data. Big data and the internet of things are standard to record keeping in the healthcare industry and in predictive analysis for healthcare. My aim is to introduce what's available for Obstetricians and Gynaecologists and how it will impact the manner in which we practice.





Immediate Past President Dr Eeson Sinthamoney

Dr Eeson Sinthamoney is the Medical Director and Fertility Specialist at Sunfert International Fertility Centre in Bangsar South Kuala Lumpur and Consultant Obstetrician and Gynaecologist at Pantai Hospital Kuala Lumpur.

He has been on the OGSM Council since 2009.

In this term, he hopes to further pursue the Society's endevour to engage with the membership, building on last year's success of 'Connect'. He also aspires to complete the protocols and procedures that will enhance the efficient and transparent functioning of the Society.



Hon. Secretary Dr Hoo Mei Lin

Dr Hoo Mei Lin had previously served on the OGSM council from 2013-2017. She is the current Honorary Secretary of OGSM as well as the Trainee Committee Chairperson.

In her role, she hopes to streamline the OGSM office to increase productivity and efficiency as well as continue to grow the trainee program.

Assistant Hon. Secretary Dr Loh Huey Wen

Dr Loh Huey Wen joins the OGSM Council as the Honorary Assistant Secretary. She is no stranger to OGSM, having served as the Trainee representative as well as being actively involved with the PACT program for trainees. She will continue to champion trainees in her new role.





Hon.Treasurer Brig Gen Dato' Dr T. Thavachelvi S. Thangarajah

Brig Gen (Dr) Thavachelvi is the second female officer promoted to Brigadier-General in the Malaysian Armed Forces. She is also of the Royal Medical Corps. She is a specialist Gynaecologist (Obstetrics and Gynaeacology). She was the Commanding Officer Tuanku Mizan Armed Forces Hospital. Currently she is Consultant & Head of Department Obstetrics & Gynaecology, Hospital Angkatan Tentera Tuanku Mizan, Kuala Lumpur.

She has been on the OGSM Council since 2017.

In the coming term, Dr Thavachelvi, will ensure that the financial wellbeing of the Society is maintained and will continue to inculcate the virtues of prudence, consistency and transparency.



Committee Member Dr Muniswaran Ganeshan

Dr Muniswaran Ganeshan is the unit lead and Maternal Fetal Medicine Specialist at the Women and Children's Hospital Kuala Lumpur and the National Heart Institute (IJN) of Malaysia.

Having completed his subspecialty training in UK, he initiated and successfully runs the Obstetric Medicine clinic; overseeing the management of patients with complex medical diseases in pregnancy.

He has contributed to numerous national guidelines and is also actively involved in training of doctors and midwives in obstetric emergencies, both in Malaysia and internationally. His passion is to establish Obstetric Medicine services in Malaysia.



Committee Member Dr Ng Beng Kwang

Dr Ng Beng Kwang is a Senior Lecturer & Specialist attached to Universiti Kebangsaan Malaysia Medical Centre and UKM Specialist Centre. He is currently undergoing urogynaecology subspecialty.

While this is his second term as a council member. Dr Ng has been actively involved in several other organization including the Malaysian Menopause Society as Vice President. He has several interests in Obstetrics and Gynaecology but is most passionate about menopause and minimally invasive gynaecology.

In the coming term, he would like to expand the use of newsletters to "CONNECT" with all OGSM members.



Committee Member Dr Tan Cheng

Dr Tan Cheng graduated from University of Bristol, UK in 2008 and obtained the Membership of the Royal College of Obstetricians and Gynaecologists (MRCOG) in 2016. He is passionate in the training of MRCOG candidates and has been active in applying the advances of information technology in day to day medical practices as well as teachings.

Committee Member Dr Patricia Lim Su-Lyn

Dr Patricia Lim Su-Lyn is a Consultant Obstetrician and Gynaecologist with KPJ Tawakkal Specialist Hospital in Jalan Pahang, KL.

She obtained her Membership from the Royal College of Obstetricians and Gynaecologists London in 2012. She is also an ICOE trainer and contributes to the training of midwives and doctors in Malaysia and regionally.

In this term as council member, I have been tasked to assist the treasurer. I would like to continue to help maintain the well-being of the society finances with the same virtues of my treasurer – prudence, consistency and transparency.

In addition, I would like to help the society to engage with Malaysian women to help address social issues such as teenage pregnancies and access to contraception, with our expertise and resources, and also by working together with the Ministry of Women, Family and Community Development.



Laparoscopic Partial Bladder Cystectomy for Bladder Endometriosis **A Combined Cystoscopic and Laparoscopic approach**



Dr Sevellaraja Supermaniam FRCOG (UK), MRM (UW Sydney), FICS (USA), is a Consultant Obstetrician and Gynaecologist as well as a subspecialist in Reproductive Medicine. Dr Koh Eng Thye FRCS (Edinburgh), MMed (Singapore), is a Consultant Urologist at Mahkota Medical Centre.

INTRODUCTION

Urinary tract endometriosis (UTE) involves the bladder and/or the ureters. UTE is present in approximately 1% of women with endometriosis¹. Bladder endometriosis is the most frequent type of UTE, occurring in about 70-85% of cases^{2,3}. Bladder endometriosis is defined as the presence of endometrial glands and stroma in the detrusor muscle. Surgically, there are 2 ways of excising this disease. The first is by trans-urethral bladder resection of the tumour, and the second is laparoscopic/robotic/open partial cystectomy of the bladder endometriosis. Since the nodule develops from the outer layer of the bladder wall towards the inner layer, complete excision of the endometriotic lesion is virtually unachievable with transurethral resection surgery; there is a high risk of bladder perforation⁴⁻⁷. Partial cystectomy of the bladder runs a risk of excising normal bladder tissues because it will be difficult to ascertain the margins of the bladder nodule. A combined approach, where the margin of the bladder nodule is cut via a cystoscopy and the excision of the bladder nodule is then done laparoscopically, would be the best method to deal with bladder endometriosis⁸. The technique is described in this article and the accompanying video.

CASE REPORT

Madam NZT first saw me in 2005 at the age of 19 with an endometrioma. She was single (Virgo intacta) at the time. She underwent a laparoscopic cystectomy. Postoperatively, she received 3 doses of monthly GnRH analogue injection. She was last seen in 2006 and was well. She conceived spontaneously afterwards and delivered 2 babies in 2007 and 2010 in another city. She was seen again in April 2016 complaining of dysuria, dysmenorrhoea and the inability to hold her urine. She had seen the urologist 6 months earlier. Cystoscopy performed by the urologist showed bladder endometriosis. No further surgery was performed, and she was given GnRH analogues for 6 months. However, her symptoms persisted after completing the GnRH analogue. Examination and ultrasound displayed a large bladder nodule measuring 4.17 x 2.80 cm (Fig. 1). Intravenous urogram showed stricture in the upper right ureter. She underwent a combined urology and gynaecology surgery to excise the bladder nodule. Informed consent was obtained from the patient, and the local institutional board provided the approval.

THE SURGERY

Examination and ultrasound presented a large bladder nodule measuring 4.17 x 2.80 cm (Fig. 1). IVU showed stricture in the upper right ureter. She underwent a combined urology and gynaecology surgery to excise the bladder nodule. The surgery was performed with the patient in the dorsosacral position. Verres needle was inserted into the abdomen at the umbilicus, and carbon

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dioxide insufflation was performed. A 10 mm trocar was inserted in the umbilicus and a 3D laparoscope (Aesculup-BBraun Einstein Vision) was inserted to view the pelvis. Three 5 mm trocars were inserted: one on the right side and two on the left side of the abdomen. A RUMI uterine manipulator was placed into the uterine cavity. Laparoscopy showed no adhesions in the upper and mid abdomen. The appendix and intestines looked normal. Both the ovaries and fallopian tubes were normal. Uterine insufflation with methylene blue showed that both tubes were patent. There was dense endometriosis between the bladder and fundus of the uterus (Fig. 3). The omentum was also adherent to the site of the endometriosis. There were endometriotic nodules on the left uterosacral ligaments and peritoneum at the wall in the Pouch of Douglas. The omentum was released and laparoscopic adhesiolysis was performed. Both paravesical spaces, lateral to the nodule, were dissected out. The bladder was released from the uterus with some difficulty. The peritoneal endometriosis in the POD and the nodules in the left uterosacral ligament were excised. Cystoscopy was performed and stents were first placed in both ureters (Fig. 2). The nodule was found to be in the central position and the margins were about 2 cm from both ureteral orifices. The nodule was seen protruding into the bladder with bluish lesions in it (Fig. 4). Demarcation of the bladder endometriosis was done using a resectoscope (Fig. 5). Using a needle electrode, a deep circular incision was made around the bladder nodule and into the detrusor muscle (Fig. 6). Cystoscopic perforation of the bladder was done and seen laparoscopically (Fig. 7). The bladder endometriotic nodule was completely excised laparoscopically following the demarcation line created via the cystoscopy (Fig. 8 and Fig. 9). Stay sutures were first placed at the superior and inferior edges of the defect (Fig. 10). The bladder was repaired continuously in one layer using polyglactin 3-0 sutures (Fig. 11). The nodule was placed in a bag cut into smaller pieces and removed through the umbilical incision (Fig. 12). At the end of the surgery, a cystoscopy was performed to check the integrity of the suture (Fig. 13). The pelvis was washed. A bladder catheter was placed. The trocars were then removed under vision, and the rectus sheath was closed using polyglactin 1 suture. The skin incisions were closed. The operation time was 2 hours. The patient received antibiotics for 10 days. She was discharged with the catheter on Day 3. She underwent a cystogram on Day 10 of the surgery and the bladder was found to be intact. The catheter was then removed. She was seen 6 weeks after the surgery and was well without any symptoms. The urologist removed the ureteric catheters. Histopathology confirmed bladder endometriosis. Five months later, she conceived spontaneously and delivered her third child naturally in June 2017. She was seen after her delivery and was advised to take oral contraceptive pills continuously or Mirena intrauterine contraceptive device to prevent recurrence of the endometriosis. She took the oral contraceptive pills for 3 months and then refused any further treatment. She was last seen in February 2019 and was well without any symptoms.

Conclusion: In bladder endometriosis, a combined approach with the urologist can assist in safely excising deep bladder endometriosis without the removal of normal bladder tissue. Stents placed in the ureter assisted in avoiding injury. Demarcating the endometriotic nodule through the bladder by the urologist and excising the bladder nodule laparoscopically are both safe and effective.

Please watch the video at: https;//vimeo.com/163190083







Fig. 1 Ultrasound of the bladder



Fig. 2 Stents were placed in both ureters



Fig. 3 Bladder adherent to the uterus with a nodule



Fig. 4 Bladder nodule on cystoscopy





Fig. 5 Cystoscopic demarcation of the bladder nodule. Bladder Endometriosis demarcated

Fig. 6 The bladder nodule was cut cystoscopically. Bladder cut cystocscopically



Fig. 7 Resection of the endometriotic nodule via the bladder is seen laparoscopically



Fig. 8 Bladder perforated cystoscopically



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Fig. 10 Bladder sutured in 1 layer continuously with polyglactin 3-0 suture



Fig. 11 Bladder repair completed



Fig. 12 Bladder nodule

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Fig. 9 Bladder nodule excised laparoscopically

MISSED OBSTETRIC ANAL SPHINCTER INJURIES

Dr Ng Poh Yin Dr Ng is a Senior Consultant in Obstetrics and Gynaecology and Consultant Urogynaecologist, Hospital Kuala Lumpur.

Perineal trauma can spontaneously occur or following an extension of episiotomy. Severe perineal trauma will involve the anal sphincter. Obstetrics anal sphincter injuries (OASIS) include third and fourth perineal tears. Third degree tears involves either the external sphincter or both internal and external sphincters. Fourth degree tears involves anal sphincters and anal mucosa. The incidence of OASIS in UK is 2.9% (range 0–8%), with an incidence of 6.1% in primiparae compared to 1.7% in multiparae¹. The reported incidence of OASIS in Hospital Kuala Lumpur is 0.1 to 0.2%². Similar findings were noted by Malathi et al. in 2016³. She reported the incidence of third and fourth degrees as 0.17% and 0.03%, respectively. The incidence of missed OASIS is as high as 35%⁴. The incidence of missed OASIS in HKL among primigravida with episiotomy was 17.6%⁵, as similar to other studies.

OASIS can have a significant effect on women, especially on their quality of life in both the short and long terms. The most common cause of anal incontinence (AI) and anorectal symptoms in healthy women is injury to the anal sphincter. Symptoms of AI include flatus incontinence, passive soiling or incontinence of liquid/solid stool. The patients could also experience faecal urgency. These symptoms can potentially cause hygienic, social and psychological problems for women. Although these symptoms are not life threatening, they are very distressing for women. The reported rates of AI following the primary repair of OASIS range between 15% and 61%, with a mean of 39%⁶. Women with missed OASIS will present AI or rectovaginal fistula. The emergence of new technology, i.e. Transperineal Ultrasound, will help detect missed OASIS with ease. This scan can be easily available with any unit of 3D ultrasound. What's the implication? More patients with AI and missed OASIS will be diagnosed. Missed OASIS can carry serious medico-legal implications.

It is important to diagnose OASIS after delivery. We must assume that all patients with perineal tear following vaginal delivery have OASIS until proven otherwise. Careful and thorough examinations of the perineum to exclude OASIS must be accomplished. These include vaginal and rectal examinations. All healthcare personnel who conduct vaginal delivery should be well versed with the anatomy of the perineal, especially the muscles involved in episiotomy and extended tear. Formal training in the detection of OASIS should be conducted among all healthcare personnel. This will improve the detection of such injuries (from 11% to 24.5%) when the obstetrical care provider's examination is repeated by a trained individual⁷.

The inspection should be done with adequate lighting and analgesia. The examination includes:

- a) Inspection of perineum with labial parting
- b) Inspection of the distal (caudal) posterior vagina
- c) Inspection for a third-degree tear behind an "intact perineum"

Palpation is best done with the examiner's dominant index inserted in the anus, and the ipsilateral thumb in the vagina. The 2 fingers then palpate with a "pill-rolling" motion to assess thickness. When the external sphincter tears, the ends retract and a cavity is often palpated along the course of the sphincter muscle.

Special attention should then be given to IAS. The IAS is a continuation of the circular smooth muscle of the rectum. This muscle appears pale (like raw white fish), is not very thick and can be found 6 to 8 mm above (cephalad to) the anal margin. Examination of IAS will also permit the detection of a button-hole injury.

It is crucial to measure the angle of episiotomy post-delivery. If the angle is less than 45 degrees, the chance of having OASIS is higher. Our study⁵ showed that with an angle of less than 45, the incidence of missed OASIS is 21.1%. The episiotomy angle of less than 45 degrees is very close to the anal sphincters. Therefore, it is important to perform episiotomy at the right angle. An episiotomy performed at 40 degrees results in a post-delivery angle of 22 degrees, which is too close to the midline to be maximally protective⁸. A 60-degree episiotomy from the centre of the introitus results in a post-delivery angle of 45 degrees.

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FIGO Classification for the Clinical Diagnosis of

Placenta Accreta Spectrum Disorders

Contributed by Prof Dato' Dr Ravindran Jegasothy representing OGSM on the Consensus Panel

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aFIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel members are listed at the end of the paper.

ABSTRACT

Placenta accreta spectrum is impacting maternal health outcomes globally and its prevalence is likely to increase. Maternal outcomes depend on identification of the condition before or during delivery and, in particular, on the differential diagnosis between its adherent and invasive forms. However, accurate estimation of its prevalence and outcome is currently problematic because of the varying use of clinical criteria to define it at birth and the lack of detailed pathologic examination in most series. Adherence to this new International Federation of Gynecology and Obstetrics (FIGO) classification should improve future systematic reviews and meta-analyses and provide more accurate epidemiologic data which are essential to develop new management strategies.

KEYWORDS

Accreta; Classification; Increta; Percreta; Placenta

1 | INTRODUCTION

Irving and Hertig are credited for having published, in 1937, the first cohort study of placenta accreta in the international literature¹. Their article included comprehensive clinical and histopathologic descriptions of 20 cases, and a literature review of 86 cases published before 1935. All these cases were described as "adherent", which the authors characterized clinically as a placenta adherent to the uterine wall without easy separation and/or bleeding from the placental bed, and histologically as absence of decidual layer/Nitabuch layer between the placenta and myometrium. These diagnostic criteria were not new at the time and had been in use since the mid-1920s, including by the authors of case reports with histological evidence of villous invasion of the myometrium².

2 | HISTORICAL PERSPECTIVE

Predisposing factors identified in the 1920s and 1930s were previous manual removal of placenta and/or "vigorous" uterine curettage. Only one of the 20 patients included in the Irving and Hertig series had a previous cesarean delivery¹. Similarly, in their review of the previous 86 case reports, only one patient had a prior cesarean delivery. Before the development of antibiotics, damage to the uterine wall after uterine curettage or manual removal of the placenta was often aggravated by endometritis. This likely resulted in scar tissue forming focally within the superficial myometrium, which is not comparable to the extensive myometrial scar caused by multiple cesarean deliveries⁴⁻⁶. The low incidence of full-thickness myometrial scarring may explain why very few cases of invasive placentation were reported before the 1950s, when cesarean deliveries became safer and therefore increasingly common. There is now compelling epidemiological evidence that accreta placentation has become essentially an iatrogenic condition, secondary to the modern-era cesarean section epidemic^{3,4}. In early pathologic studies, the distribution of adherent placenta accreta was found to be 69.5% whereas invasive placenta accreta represented 30.5% of all cases accreta placentation, respectively³. The incidence of invasive cases has increased in the last two decades, but accurate data are limited due to wide variation in the methodology used in cohort studies.

Placenta accreta was redefined in the mid-1960s by Lukes et al.⁷ as a spectrum of abnormal placentation disorders. These disorders include placenta adherenta or vera, also referred to as placenta creta by pathologists, in which the villi are attached directly to the surface of the myometrium without invading it; placenta increta, in which the villi penetrate deeply into the myometrium up to the uterine serosa; and placenta percreta, in which the invasive villous tissue penetrates through the uterine serosa and may reach the surrounding pelvic tissues, vessels, and organs. They also showed that different grades of the placenta accreta spectrum (PAS) can coexist in the same specimens and that an accreta area can be focal or extended (diffuse). This remains the most comprehensive and inclusive description of placenta accreta published so far, and has been incorporated into the recent International Federation of Gynecology and Obstetrics (FIGO) guidelines³ and other publications⁶.

3 | DIAGNOSIS OF PAS

Similar to other pathologic conditions, histopathology is now

widely considered as the gold standard modality recommended to confirm clinical diagnosis of PAS, but it is often unavailable in adherent accreta or conservatively managed cases³. Moreover, unlike cancer staging, retrospective clinical and/or pathological grading of PAS has no direct long-term impact on the life of the patient. All these aspects may explain the apparent lack of interest in accurately differentiating between adherent and invasive forms, both by clinicians and pathologists and/or the lack of trained perinatal pathologists in many centers. As a result, the 1920–1930's criteria, based mostly on adherent cases, continued to be used by several authors of cohort studies. However, this can lead to misleading conclusions, as adherent and invasive accreta placentation have very different outcomes and require different management. To compound this, although 80%–90% of prenatally diagnosed PAS are managed surgically⁸, around half of the authors fail to report the extent of villous attachment or invasion after peripartum hysterectomy⁹.

Recent variants of the classical clinical description of PAS often include criteria such as a "difficult manual, piecemeal removal of the placenta"; "absence of spontaneous placental separation 20–30 minutes after birth despite active management, including bimanual massage of the uterus, use of oxytocin and controlled traction of the umbilical cord"; "retained placental fragment requiring curettage after vaginal birth"; and "heavy bleeding from the placentation site after removal of the placenta during cesarean delivery"^{10–13}. This has resulted in a multitude of different clinical criteria, which can be easily confused with non-accreta placental retention and secondary uterine atony. With so many different criteria all purporting to represent PAS, but without any attempt to differentiate between adherent and invasive forms, it is unsurprising that there is a wide variation in the reported prevalence over the last 30 years.

Adding to the confusion is the wide heterogeneity in terminology used to describe the different grades of accreta placentation, including "placental adhesive disorders", "abnormal placental adherence", "advanced invasive placentation", and "abnormal myometrial invasion"^{9,14}. A recent popular label used by clinicians reporting on the prenatal diagnosis of PAS has been "morbidly adherent placenta", which was used in the 19th century to describe placental retention¹⁵. It has been recently used in WHO's 10th revision of the International Statistical Classification of Diseases (ICD-10) (www.who.int/classifications/ icd) and has led to some exotic translation such as "the pernicious placenta" recently used by Chinese authors in both local and international journals^{16,17}. This point also highlights the limited impact of accreta placentation research on the general scientific literature, as leading medical journals are unlikely to publish articles on diseases that do not have universally accepted diagnostic criteria and unequivocal terminology. Each of the other terminologies used so far are suboptimal and exclusive as they do not describe the different grades of PAS — i.e., "adherent", which does not include the invasive grades increta and percreta, and "invasive", which can be confused with gestational trophoblastic disease and, in particular, invasive intrauterine choriocarcinoma.

Consequences reach far beyond a simple debate on what is the most adequate terminology. So far, the lack of use of standardized clinical criteria for the diagnosis of the condition at birth and the histopathologic differential diagnosis between adherent and invasive accreta placentation has led to wide

Box 1 General classification of placenta accreta spectrum Grade 1: Abnormally adherent placenta (placenta adherenta or creta)

Clinical criteria

- At vaginal delivery
 - No separation with synthetic oxytocin and gentle controlled cord traction
 - Attempts at manual removal of the placenta results in heavy bleeding from the placenta implantation site requiring mechanical or surgical procedures
- If laparotomy is required (including for cesarean delivery)
 - Same as above
 - Macroscopically, the uterus shows no obvious distension over the placental bed (placental "bulge"), no placental tissue is seen invading through the surface of the uterus, and there is no or minimal neovascularity

Histologic criteria

- Microscopic examination of the placental bed samples from hysterectomy specimen shows extended areas of absent decidua between villous tissue and myometrium with placental villi attached directly to the superficial mvometrium
- The diagnosis cannot be made on just delivered placental tissue nor on random biopsies of the placental bed

Grade 2: Abnormally invasive placenta (Increta)

Clinical criteria

- At laparotomy
 - Abnormal macroscopic findings over the placental bed: bluish/purple colouring, distension (placental "bulge")
 - Significant amounts of hypervascularity (dense tangled bed of vessels or multiple vessels running parallel craniocaudially in the uterine serosa)
 - No placental tissue seen to be invading through the uterine serosa.
 - Gentle cord traction results in the uterus being pulled inwards without separation of the placenta (so-called the dimple sign)

Histologic criteria

 Hysterectomy specimen or partial myometrial resection of the increta area shows placental villi within the muscular fibers and sometimes in the lumen of the deep uterine vasculature (radial or arcuate arteries)

Grade 3: Abnormally invasive placenta (Percreta)

Grade 3a: Limited to the uterine serosa

Clinical criteria

- At laparotomy
 - Abnormal macroscopic findings on uterine serosal surface (as above) and placental tissue seen to be invading through the surface of the uterus
 - No invasion into any other organ, including the posterior wall of the bladder (a clear surgical plane can be identified between the bladder and uterus)
- Histologic criteria
 - Hysterectomy specimen showing villous tissue within or breaching the uterine serosa

Grade 3b: With urinary bladder invasion

Clinical criteria

- At laparotomy
 - Placental villi are seen to be invading into the bladder but no other organs
- Clear surgical plane cannot be identified between the bladder and uterus Histologic criteria
- Hysterectomy specimen showing villous tissue breaching the uterine serosa and invading the bladder wall tissue or urothelium

Grade 3c: With invasion of other pelvic tissue/organs

- **Clinical criteria**
- At laparotomy
 - Placental villi are seen to be invading into the broad ligament, vaginal wall, pelvic sidewall or any other pelvic organ (with or without invasion of the bladder)

Histologic criteria

• Hysterectomy specimen showing villous tissue breaching the uterine serosa and invading pelvic tissues/organs (with or without invasion of the bladder)

For the purposes of this classification, "uterus" includes the uterine body and uterine cervix

Box 2 Basic dataset for reporting on placenta accreta spectrum

Background population

- Institution-based study
 - Display referred cases and cases from local catchment area in separate data sets
- Description of background population and cases including number of births, mode of delivery, parity, local CD rate (stratified by numbers of prior deliveries and numbers of prior CD)
- Regional/network/national-based study
 - Description of local background population including number of births, mode of delivery, parity, CD rates (stratified by numbers of prior deliveries and numbers of prior CD) for referred cases and local cases.

Description of standardized criteria used for prenatal diagnosis

- Ultrasound signs of placenta accreta spectrum, including placental location
- MRI signs of PAS including surface area and depth Management strategy
- Intended mode of management: vaginal delivery, scheduled CD, hysterectomy (primary or delayed), focal myometrial resection, leaving the placenta in situ
- Actual mode of management: vaginal delivery, scheduled CD, emergent CD, focal myometrial resection, hysterectomy (primary or delayed), leaving the placenta in situ and other uterine spearing methods.

Confirmation of diagnosis:

- Clinical diagnostic criteria confirmed histopathological diagnosis when possible
- The final diagnosis (clinical, histopathological) should be clearly stated and made according to the classification in Box 1

Abbreviations: CD, cesarean delivery; MRI, magnetic resonance imaging.

heterogeneity between studies for all epidemiologic and outcome parameters¹⁸. Distinguishing between adherent and invasive forms of accreta has a direct impact on the accurate evaluation of epidemiology, on improving the understanding of the underlying pathology and, most importantly, on the development of better management strategies. In addition, labelling cases of placenta retention as accreta or morbidly adherent leads to overdiagnosis, which can influence treatment decision leading to overtreatment and diagnosis-related anxiety for many patients.

4 | PAS GRADING AND CLASSIFICATION

The process of clarifying the reporting data on placenta accreta in the international literature started recently with the development of a grading system for the clinical diagnosis of PAS¹⁹. The classification presented in Box 1 was developed from this grading scheme, and reviewed by members of the FIGO Placenta Accreta Spectrum Disorders Diagnosis and Management Expert Consensus Panel²⁰. Of note, it refers to a classification and not a staging system, to differentiate it from the terminology used for cancer. As an example, for use of the classification, we have summarized the recommendations of the recent FIGO guidelines for the conservative²¹ and non-conservative surgical management²² of PAS according to the grade of accreta invasiveness defined in the present classification.

The accreta placentation process has an impact on both the anatomy of a portion of the placenta and on the development of the surrounding deep uterine circulation⁶. The accreta area will not spontaneously deliver at birth and any attempt in doing so may result in rapidly uncontrollable bleeding from the deep uterine vessels or the neovascularisation around the accreta area. The deeper and larger the accreta area inside the uterine wall, the higher the risks of severe hemorrhagic complications and need to perform an emergency hysterectomy. To avoid unnecessary complex surgical procedure, clinicians should differentiate between placenta percreta and a so-called uterine window, which is an area of cesarean scar dehiscence with normal placentation underneath (or sometimes seen poking through). In the latter, the surrounding uterine tissue appears relatively normal with no gross vascular changes (hypervascularisation and larger vessels) or placental bulge. If the placenta is eventually delivered manually in whole or in pieces at the end of the uterine surgical repair or within 24-48h, it is unlikely to have been accreta. The manual removal of a non-accreta retained placenta can also be associated with severe hemorrhage due to secondary uterine atony, but in these cases, conservative management techniques such as compressive sutures and intrauterine balloon are often successful in controlling the bleeding. These cases should not be reported as successful management of PAS.

5 | REPORTING DATA ON PAS

It is pivotal to improve the accuracy of PAS diagnosis in the international literature, and for this purpose we also propose reporting guidelines, which include a standardized basic dataset for future clinical research and to allow comparison between centers with different management strategies (Box 2). This protocol does not replace the general EQUATOR network guidelines (https://www.equatornetwork.org/), such as the PRISMA guideline for systematic reviews, but rather it serves to elevate the international discourse about PAS to a scientific caliber that matches the importance of the disease in maternal health globally. Adherence to this new FIGO classification will improve future systematic reviews and meta-analysis and provide more accurate epidemiologic data which are essential to improve clinical outcomes.

CONSENSUS PANEL

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CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.



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CONNECT • Issue 1

AP Ani Amelia Dato Zainuddin is the Head of the Paediatric & Adolescent Gynaecology (PAG) unit in the Dept. of O&G, HCTM UKMMC. This unit manages young women with gynaecological issues and is a recognised training centre for the subspecialty of PAG by the FIGIJ (International Federation of PAG). AP Amelia's interest is in managing patients with Differences of Sex Development (DSD).

Beyond the engrained concept of binary sex, XY females are the result of discrepancies between genetic, gonadal and genital sex. These individuals are now classified under the nomenclature of 'Disorders of Sex Development' (DSD) and require special attention to deal with psychosocial, medical/surgical and fertility issues.

Berra M (2010) categorised the condition on the basis of gonadal sex which is the ultimate grounds for gonadectomy decisions:

- (1) 46XY females with functioning testis, absent uterus and female external genetalia. Mullerian duct system regressed due to the production of Anti-Mullerian Hormone (AMH) from the testis (Sertoli cells) during development. Androgen Insensitivity Syndrome (AIS), 5 alpha reductase (5AR) deficiency and 17 hydroxysteroid dehydrogenase (17-HSD) deficiency fall in this category.
- (2) 46XY females without testis, small uterus and dysgenetic gonads, described in the medical literature as Swyer's syndrome. AMH is not available to suppress Mullerian duct system. Mesonephric ducts fail to develop and external genitalia mature into female structures in the absence of testosterone and testicular androgens.
- (3) 46XY women with mixed DSD having ovo-testis with variable secretions of AMH, testicular function and uterine appearance.

In utero gender discrepancy, presentation varies between ultrasound and karyotype from amniocentesis to ambiguous genitalia at birth, inguinal hernia in childhood, virilisation at puberty and primary amenorrhea in later teens. They may be present with exstrophy of cloaca, inability for consummation of sexual life and infertility.

Accurate diagnosis of which type of XY female is still a challenge even at the most established centres. Diagnosis at an early age, e.g. in the presence of ambiguous genitalia, may result in better acceptance of discrepant gender and timely involvement of multidisciplinary teams. But mostly, these girls do not seek medical help until a concern of non-commencement of periods arises. Emotional and social adjustments would be equally challenging at this stage as well as their medical or surgical corrections.

Management cannot be standardised for all XY females, but there are some recommendations to be tailored according to age, diagnosis and individual needs. Gender identity must be established. Gynaecologists with experience in handling DSDs can manage the XY females who wish to retain their female gender identity, however for those with gender issues or wish to be re-assigned to the male gender, this requires referral to a multidisciplinary team experts in managing such cases.

For those who wish to maintain their female gender identity, induction of puberty and subsequent commencement of menstruation would be the initial step. Stepwise induction from low to high doses of oestrogen may be effective for breast development and for inducing menstruation in girls with uteri like in Swyer's syndrome. Breast development, on the other hand, may not be an issue for AIS as they typically have breasts due to the peripheral aromatization of their endogenous testosterone. AIS patients, however, will not be able to menstruate as they do not have uteri.

Unless there is an urgent need, scheduling of surgical feminisation ambiguous genitalia must be considered in later life when the individual can consent and understand the consequences. Vaginal dilatation, in cases of inadequate vaginas, can be deferred until the girl plans to embark on a sexual relationship. Regular intercourse can help maintain vaginal adequacy.

Accuracy of diagnosis is important before surgical intervention. Gonadectomy is planned earlier in cases of gonadal dysgenesis and mixed DSD due to increased risk of malignancy as compared to CAIS. Surgery can be deferred until full bone maturity for CAIS, especially if testis is lying outside the abdominal cavity. However, six monthly MRIs would be required for screening of malignancy.

These individuals should be dealt within their social context. Help should be sought from psychology colleagues to clarify thoughts relating to sexual identity and tackle communication difficulties within family and relationships. Support groups can play their role in social network to overcome psychosocial barriers related to social stigma and emotional challenges.



27th International Congress of the Obstetrical & Gynaecological Society of Malaysia





Date: 18-21 July 2019

Venue: Setia SPICE Convention Centre, Penang, Malaysia

Congress Hotel: Equatorial Hotel Penang





Congress Report

The 27th Congress of Obstetrics and Gynaecology which was held at the Setia SPICE Convention Centre, Penang was a resounding success by any count. The Organizing Committee, ably led by the In-coming President, Dr Harris Njoo Suharjono, had decided from the very onset, that this year's congress should be held outside of Kuala Lumpur. The congress was last held in Penang in 2011. Since then, it has been held outside of Kuala Lumpur only twice, in 2012 and 2015. On both these occasions, it was held in Kuching, Sarawak, as these meetings were being held in collaboration with other international meetings (the Royal College International congress in 2012 and AOCOG in 2015). On both these occasions, Borneo was seen as the ideal 'winnable' bid, hence Kuching.

The SPICE Convention Centre in Penang was an obvious choice as the only other option was to have it at the Equatorial Hotel (again) as they are the only other venue in Penang island capable of accommodating our huge trade exhibition.

The scientific program covered a wide and varied spectrum. In addition to the usual discourse on recent developments and good evidence, the proceedings were lightened up with several other events that generated much interest. This included the 'Enrichment Lectures', the debate and several other innovative additions including the 'treasure hunt'. Dr Muniswaran Ganeshan, our very talented Scientific Chair, who has always been keen to push boundaries and breach new frontiers, has certainly done justice to this year's program.

The invited faculty included 57 local speakers and a further 32 from abroad. The foreign invited faculty were from 12 countries in total, marginally less than the 39 foreign faculty from 18 countries in the 2018 congress. Nonetheless, the scientific content was certainly up to par.

There were a total of 1092 registered delegates, of which 915 were doctors and a further 177 nurses. A total of 96 foreign delegates attended the congress.

Feedback from delegates clearly indicated that they found the program intellectually stimulating and the venue optimal. The only recurring complaint however concerned the bentoboxed lunch provided at the lunch symposiums. Many felt that since we were in Penang, a legendary food paradise, the standard 'congress diet' benchmark could have easily been breached, but was unfortunately not!

All said, the congress was undoubtedly a great success and the organizing committee, which was an interesting mix of some newer additions and the usual 'seasoned' ones, demonstrated their intrinsic ability to work synergistically well together. Certainly this bodes well for the future of OGSM.

The Gala Dinner

The Gala Dinner was a definite highlight of this year's congress. Whether it was the famous Kumar and his (her?) extremely vulgar antics or the mere fact that we were in Penang, the Gala Dinner was a runaway success. The hall was filled to capacity, a phenomenon we have never seen before. In fact, extra tables had to be prepared and late attendees pacified. Both the Organizing Committee and the senior banquet staff were at their wits end trying to fit everyone into the hall. Fortunately, with the valiant efforts of all quarters including our office administrators, we were able to get everyone into the hall. This is something we have never encountered before and may be worth examining, hopefully to avoid a recurrence. It was otherwise an extremely successful night and clearly a new benchmark!

OGSM 2019 Trainee's view

There's really no sugar-coating to it. The 2019 OGSM congress is a beacon to excellence in women's health. There was a wide range of interesting and informative topics that covered both gynaecology and obstetrics. Of course, it is also the perfect opportunity to relax and socialise with our peers. I am already looking forward to next year.

Dr Vivian Tan

vention

of the OBSTETRICAL AND GYNAECOLOGICAL SOCIETY

🚱 MSD 📝 🖉 ZUELLIG 🔁 Abbott 🐢

Grand Opening

The Congress was officiated by the Deputy Minister of Women, Children and Family Development, YB. Puan Hannah Yeoh. It was most certainly a great honour to OGSM that she accepted our invitation.

Upon arrival, she was met by some of the Organizing Committee. After a short discussion, she visited our trade exhibition. Many of the exhibitors were thrilled that YB Hannah was comfortable allowing them to take 'wefies' with her. She also demonstrated a keen interest in some of the products that were being exhibited, underlining her deep interest and passion for women related issues.

She then gave a very informative Enrichment Lecture just prior to the opening, entitled "Child Protection".

The opening gambit this year was a quantum leap from the past. The futuristic computer generated presentation certainly belonged to a league of its own in comparison to the customary gong. Following the opening gambit, delegates were entertained to some local culture. This was then followed by a Welcome Reception which was very well attended.



The OGSM Contraception course was held on the 25th August in Tawau Hospital. There were 45 participants comprising of Medical Officers, GPs, Pharmacists, Nurses and estate health care workers.



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