*Official Journal of the*
*Malaysian Medical Association*

# *The Medical Journal of Malaysia*

## 32nd Congress of the Obstetrical & Gynaecological Society of Malaysia (OGSM 2025)

## 10-13 July 2025
## Setia SPICE Convention Centre
## Penang, Malaysia

**August 2025**

**Volume: 80**

**Supplement: 5**

**ISSN 0300-5283**

# MJM

*Official Journal of the Malaysian Medical Association*

*Volume 80 Number 5 August 2025*


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ISSN 2948-3859

The Medical Journal of Malaysia is published six times a year.
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Rampal L, Liew BS, Choolani M, Ganasegeran K, Pramanick A, Vallibhakara SA, et al. Battling COVID-19 pandemic waves in six South-East Asian countries: A real-time consensus review. Med J Malaysia 2020; 75(6): 613-25.

NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. Lancet 2021; 11; 398(10304): 957-80.

**Books and Other Monographs:**
**Personal Author(s)**
Goodman NW, Edwards MB. 2014. Medical Writing: A Prescription for Clarity. 4 th Edition. Cambridge University Press.

**Chapter in Book**
McFarland D, Holland JC. Distress, adjustments, and anxiety disorders. In: Watson M, Kissane D, Editors. Management of clinical depression and anxiety. Oxford University Press; 2017: 1-22.

**Corporate Author**
World Health Organization, Geneva. 2019. WHO Study Group on Tobacco Product Regulation. Report on the scientific basis of tobacco product regulation: seventh report of a WHO study group. WHO Technical Report Series, No. 1015.

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World Health Organization. Novel Coronavirus (2019-nCoV) Situation Report 85, April 14, 2020. [cited April 2020] Accessed from: https://www.who.int/docs/defaultsource/coronaviruse/situationreports/20200414-sitrep-85-covid-19.

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Ministry of Health Malaysia. Press Release: Status of preparedness and response by the ministry of health in and event of outbreak of Ebola in Malaysia 2014 [cited Dec 2014]. Available from: http://www.moh.gov.my/english.php/database_stores/store_view_page/21/437.

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Panirchellvum V. 'No outdoor activities if weather too hot'. the Sun. 2016; March 18: 9(col. 1-3).

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Rampal L.World No Tobacco Day 2021 -Tobacco Control in Malaysia. Berita MMA. 2021; May: 21-22.

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# Navigating the obstetrics legal landscape in Malaysia: Mitigation through best practices

**Wan Ahmad Hazim Wan Ghazali**

National Head of Service for O&G, MOH Malaysia

**SUMMARY**

In Malaysia, obstetrics is increasingly vulnerable to legal challenges due to rising patient expectations, complex medical procedures, and heightened awareness of patient rights. Medical malpractice claims in obstetrics often arise from perceived failures in diagnosis, treatment, or communication, leading to significant financial and reputational consequences for healthcare providers.

Several recurrent issues are frequently cited in obstetric malpractice claims within the Malaysian context. One of the most prevalent is the failure to recognise and appropriately respond to antepartum or intrapartum fetal distress, to perform a timely caesarean section when indicated. Delays in delivery, particularly in emergency situations, can result in adverse outcomes for the neonate. Inadequate informed consent is also a significant factor, as legal action may arise if patients feel they were not fully informed about the risks and benefits of procedures, especially in complex or emergency situations.

Poor documentation practices further complicate matters; inadequate, incomplete, or illegible medical records can undermine the defence in malpractice cases, as thorough documentation is essential to demonstrate adherence to the standard of care. Additionally, breakdowns in communication among healthcare providers or between providers and patients can lead to misunderstandings, errors, and ultimately, legal claims.

To reduce the likelihood of litigation, obstetric practitioners and institutions in Malaysia should adopt several strategies. Comprehensive documentation is paramount; maintaining detailed, accurate, and timely medical records that reflect the care provided, patient interactions, and decision-making processes is essential. Effective communication is equally important; fostering open and empathetic communication with patients and their families ensures they are well-informed and involved in decision-making. Timely and appropriate interventions are crucial; responding promptly to signs of complications and making timely decisions regarding interventions such as caesarean delivery can prevent adverse outcomes. Informed consent should be obtained and documented, ensuring that patients understand the risks and benefits of proposed procedures, particularly in high-risk situations. Continuous education and training are vital; engaging in regular professional development helps obstetric practitioners stay current with clinical guidelines, legal requirements, and best practices. Finally, implementing risk management protocols, such as regular audits, morbidity and mortality reviews, and the establishment of clear clinical guidelines, can promote safety and reduce liability exposure.

While the risk of litigation in obstetrics cannot be entirely eliminated, adherence to established best practices can significantly reduce the likelihood of legal challenges. By prioritising comprehensive documentation, effective communication, timely interventions, informed consent, continuous education, and robust risk management, obstetric practitioners in Malaysia can mitigate legal risks and enhance patient safety. Ultimately, fostering a culture of care and accountability is essential in navigating the complex legal landscape of obstetrics.

# Intrapartum management & risk aversion

**Vijayan Valayatham**

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**SUMMARY**

Medicolegal litigation is increasingly prevalent in Malaysia. While the exact number of cases remains unclear, there are approximately 1,500 complaints annually across the public and private healthcare sectors. Although only a small proportion reach the courts, damages awarded have reached RM9.45 million, significantly impacting medical indemnity costs. Obstetricians and gynaecologists are disproportionately affected, particularly as their fees are capped under the Akta Fi. Some relief has come with Siow Ching Yee v Columbia Asia Sdn Bhd [2024] CLJU 404, where the Federal Court ruled that private hospitals owe a statutory, non-delegable duty of care to patients. This landmark judgment should catalyse a paradigm shift in the delivery of obstetric services within private healthcare.

Most adverse obstetric outcomes occur during labour. Though rare, such events are often unpredictable. Typically, women are admitted only when labour begins, having been followed regularly by their obstetrician on an outpatient basis. In emergencies, however, they may suddenly require care from other specialities and departments—often under duress. A patient with amniotic fluid embolism, for example, may need an anaesthetist, neonatologist, haematologist, intensivist, and coordinated paramedical response. These are beyond the obstetrician's direct scope. Institutions should ensure that every patient registering for delivery is counselled on the full provision of maternity services. Obstetricians should remain focused on obstetric emergencies to optimise outcomes.

Intrapartum risk is further compounded by the lack of real-time documentation, a major weakness in medico-legal defence. In emergencies, a staff member should be designated to document directives, observations, and interventions. If unavailable, obstetricians should consider maintaining a running verbal commentary. Informed consent for labour interventions should ideally be completed antenatally.

Evidence-based practice should guide all interventions, including induction of labour (per MOH guidelines), amniotomy, augmentation, cardiotocography (CTG), episiotomy, and instrumental or caesarean delivery.

CTG monitoring remains a paradox. There is no strong evidence supporting its use in low-risk pregnancies where continuous one-to-one care is provided. Therefore, one-to-one monitoring should be the preferred standard. CTG abnormalities should be confirmed by fetal scalp blood sampling, as CTG alone is a poor predictor of fetal hypoxia. Despite this, CTG is frequently used in court as definitive proof of fetal compromise. When used, it should be interpreted and described using contemporary frameworks, such as the UK's NICE Intrapartum Guidelines.

Simulation-based training for obstetric emergencies enhances team response and improves maternal and neonatal outcomes.

In emergencies, an array of multidisciplinary tests may be required from the mother, baby and placenta to aid diagnosis or rule out hypotheses that may be put to you eventually in court.

# Medico-legal aspect of stillbirth

**Khairul Anuar Zainun**

Department of Forensic Medicine, Hospital Sultan Idris Shah, Serdang, Selangor

**SUMMARY**

Stillbirth is a tragedy to both parents and medical professionals. When it occurs, there are potential medicolegal issues that may arise, and it is certainly important medical professionals are aware of the risks for informed actions to address and mitigate them effectively could be taken. This talk will highlight medicolegal issues associated with stillbirth from Malaysian law perspectives and relate them to case scenarios.

The first medicolegal aspect involves certification of stillbirth. In cases of abandonment and new-born being delivered before arrival to hospital, very often they are being promptly certified as stillbirth lacking detailed investigation to establish the situation with greater certainty. One of the lingering questions is: are they in fact stillbirths? The second aspect involves determination of cause of stillbirth - which can be varies within the spectrum of natural to unnatural causes. While natural causes may lead to suitable management plan for future pregnancies, missing on unnatural causes may result in justice not being thoroughly investigated and served. Therefore, it is crucial to acknowledge suspicious circumstances surrounding the death that may suggest possible unnatural event. The final medicolegal aspect of stillbirth relates to timing of fetal demise which may potentially associated with medical negligence claim including allegation of substandard care. It is paramount to document and establish reasonable timing of fetal demise in cases of stillbirth to address any medicolegal questions surrounding substandard care in future.

Finally, it is worth highlighting that the above aspects can be reasonably addressed by performing procedures such as an autopsy including detailed examination of placenta.

References:
1. Criminal Procedure Code. Part VIII, Special Proceedings, Chapter XXXII, Inquiries of Death.
2. Penal Code. Chapter XVI, Offences affecting the human body & Concealment of birth.
3. Child Act 2001. Chapter III, Offences in relation to the health and welfare of children.
4. Cordner S, Burke M, Dodd M, Lynch M, Ranson D, Robertson S. Issues of child homicides: 11 cases. Legal Medicine 2001; 3:95-103.
5. Cohen M, Scheimberg I. Forensic aspects of perinatal deaths. Academic Forensic Pathology 2018; 8:3:452-491.

# Stillbirth – how the placenta tells tales

**Nur Syahrina Rahim**

Faculty of Medicine and Health Science, Universiti Sains Islam Malaysia (USIM), Negeri Sembilan

**SUMMARY**

The placenta is a temporary organ that develops solely during pregnancy, functioning as a vital interface between the mother and fetus. In addition to its essential role in physiological exchange, it acts as a biological record, reflecting the intricate interactions and events in the intrauterine environment. Despite its significance, placental examination is still underutilised in clinical practice due to various limitations.

However, evaluating the placenta is crucial when addressing stillbirth, and this assessment is carried out with or without a perinatal autopsy. Since placental morphology changes throughout gestation, it can reflect pathological alterations in response to various intrauterine events. These may include perfusion abnormalities, inflammatory lesions, and conditions with a recurrence risk. Some placental lesions develop gradually, while others may differ in severity depending on the type and duration of the insult. A thorough examination of the placenta can yield critical insights into the causes of perinatal morbidity and mortality and may also reveal maternal conditions, both known and previously unrecognised.

Hence, the placenta serves as an essential diagnostic resource, revealing pathological evidence in stillbirth cases and holding clinical significance in perinatal care. This information is invaluable for guiding clinical management and counselling in future pregnancies.

# HIE-CP Genomics

**Tajul Arifin Tajudin**

KPJ Puteri Specialist Hospital/Hospital Sultan Ismail, Johor Bahru, Johor

**SUMMARY**

Neonatal hypoxic-ischemic encephalopathy (HIE) occurs in approximately 1.5 per 1,000 live births in high-income countries and is even more prevalent in middle- and low-income regions. One of the most common complications resulting from hypoxic-ischemic encephalopathy is cerebral palsy. Cerebral palsy is a neuromotor disorder that primarily affects movement, muscle tone, and posture. It results from brain injuries sustained during the prenatal or neonatal periods. While the primary brain injury remains unchanged, children with cerebral palsy may experience a range of secondary conditions over time, potentially affecting their functional abilities and overall quality of life.

There are several early indicators that can help identify and suspect cerebral palsy in infants and young children. Developmental delays, such as difficulties with rolling over, sitting unsupported, or crawling, are common. Abnormal muscle tone, which can manifest as either excessive stiffness (hypertonia) or unusual limpness (hypotonia), is another key sign. Children may also display unusual postures, including asymmetry in movement or positioning. Additionally, premature hand preference – favouring one hand noticeably before 12 months of age – can signal possible hemiplegia.

Although the above can be indicative of cerebral palsy, they are not exclusive to cases linked to hypoxic-ischemic encephalopathy (HIE). Various other conditions, including genetic disorders, metabolic diseases, or structural brain abnormalities, can present with similar characteristics. A thorough medical evaluation, including neuroimaging and clinical assessments, is essential for determining the underlying cause and ensuring appropriate intervention. It is of utmost importance to know when neonatal encephalopathy is not secondary to HIE.

Cerebral palsy (CP) is a complex neurodevelopmental disorder with multifactorial origins, including genetic contributions that are increasingly being recognised. Advances in genomic research have provided new insights into the potential genetic predisposition to CP, uncovering mutations and variations associated with motor function and neurodevelopment.

In my presentation, I will not only discuss the well-established aspects of the hypoxic-ischemic encephalopathy (HIE) and cerebral palsy relationship but also shed light on overlooked early indicators in movement and posture among children at risk of developing cerebral palsy. To conclude, I will also explore the intersection of cerebral palsy and genomics, highlighting recent discoveries that enhance our understanding of the disorder's genetic aetiology and emerging pathways for personalised therapeutic interventions.

# The depressed infant: Test and imaging

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**SUMMARY**

Among the common neurological scenarios encountered in the Neonatal Intensive Care unit is managing the depressed infant. Many different aetiologies result in alteration in neonatal conscious state, which often at times can be subtle. After initial management steps that aim to stabilise the newborn, the clinician would then pursue various assessments that include encephalopathy scores, electrophysiologic studies and neuroimaging. These assessments aid in differentiating various aetiologies of encephalopathy, initiating treatment modalities and outcome prognostication. Encephalopathy scores (Thompson & Sarnat scores) are used to assess and monitor the neurological state of an infant. It is also commonly used as a tool to qualify for therapeutic hypothermia. Neurodiagnostic test like electroencephalogram (EEG) diagnose seizures, especially subclinical types and may aid in prognostication. Magnetic Resonance Imaging would be important to delineate the extent of brain injury, which then helps in outcome prediction and future management planning.

# Comparative outcomes of cervical cerclage, arabin pessary and vaginal progesterone: A retrospective look at cervical support strategies

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## ABSTRACT

**Introduction:** Preterm birth remains a leading cause of neonatal morbidity and mortality worldwide. Cervical insufficiency is a potentially preventable risk factor for spontaneous preterm birth. **Objective:** To compare the effectiveness of cervical cerclage, Arabin pessary and vaginal progesterone in the prevention of preterm birth and improvement of perinatal outcomes in women at risk of cervical insufficiency. **Materials and Methods:** An audit was done from year 2020-2024 in our centre using descriptive statistics. **Results:** Among those with a short cervix on ultrasound, 58.3% delivered before 32 weeks, 70% before 35 weeks and 66.7% before 37 weeks. In the history-based treatment group, 33.3% were delivered before 37 weeks. Among the progesterone group, 25.6% delivered before 32 weeks, compared to 38.2% in the Arabin pessary group and 37% in the cervical cerclage group. Perinatal mortality was 28% in the progesterone group, 32% in the cerclage group, and 38% in the Arabin group. Maternal infection was most prevalent in the cerclage group, 42.2%, while neonatal sepsis rates were similar across all three groups. We also analysed the average cost per treatment group. The Arabin pessary cost RM17,600 for 55 patients, the cerclage group RM64,000 for 46 patients (including inpatient stay and antibiotics), and the progesterone group RM12,000 for 39 patients over an average of 10 weeks of use. **Conclusion:** Overall, progesterone was the most cost-effective intervention, along with lower rates of perinatal mortality, preterm delivery and maternal infections. Ultrasound-based screening showed a better outcome in accurately identifying patients at risk of cervical insufficiency.

# Ex-utero intrapartum treatment (Exit) case series: A single center clinical experience

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## ABSTRACT

**Introduction:** With advances in prenatal diagnostic modalities, the detection of life-threatening fetal facio-cervical masses has improved. The Ex-Utero Intrapartum Treatment (EXIT) procedure improves neonatal outcome by establishing an airway during caesarean delivery while preserving feto-maternal circulation. **Objective:** To review the indication and outcome of the EXIT procedure at our local centre. **Materials and Methods:** A case series to review 10 EXIT procedures carried out at our centre from year 2009 to 2023. Data was collected from electronic medical records of patients who had prenatal diagnosis of fetal facio-cervical masses. **Results:** The diagnosis included cystic hygroma (n=6), immature teratoma (n=1), giant teratoma (n=1), cervical hemangioma (n=1) and congenital granular cell tumour of upper gingiva (n=1). Polyhydramnios was present in 5 patients. Three out of seven patients who had prenatal MRI showed airway obstruction. The mean gestational age at EXIT procedure was 35-36 weeks (range 31-39 weeks). Airway access was successfully established in all except for 1 case, whereby no airway obstruction was noted after laryngoscopy due to the location of the mass. Eight of the neonates born by EXIT are currently healthy, while 2 developed complications not related to EXIT procedure and expired at day 3 and day 15 of life. **Conclusion:** The location, size of the mass and airway patency are major determinants for EXIT procedure and neonatal outcome. Prenatal fetal MRI adds value in anticipation of complications during EXIT procedure.

# Design placentation: Elaborating the mechanism of peri-implantation sexual intercourse and oxidative stress

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## ABSTRACT

**Introduction:** The peri-implantation phase plays a critical role in successful placental development. Disruptions during this phase have been linked to adverse outcomes such as preeclampsia, fetal growth restriction (FGR), and placenta previa. Although sexual intercourse during this period is traditionally thought to support conception, its impact on oxidative stress and placental morphology remains unclear. **Objectives:** To investigate the effects of sexual abstinence during the peri-implantation period on placental development, oxidative stress markers, placental positioning, and maternal-fetal outcomes. **Materials and Methods:** A randomised controlled trial was conducted with 33 pregnant participants, divided into abstinence (n=9) and non-abstinence (n=24) groups. Placental tissue was evaluated for histomorphological features using H&E and CD31 immunohistochemistry. Oxidative stress markers (MDA, SOD, CAT, T-AOC) were assessed using ELISA. Placental location was evaluated via ultrasonography, and maternal-fetal outcomes were recorded. **Results:** The abstinence group demonstrated better placental histomorphology with lower inflammation (33.3% vs. 70.8%), absence of MPFD (0% vs. 33.3%), and preserved membrane integrity (100% vs. 25%, $p<0.0001$). Angiogenesis was enhanced in the abstinence group (15.3 ± 3.1 vs. 8.9 ± 2.7 vessels/HPF, $p=0.0136$). Oxidative stress markers showed reduced stress and elevated antioxidant capacity: lower MDA (6.54 ± 2.37 vs. 16.65 ± 4.98 µmol/L, $p=0.0006$), higher SOD (52.16 ± 15.29 vs. 24.40 ± 6.30 U/mg, $p=0.0038$), CAT (106.7 ± 23.24 vs. 57.33 ± 11.63 U/mg, $p=0.0026$), and T-AOC (137.5 ± 60.93 vs. 60.93 ± 22.35 µmol/L, $p=0.0034$). No low-lying placenta was observed in the abstinence group versus 20.8% in the non-abstinence group. **Conclusion:** Peri-implantation sexual abstinence is associated with improved placental development, reduced oxidative stress, enhanced angiogenesis, and reduced risk of abnormal placental positioning. These findings suggest a potential role for sexual behaviour modification during early conception in improving pregnancy outcomes.

# The comparison of insulin and metformin on maternal and neonatal outcomes of gestational diabetes mellitus: A retrospective analysis

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## ABSTRACT

**Introduction:** Gestational diabetes mellitus (GDM) affects a significant number of pregnant women in Malaysia and can lead to adverse maternal and neonatal outcomes if poorly managed. During the COVID-19 pandemic, metformin replaced insulin as the first-line pharmacological treatment in Negeri Sembilan due to limited hospital bed availability. With healthcare services now restored, a review of both treatments is essential to guide future GDM management. **Objectives:** To compare maternal and neonatal outcomes of insulin and metformin treatment in GDM patients unresponsive to diet modifications. **Materials and Methods:** This retrospective observational study compared two groups of pregnant women with GDM and failed diet control. The insulin group included 304 women treated from 18 March 2019 to 17 March 2020, while the metformin group included 306 women treated from 18 March 2020 to 17 March 2021. **Results:** There were no significant differences between groups in rates of macrosomia, neonatal hypoglycaemia, preterm delivery, gestational hypertension, pre-eclampsia, caesarean section, or postpartum haemorrhage. However, metformin was associated with significantly lower risks of neonatal jaundice requiring phototherapy (aOR: 0.44, 95% CI: 0.29-0.63, p<0.001), respiratory morbidities (aOR: 0.18, 95%CI: 0.09-0.36, p<0.001), and neonatal intensive care unit admission (aOR: 0.37, 95%CI: 0.18-0.73, p=0.004). Other neonatal outcomes such as low birth weight, small or large for gestational age, birth asphyxia, and birth injuries showed no significant difference. **Conclusion:** Metformin is a safe and effective alternative to insulin for managing GDM unresponsive to diet in our setting. The findings support its continued use as a first-line pharmacological treatment.

# HbA1c as a predictor of pregnancy outcomes among GDM women

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## ABSTRACT

**Introduction:** HbA1c is commonly measured once gestational diabetes mellitus (GDM) is diagnosed, yet its clinical utility during pregnancy remains uncertain. Clinicians often rely on a non-pregnancy cut-off value, but whether this applies during pregnancy is questionable. This study aims to determine whether HbA1c can predict adverse pregnancy outcomes, identify which outcomes are best predicted, and establish appropriate trimester-specific cutoff values. **Objective:** To assess the predictive value of maternal HbA1c for adverse pregnancy outcomes and determine optimal cut-off levels and timing of measurement. **Materials and Methods:** A retrospective study of 553 women with GDM delivering at Hospital Canselor Tuanku Mukhriz from 2020-2020 was conducted. HbA1c levels measured in either the second (n=293) or third trimester (n=260) were analysed for their ability to predict caesarean section (CS), preterm birth (PTB), and large for gestational age (LGA) infants using ROC analysis. **Results:** The mean HbA1c was 5.40% in the second trimester and 5.42% in the third. Second trimester HbA1c showed better predictive value for LGA (AUC 0.68, optimal cutoff 5.65%) compared to the third trimester (AUC 0.53, cutoff 5.75%). Conversely, third trimester HbA1c modestly predicted CS (AUC 0.639, cutoff 5.45%) compared to the second trimester (AUC 0.513). No meaningful predictive value was found for PTB. **Conclusion:** Second-trimester HbA1c demonstrates moderate potential in predicting LGA, while third-trimester values show a modest association with CS. The conventional HbA1c of 6.5% may not be appropriate in pregnancy; trimester-specific lower cutoffs may offer better clinical utility. Further prospective studies are warranted to validate these findings.

# A mermaid in a dry ocean: A case of missed sirenomelia masked by severe oligohydromnios

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## ABSTRACT

**Introduction:** Sirenomelia, or "mermaid syndrome," is a rare and typically fatal congenital malformation characterised by fusion of the lower limbs, often accompanied by severe genitourinary and gastrointestinal anomalies. Despite advances in prenatal imaging, diagnosis remains challenging, particularly in the presence of severe oligohydramnios. **Case Description:** A 40-year-old gravida 7 para 6 woman presented at 25 weeks gestation for late antenatal booking and was diagnosed with gestational diabetes mellitus (GDM). An ultrasound at the primary care level revealed severe oligohydramnios, prompting referral to a tertiary centre. On specialist review, she was found to have preterm prelabour rupture of membranes (PPROM). Fetal ultrasound showed breech presentation with persistent anhydramnios. Despite limited imaging, key anomalies were noted: absent urinary bladder, non-visualisation of the lower spine, and visible bilateral kidneys. The couple was counselled on the poor fetal prognosis and opted for conservative management. At 29 weeks, she developed fetal bradycardia and underwent emergency cesarean section. The neonate demonstrated classic features of sirenomelia and succumbed within hours of birth. **Discussion:** This case highlights the diagnostic and management challenges of sirenomelia in the context of late antenatal care and severe oligohydramnios. The presence of GDM raises consideration of possible metabolic contributions to the condition. Clinicians should remain vigilant for hallmark sonographic findings – specially fused limbs and absent bladder — even in suboptimal conditions. Early identification enables timely counselling, multidisciplinary involvement, and informed decision-making for this invariably fatal anomaly.

# Family size and mode of delivery wishes of women following obstetric anal sphincter injury (OASI)

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## ABSTRACT

**Introduction:** Birth trauma such as obstetric anal sphincter injuries (OASIs) can significantly alter a woman's health and life, including future family planning decisions. **Objective:** This study aims to determine family size and mode of delivery preferences of women following OASI. **Materials and Methods:** This prospective cohort study enrolled all women who attended the perineal clinic between 1 January 2024 and 31 December 2024 at KK Women's and Children's Hospital following OASI. Data on patient characteristics, birth events, and family size and mode of delivery preferences were collected from electronic medical records. **Results:** Thirty-two women participated in this study. The mean age was 30.8 years. Mean parity was 1.28, with 25 (78.1%) primiparous and 7 (21.9%) multiparous women. Twenty-nine (90.6%) sustained third-degree tears, with 13 (40.6%) classified as 3A, 10 (31.3%) as 3B, and 6 (18.8%) as 3C. Three (9.4%) women suffered fourth-degree tears. Twenty-five (78.1%) women wanted more children, with 20 (62.5%) wanting just 1 more child, 4 (12.5%) wanting 2 more children and 1 (3.1%) wanting more than 2 more children. Five (15.6%) women did not want any more children, whilst two were undecided. Of those who planned for more children, 24 (96%) wished for a vaginal birth in the future. **Conclusion:** Despite sustaining birth-related trauma, most women continue to plan for more children and desire vaginal birth after OASI. Clinicians need to ensure women recover well from OASI and receive the necessary follow-up care including endoanal ultrasound and anorectal manometry with review of anal incontinence symptoms, to better guide and support women in their future pregnancy journeys.

# Maternal booking body mass index and birth weight: A retrospective population-based cohort study of mother-infant pairs in 5 tertiary hospitals based on the National Obstetric Registry (NOR) of Malaysia

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## ABSTRACT

**Introduction:** Abnormal birth weights (BW) are associated with a significantly higher risk of developing health complications than infants with a normal BW, and maternal nutritional status has been found to be one of the key determinants of neonatal health outcomes. **Objectives:** This study aims to determine the association between maternal booking BMI and BW amongst populations of various ethnicities after adjusting for potential confounding variables, besides determining the association of maternal booking BMI and the development of maternal-foetal complications. **Materials and Methods:** This is a retrospective, population-based cohort study. Data on 194,447 mother-infant pairs with live births, in five tertiary hospitals, between January 2013 to December 2017, is retrospectively reviewed and extracted from the electronic medical records of the National Obstetric Registry of Malaysia. The extracted data included information on the mothers' age, BMI at booking, infant outcomes, ethnicity, antepartum and intrapartum history. Maternal booking BMI is categorised into underweight, normal, overweight, and obese. BW is categorised into low BW, normal BW and macrosomia. **Results:** There is a significant correlation between maternal booking BMI and BW. Underweight mothers are 73.3% ($p<0.001$) more likely to give birth to low BW infants, whilst overweight and obese mothers are 88.1% ($P<0.001$) and 184.8% ($P<0.001$), respectively, more likely to give birth to macrosomic infants. Subgroup analysis based on maternal ethnicity reveals that Indian mothers have the highest prevalence of low BW and Malay mothers have the highest prevalence of macrosomia. Abnormal maternal booking BMI was also significantly correlated with antepartum, intrapartum, and neonatal complications where Indian mothers are found to have the highest morbidity risk as compared to mothers of other ethnicities. **Conclusions:** There is a direct causative effect between maternal booking BMI and BW. These findings can inform policies to optimise maternal BMI through nutritional interventions specific to respective ethnic groups to achieve optimal BW of infants and prevent the development of pregnancy complications.

# The effect of Zhang's guidelines versus WHO partograph on childbirth experience according to CEQ-MY

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## ABSTRACT

**Introduction:** The active phase of labour was historically defined at 4 cm cervical dilation based on Friedman's labour curve, forming the basis of the WHO partograph. However, recent studies by Zhang et al. suggest that labour progresses more slowly before 6 cm and that cervical dilation accelerates only thereafter. This redefinition may improve labour management and reduce unnecessary interventions. Beyond clinical outcomes, the childbirth experience is now recognised as a key indicator of quality obstetric care. This study aimed to compare childbirth experience and outcomes between WHO and Zhang labour guidelines using the validated Malay version of the Childbirth Experience Questionnaire (CEQ-My). **Materials and Methods:** A prospective cross-sectional study was conducted at Hospital Canselor Tuanku Muhriz from June 2024 to February 2025. A total of 713 women in active labour were enrolled and grouped based on cervical dilatation at admission: <6 cm (WHO group, n=390) and ≥6 cm (Zhang group, n=323). CEQ-My was used to assess the childbirth experience. Clinical and delivery outcomes were also analysed. **Results:** Total CEQ-My scores were comparable between groups, but the own capacity domain was significantly higher in the Zhang group ($p<0.001$). Multiparity and shorter active labour were associated with higher own capacity scores. The Zhang group had more spontaneous vaginal deliveries (91.3% vs. 59.7%, $p<0.001$), shorter active labour, and lower usage of oxytocin and epidural. Cervical dilatation ≥6 cm, multiparity, and no epidural use significantly predicted spontaneous vaginal delivery. **Conclusion:** Zhang's guideline was associated with fewer interventions, shorter labour, and improved maternal perception of capacity, suggesting a more positive and empowering childbirth experience.

# An overview on the shoulder dystocia risk factors and outcomes at Hospital Seberang Jaya, Penang from year 2021 to 2024: A retrospective study

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## ABSTRACT

**Introduction:** Shoulder dystocia (SD) occurs when a vaginal cephalic delivery requires additional obstetric maneuvers to deliver the fetus after the head has delivered and gentle traction has failed. Identified risk factors of SD with appropriate intervention can significantly reduce maternal and neonatal mortality and morbidity. **Objectives:** The study aims to identify the contributing risk factors of SD cases and maternal-fetal outcomes at Hospital Seberang Jaya, Penang (HSJ) from year 2021 to 2024. **Materials and Methods:** A retrospective cohort design – reviewed the medical records of all deliveries complicated by SD and compared with random samples of non-SD. Studied parameters included demography, obstetric history, antenatal risk factors, mode of delivery, applied manoeuvres and interventions, duration of dystocia, maternal and neonatal outcomes. Statistical data were analysed to identify the relationship between risk factors and outcomes. **Results:** The incidence rate of SD in HSJ was 0.48%. Univariate analysis showed significant correlation ($p<0.05$) between SD vs non-SD groups in terms of higher values in Body Mass Index (28.5 ± 5.9 vs 26.0 ± 4.5), baby birth weight (kg) (3.7 ± 0.4 vs 3.1 ± 0.2), blood loss (mL) (354.0 ± 249.4 vs 242.7 ± 66.6) previous history of SD (%) (5.3 vs 0.0) and reduced Apgar score (8.3 ± 1.4 vs 9.0 ± 0.0). Multivariate logistic regression also showed a significant association between augmentation of labour and birth weight with the occurrence of SD (odds ratio of 4.7 and 0.003, respectively). Other studied parameters were not significantly different. **Conclusion:** Contributing risk factors of SD have been identified in this study. It helps in the early recognition of high-risk pregnancies and the management of SD cases.

# Human papillomavirus oncotypes and cervical cancer in multi-ethnic Sarawakian patients

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## ABSTRACT

**Introduction:** Cervical cancer remains a major health concern in Malaysia, with Sarawak reporting the highest incidence nationwide. Despite this, local data on HPV genotype distribution and its predictive value for cervical cancer remain limited. **Objectives:** This study aimed to evaluate the distribution of HPV genotypes among cervical cancer patients in Sarawak and the associations with clinical outcomes. **Materials and Methods:** Patients diagnosed with cervical cancer at Sarawak General Hospital from December 2023 to April 2025 were recruited. Cervical samples from 62 consenting patients were analysed using the Seegene Allplex HPV28 Detection kit. Demographic and clinical data were collected, with a 1-year follow-up. Statistical analysis was performed using SPSS v27. **Results:** The mean patient age was 50 years, with Iban ethnicity comprising 41.9%. Most patients (59.7%) were diagnosed at Stage III or IV, while only 14.5% were at Stage I. Squamous cell carcinoma accounted for 70.5% of cases. High-risk HPV genotypes 16, 18, and 52 were most prevalent, found in 45.2%, 27.3%, and 9.7% of patients, respectively. Low-risk types 6, 42, and 44/70 were detected in smaller proportions. Notably, HPV30 was identified via metagenomic sequencing in one case. Only two patients had prior HPV vaccination. Seven patients (11.3%) died within a mean of 124 days from diagnosis, and a mean of 67 days from treatment. **Conclusion:** The study highlights a high burden of late-stage cervical cancer in Sarawak and dominance of HPV 16, 18, and 52. Rare genotypes and low vaccination uptake underline the urgent need for enhanced screening, vaccination, and public health strategies.

# Investigating the role of artificial oocyte activation (AOA) in enhancing fertilisation rates (FR) in infertile women: A university-based cohort study

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## ABSTRACT

**Introduction:** The introduction of Intracytoplasmic Sperm Injection (ICSI) has transformed assisted reproduction, particularly for male infertility, yet fertilisation failure still occurs in 1-5% of cases, often due to poor oocyte activation. **Objectives:** To address this, we conducted a prospective cohort study at the Advanced Reproductive Centre (ARC) HCTM UKM Cheras from January 1 2024 to December 31, 2024, evaluating Artificial Oocyte Activation (AOA) using calcium ionophore (GM508 CultActive Gynemed®, Sierksdorf Germany). **Materials and Methods:** We included 43 women, comparing initial IVF cycles (control) with subsequent IVF-AOA cycles (intervention) for those with Low Fertilisation Rate (LFR) or Total Fertilisation Failure (TFF). The average age of participants was 38.44 years, with a majority having primary subfertility and male factors being the leading cause of infertility. **Results:** We observed a significant improvement in fertilisation rates (FR), from 26.95% to 64.04% ($p < 0.001$), alongside enhancements in cleavage rates (91.6% vs. 77.6%, $p < 0.001$), blastulation rates (68.47% vs. 34.21%, $p < 0.001$), and top embryo quality rates (48.9% vs. 47.4%, $p = 0.02$). AOA improved FR across most subfertility groups except for those with PCOS. Importantly, TQE was significantly improved in the TFF cohort compared to LFR (p=0.02). **Conclusion:** Although our findings highlight the potential of AOA to enhance FR and embryological outcomes, further research with larger, multicenter studies is necessary for broader recommendations.

# Conservative management of heterotopic pregnancy in comparison with surgical intervention

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## ABSTRACT

**Introduction:** Heterotopic pregnancy is a rare condition with an incidence of 1 in 30,000 in spontaneous pregnancies. Increasing use of assisted reproductive technologies (ART), such as in vitro fertilisation (IVF), has substantially increased their incidence. The reported incidence of heterotopic pregnancy in IVF recipients is estimated to be 1 in 100. **Case Description:** A 28-year-old Gravida 3 Para 0+2 with two previous consecutive miscarriages, underwent fertility treatment. She conceived following the second month of clomid induction with gonadotropin injection support. She presented to hospital with abdominal pain associated with per vaginal bleeding 7 weeks 6 days of gestation. Transabdominal scan followed by transvaginal scan revealed a case of viable heterotopic pregnancy. She underwent a successful ultrasound-guided fetocide of the ectopic using Shiba biopsy needles, performed by an intervention radiologist with the O&G team. She was observed in the ward for 3 days and subsequently discharged well. She presented a week later to a private hospital overseas with abdominal pain following a massage. She subsequently had a laparotomy with salpingectomy done. **Discussion:** Ultrasound-guided fetocide can be considered for management of heterotopic pregnancy. However, close monitoring of the patient should be provided to prevent incidents as per our case. The management of HTP remains controversial. Surgical therapy has been the traditional mainstay but involves surgical and anaesthetic risks to both the mother and IUP. Literature review shows a relatively low success rate for non-surgical intervention for heterotopic pregnancy. In our case, it showed that a selective embryo reduction using a non-surgical approach in a haemodynamically stable patient can therefore be considered in the management of heterotopic ectopic pregnancy if diagnosed relatively early, but more vigilant care should be provided after the procedure. Heterotopic pregnancy incidence is increasing following ART. High suspicion of heterotopic pregnancy should be given to a case of viable intrauterine pregnancy presenting with abdominal pain. Thus, we recommend that all patients, especially those who are symptomatic, must be assessed comprehensively to exclude the presence of a simultaneous HTP. We also emphasise the need for prompt and immediate action when a HTP is suspected, to avoid missing this potentially life-threatening condition. Non-surgical management can be considered as a management of heterotopic pregnancy. However, treatment should be individualised.

# Unveiling OHVIRA: Persistent vaginal discharge in a 7-year-old leads to a rare diagnosis: A case report

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## ABSTRACT

**Introduction:** OHVIRA syndrome, also known as Herlyn-Werner-Wunderlich syndrome, is a rare congenital anomaly of the Müllerian and Wolffian ducts diagnosed during adolescence following the onset of menarche. **Case Description:** A 7-year-old girl presented with persistent vaginal non-foul-smelling vaginal discharge for 2 months, excluding history of trauma or abuse, and refractory to multiple courses of antibiotics. Perineum examination was unremarkable. Low vaginal swab revealed Haemophilus influenzae. The patient underwent EUA, noted greenish vaginal discharge and whitish tissue appeared like which was removed and HPE represented as acute inflammation process. Lobulated homogenously hyperechoic structure within uterus (0.6 x 1.0 x 0.5 cm) seen in USG with absence of right renal bed, normal left kidney and MRI showed uterine didelphys with septate cervix, two cervical lumens with a thin septum in between. Vagina appearing wide and flattened with fluid predominantly on right side, absent right kidney – consistent with OHVIRA. Patient presented back with persistent clear PV discharge with lower abdominal pain complicated with fluid collection at POD. Eventually vaginal septotomy was done draining retained secretions from right vagina. Intraoperative findings correlated well with vaginoscopy. Postoperative was uneventful, with complete resolution of symptoms during follow-ups. **Discussion:** This case highlights a rare prepubertal presentation of OHVIRA and emphasises the need for high clinical suspicion in young girls with recurrent vaginal discharge, particularly failure to standard treatment. Early diagnosis and surgical intervention not only alleviate symptoms, concurrently prevent long-term complications like endometriosis, infections, and future reproductive challenges. Raising awareness of this condition among paediatric and adolescent health providers is crucial for prompt intervention and safeguarding reproductive health for young patients.

# The influence of mosaicism and blastocyst grading on ongoing pregnancy rate

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## ABSTRACT

**Introduction:** Pre-implantation genetic testing for aneuploidies (PGT-A) is used widely to improve outcomes especially for women of advanced age. However, with technological advancements in the field came a new issue – mosaicism, which complicated the blastocyst selection process. **Objectives:** To determine the effect of mosaicism and blastocyst grading on ongoing pregnancy rate (OPR). **Materials and Methods:** A total of 975 frozen PGT-tested single blastocyst transfers from 2022-2024 were analysed retrospectively, with an ongoing pregnancy defined as the presence of a fetal heartbeat at ≥ 12 weeks. The type and degree of mosaicism, number of mosaic chromosomes, and blastocyst grading were investigated. **Results:** The type of mosaicism and number of mosaic chromosomes did not significantly affect the OPR. The degree of mosaicism was divided into 10% increments, and a sharp cut-off after 50% was seen in the OPR. The degree of mosaicism had a significant effect (p=0.035), with euploid and ≤50% mosaic blastocysts not differing significantly, whereas >50% mosaic blastocysts showed a significant 0.76 times lower odds for ongoing pregnancy compared to euploid blastocysts (p=0.031). The blastocyst grading was found to significantly affect the OPR as well, with Poor-quality blastocysts showing 48% decreased odds for an ongoing pregnancy compared to Good-quality blastocysts (p=0.000). Good-quality blastocysts did not show a statistical difference compared to Fair-quality blastocysts. **Conclusion:** Thus, to rank blastocysts for transfer, euploid and ≤50% mosaic blastocysts should take priority over >50% mosaic blastocysts, while Good- and Fair-quality blastocysts should be transferred before Poor-quality blastocysts, regardless of their type of mosaicism and number of chromosomes affected.

# Lee-Huang optical entry and in-bag enucleation: A safe approach to laparoscopic ovarian cystectomy in pregnancy

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## ABSTRACT

**Introduction:** Laparoscopic management of adnexal masses during pregnancy poses a unique challenge due to the anatomical and physiological changes of gestation. Ensuring maternal and fetal safety while minimising surgical risks is paramount. The Lee-Huang entry technique reduces the risk of uterine injury during laparoscopic access, and in-bag enucleation allows safe cyst removal and reduces the risk of chemical peritonitis from spillage. **Case Description:** A 35-year-old G2P1 was found to have an incidental right ovarian cyst since her first pregnancy. Follow-up sonography confirmed the presence of a 6.4 cm right ovarian cyst, characterised by diffuse bright echoes and hyperechoic lines and dots, suggestive of a teratomatous lesion. A laparoscopic ovarian cystectomy was safely performed at 15 weeks of gestation using optical entry at the Lee-Huang point to avoid uterine injury. The cyst was removed "in-bag" without spillage, and the rectus sheath was closed with a suture passer to prevent port hernia. The one-hour procedure had minimal blood loss and no complications. Histology confirmed a mature cystic teratoma. Postoperative recovery was uneventful, with no signs of preterm labour, and the pregnancy progressed without complications. **Discussion:** By integrating Lee-Huang entry with in-bag enucleation, this technique offers an innovative and efficient solution that reduces surgical risks and enhances maternal-fetal safety during laparoscopic cystectomy in pregnancy.

# Comparative gut microbiome profiling in primary dysmenorrhoea rat models via 16s rRNA gene next generation sequencing

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## ABSTRACT

**Introduction:** Primary Dysmenorrhoea (PD) is a prevalent gynaecological disorder affecting women worldwide. Emerging evidence suggests a bidirectional relationship between the gut microbiome and reproductive health, particularly through the modulation of the estrobolome. However, microbial profiles associated with PD remain poorly characterised, particularly in preclinical models. **Objectives:** This study aimed to characterise the alterations in microbiome profiles between control and PD-induced rat models while evaluating the modulatory effects of mefenamic acid and probiotic treatments in PD model rat group via high-throughput sequencing. **Materials and Methods:** Twenty-eight female Sprague-Dawley rats were divided into four groups (n=7): a control group (Group 1), a PD model group (Group 2), PD group treated with Mefenamic Acid (MA) (Group 3), and PD group treated with Probiotics (Group 4). Gut samples were collected, and DNA was extracted upon euthanisation. Microbiome profiling was conducted by targeting the V3 region of the 16S rRNA gene. Diversity measures were analysed using alpha and beta diversity matrices to uncover microbial disparities between the rat groups. **Results:** This study revealed that alpha diversity analysis indicated an increased shift towards microbial richness in the PD + Probiotics group, as indicated by a higher Shannon index compared to the untreated PD group, though this does not reach statistical significance (p-value = 0.2494). Beta diversity based on PCoA analysis showed a partial separation between the untreated PD group and treatment groups (PD + MA and PD + Probiotics), suggesting treatment-induced shifts in microbial community composition (p-value = 0.12). Remarkably, among the top ten most abundant taxa identified, core microbiome analysis showed that the PD model group was enriched with pro-inflammatory family Helicobacteraceae, and genera Pseudomonas sp., Turicibacter sp. and Eubacterium sp. CAG-274. In contrast, the control group was enriched with a higher relative abundance of beneficial genera such as Lactobacillus sp., Eubacterium sp., Bifidobacterium sp. and Blautia sp. – taxa associated with estrobolome and implicated in estrogen metabolism and homeostasis. **Conclusion:** This study reveals differences in microbial diversity between the rat groups, illustrating a possible link between gut microbiome alteration and PD disease mechanism. Ultimately, these findings will open new avenues for microbiome-based therapeutic strategies to alleviate PD symptoms, warranting further research in the future.

# Caesarean scar ectopic partial molar pregnancy: A case report and a review of literature

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## ABSTRACT

**Introduction:** Caesarean scar ectopic pregnancy (CSP) is an abnormal implantation of pregnancy on the myometrium site of the previous caesarean section scar. CSP accounts for 6% of all ectopic pregnancies in women with at least one previous lower uterine segment scar. Molar pregnancy is a condition with abnormal trophoblasts with a neoplastic potential implant in the uterus. The incidence of concurrent CSP and GTD is extremely rare. **Case Description:** A 35-year-old lady, G2P1 with 1 previous caesarean section done in 2010. She presented to us at 5 weeks 6 days of amenorrhea, complaint of per vaginal spotting. The examination was unremarkable. Ultrasound scan revealed an irregular gestational sac at the lower part of the uterus near the caesarean scar, with a crown-rump length of 9 weeks of gestation, with hydrophic changes. Serum Beta HCG of 156144.55. She underwent hysteroscopy and proceeded with laparotomy excision of scar ectopic pregnancy. Histopathology was suggestive of partial molar pregnancy with positive P57 staining. Postoperatively, showing a drastic drop in her serum Beta HCG. **Discussion:** Caesarean scar ectopic pregnancy, in which the pregnancy implants onto the scar in the uterus. Treatment options include medical and surgical management. Caesarean scar ectopic with concurrent hydatidiform mole is extremely rare, which needs special follow-up postoperatively as well as proper planning for future pregnancy. We present the clinicopathological features of caesarean scar ectopic partial molar pregnancy and its successful surgical management. More research is needed to establish a more comprehensive approach to the diagnosis and management of these rare cases.

# Sociodemographic and clinical profile of cervical cancer patients in a tertiary hospital in Nueva Ecija, Philippines from January 2020 to December 2022: A retrospective cross-sectional study

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## ABSTRACT

**Introduction:** Cervical cancer is a rampant but preventable malignancy in the Philippines. Developing knowledge and awareness of the sociodemographic and clinical profile associated with cervical cancer will help in the identification of women who need thorough screening and surveillance. Subsequently, this will promote better clinical outcomes and improve the survival of women potentially at risk for cervical cancer. **Objectives:** To determine the prevalence, sociodemographic and clinical profile of cervical cancer at a government tertiary hospital in Nueva Ecija, Philippines, from January 2020 to December 2022. **Materials and Methods:** A retrospective, descriptive cross-sectional study, which involved 199 records of cervical cancer patients. **Results:** Most patients were > 40 years old (75.38%) with a mean of 48.38, had a parity of < 7 (92.96%) with a mean of 3.73. They were mostly residing in rural areas (83.42%), married (63.32%), college undergraduates (74.87%), and non-smokers (84%). The majority (89.45%) had sexual partners of < 6 with a mean of 2.578, 89.45% had their coitarche at < 16 with a mean age of 18.17, 59.8% did not use combined oral contraceptive pills. Only 21.61% of patients had a history of cervical cancer screening, while almost all (99.5%) had no history of HPV vaccination. In terms of clinical profile, 62.31% had a histologic diagnosis of squamous cell carcinoma, 51.26% had stage III, and 59.8% had prior treatment. The majority (66.33%) had no other co-morbidities. However, if present, hypertension was the most common (15.58%). **Conclusion:** Cervical cancer is commonly diagnosed at an advanced age, married, college undergraduates, with a parity of 3 to 4, those who had coitarche at more than 16, with sexual partners of less than 6. No exposure to any screening method and HPV vaccinations are prone to such malignancy as well. Furthermore, cervical cancer is frequently identified when already in advanced stages, with a histologic type of squamous cell.

# Outcome of tension free vaginal tape-obturator for surgical management of stress urinary incontinence in Hospital Kuala Lumpur: A tertiary hospital experience

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## ABSTRACT

**Introduction:** Stress urinary Incontinence (SUI) is one of the common troublesome symptoms affecting many women worldwide. Mid urethral sling (MUS) is the gold standard treatment for treating women with SUI. While long-term studies have shown MUS to have complications, it has also been shown to be an effective treatment option. There were several methods and types of MUS procedure. One of the procedures were Tension Free Vagina Tape-Obturator (TVT-O) which was widely used for continence surgery in this tertiary center. **Objective:** To assess the success rate of TVT-O in the treatment of SUI and assess the safety outcome of the procedure. **Materials and Methods:** We conducted a retrospective review of secondary data from the Urogynaecology registry at MHKL, covering cases from 1st September 2006 to 31st August 2019. A total of 458 patients who underwent TVT-O surgical treatment were recruited. All of these patients experienced either SUI symptoms or Urodynamic Stress Incontinence prior to surgery. The indicative outcome of a successful surgery was the presence of SUI post-surgery. The complications observed were mesh erosion, bladder perforation and pain at the TVT-O insertion point. **Results:** There were 80 patients who had follow-up less than 1-year post-surgery. The remaining numbers were seen at 1-year post-surgery. There were 202 patients who were managed to follow-up up to 5 years, and 90 patients were followed up to 10 years post-surgery. Only 3 patients (0.7%) experienced SUI symptoms at 6 months post-surgery, 5 patients (1.09%) at 1 year post op, 18 patients (3.9%) at 5 years, and 3 patients (0.75%) by 10 years post-surgery. The complications observed post-surgery were mesh erosion in 28 patients (6.5%), voiding difficulty in 4 patients (0.9%), and thigh pain in 14 patients (3 %). There were no incidences of bladder perforation recorded since the introduction of TVT-O surgery in this tertiary hospital. **Conclusion:** The usage of mid-urethral sling (TVT-O) for treatment of SUI or USI has shown good success rate of 93.7% by 10 years post-surgery. There were a low number of MUS-related complications and morbidity were observed. All of the mesh-related complications were treated accordingly. Hence, MUS (TVT-O) is a good treatment option for managing SUI or USI.

# The MssPOPVhyst: A low fidelity vaginal hysterectomy simulation model for mass surgical training in Urogynaecology

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## ABSTRACT

**Introduction:** Introduction: Surgical training in urogynaecology is now limited, attributed to concern for patients' safety and an increase in medical litigations. Training by simulation overcomes technical challenges and provides a safe learning environment. Simulators for pelvic floor surgeries including vaginal hysterectomy (VH) is currently limited. **Objective:** To demonstrate the construction of a low-fidelity, cost-effective VH simulation model and assess its acceptability and feasibility. **Materials and Methods:** Construction of a VH simulator, using low-cost, widely accessible materials, is demonstrated. Costs and time were calculated, followed by the assembly steps and a simulated VH. Participants' feedback (from a VH simulation workshop using the MssPOPVHyst), involving 27 questions, assessing the technicality of the model and participants' hands-on experience, was retrospectively analysed. **Results:** The construction of MssPOPVHyst was completed utilising a silicone ball, plastic cup, sock, long balloons, cling film, glue, double-sided adhesive tape, a box and a cardboard platform, in 20 minutes/model preparation time. The total recurring cost was RM12.50/model. Surgical anatomy relevant to VH was well represented. Of 60 simulation workshop participants, the majority (66.7%) were medical officers or O&G trainees. 27 (69.2%), 29 (74.4%) and 27 (69.2%) felt that the model is user-friendly, resembled relevant anatomy, tissue quality and deformation, respectively. 22(56%) agreed that the steps of the simulated VH were realistic, and 66%-69% agreed that the simulation improved their overall knowledge of surgical steps and confidence. **Conclusion:** MssVPOPHyst is a low low-fidelity VH simulator which is cost-effective, easily assembled, user-friendly, with good anatomical and tissue quality resemblance, ideal for mass-simulated surgical training, especially in resource-limited areas.

# Laparoscopic assisted and ultrasound guided radiofrequency ablation of a subrectus endometriosis

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## ABSTRACT

**Introduction:** Abdominal wall endometriosis (AWE) is a form of extrapelvic endometriosis, commonly associated with previous uterine surgery. Management offered is either medical or surgical removal, which poses a challenge as it may require extensive fascial repair or mesh application. Ablative therapies have been used with excellent results, and here is our experience with radiofrequency ablation of a subrectus abdominal wall endometriosis. **Case Description:** A 45-year-old para 1 +1 who had an emergency caesarean delivery 8 years ago presented with severe cyclical abdominal wall pain and tenderness during menses. Ultrasound examination revealed hypoechoic mass 3x2 cm located below the left rectus abdominis muscle, giving the diagnosis of a subrectus (abdominal wall endometriosis. Medical treatments, however, failed to adequately control the symptoms. Laparoscopic assisted and ultrasound guided radiofrequency ablation (RFA) was performed using a CelonProBreath bipolar radiofrequency needle, powered by CelonLab ENT generator. The ablation was performed using the moving shot technique at 10 watts, with peritoneal insufflation pressure maintained at 10 mmHg to create a safe distance from the abdominal viscera until the whole mass turned echogenic. The improvement was significant with the disappearance of the cyclical symptoms in the subsequent menstrual cycles. **Discussion:** RFA offers another option of nonsurgical treatment for AWE, especially useful for subrectus lesion. It is highly effective with a minimal and transient complication profile.

# From misdiagnosis to multidisciplinary success: Conservative management of advanced abdominal pregnancy with placental in-situ retention

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## ABSTRACT

**Introduction:** Advanced abdominal pregnancy is a rare and potentially life-threatening ectopic pregnancy, occurring in approximately 1:10,000 live births. Nonspecific symptoms often delay diagnosis, increasing maternal and fetal risks. This case, initially mistaken for an ovarian mass, highlights the role of advanced imaging, multidisciplinary planning, and conservative placental retention. **Case Description:** A 33-year-old G5P2+2 presented in early pregnancy with an adnexal mass (6.3 × 3.3 cm) and raised AFP, raising concerns about ovarian malignancy. Follow-up imaging showed resolution; however, at 27+5 weeks, she developed abdominal discomfort and reduced fetal movements. Ultrasound revealed a viable fetus in transverse lie with anhydramnios and placentomegaly, prompting referral to maternal-fetal medicine (MFM), which confirmed an intra-abdominal pregnancy with extrauterine placental implantation at the uterine fundus. MRI revealed placental vascularisation from the internal iliac and inferior mesenteric arteries. A multidisciplinary approach — including MFM specialists, interventional radiologists, neonatologists, and surgeons – guided preoperative bilateral uterine artery balloon catheter placement and elective laparotomy, delivering a live fetus (1070 g). Due to extensive vascularisation, in-situ placental retention followed by postoperative uterine artery embolisation was the safest strategy. Beta-hCG levels normalised by 11 weeks postpartum, with serial ultrasound confirming placental involution after 12 weeks. At ten months postpartum, the patient remained stable, with a reduced placenta in situ and no complications. **Discussion:** This case emphasises the need to recognise atypical abdominal pregnancy presentations and demonstrates that conservative placental management with interventional radiology can be life-saving. Multidisciplinary collaboration is essential for optimising maternal outcomes in rare ectopic pregnancies.

# Resuscitation begins before birth: Resuscitative fetal thoracocentesis to save a newborn

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## ABSTRACT

**Introduction:** This procedure was initiated moments before delivery to decompress a massive fetal pleural effusion, causing cardiac compromise. By intervening while the fetus was still within the uterus, we initiated resuscitation prior to birth, buying vital time and improving postnatal outcomes. This case series underscores the evolving role of in utero resuscitative strategies at the intersection of fetal therapy and neonatal critical care. **Case Description:** We are presenting two cases in our unit which require such intervention to improve neonatal resuscitation upon delivery. The diagnostic steps, real-time decision-making, and the procedural technique offer a unique insight into this high-stakes clinical scenario. Case 1 was a 34-year-old Gravida 5 Para 4 @ 35 weeks who was referred to our MFM unit for Hydrop Fetalis & polyhydraminos. Assessment of fetal Dopplers was normal, non-suggestive of fetal anaemia. TORCHES panel sent was normal. There was gross hydrops with bilateral pleural effusion. Patient was subsequently observed in the ward, and surveillance with advanced dopplers and cardiotocographs was performed to evaluate fetal wellbeing. At 37 weeks, the pleural effusion was increasing in nature, compressing the fetal heart, causing low-output cardiac failure. Bilateral Fetal Thoracentesis and amnioreduction were performed in the same setting. The baby was delivered with AS 3, 7, intubated with good ventilation. Neonatal assessment showed the baby had Congenital Nephrotic Syndrome. Case 2 was a 34-year-old gravida 4 para 2+1 @ 32 weeks who was referred to us for hydrops fetalis with polyhydramnios. On assessment, it was a grossly normal fetus with normal advanced Dopplers, which was not suggestive of fetal anaemia. Maternal history did not suggest an immune hydrops. TORCHES panel was negative, and chromosomal microarray was performed to rule out a genetic cause, which was negative for copy number variants. The first amnioreduction and fetal thoracocentesis were performed at 32 weeks to reduce the risk of low-output cardiac failure in view of fluid compression on the fetal heart. This fluid was sent for specific gravity and triglycerides, which were negative. Within a week, there was a rapid accumulation of the thoracic fluid, thus again causing low-output cardiac failure in the fetus, Thus, a decision to perform bilateral fetal thoracocentesis and amnioreduction was done. The patient was given antenatal steroids to assist fetal lung maturation. subsequently, a caesarean section was performed, and the baby was born vigorous with AS 4, 7, and subsequently intubated. **Discussion:** Fetal thoracocentesis gives the neonatal team previous time to to resuscitative the fetus by removing the fluid antenatally, the lungs are allowed to re-expand, improving compliance and readiness for postnatal ventilation, drainage relieves this shift, optimising cardiac function at birth and improving systemic circulation—essential for neonatal resuscitation, by decompressing the chest, thoracocentesis enhances mechanical ventilation efficacy, reducing the risk of barotrauma & avoiding emergent needle drainage in the delivery room reduces delay in resuscitation, risk of pneumothorax, and procedural complications, thus resulting in better Apgar score at birth due to improved oxygenation. **Discussion:** Fetal thoracocentesis is a valuable intervention for managing severe pleural effusions, particularly in cases complicated by hydrops fetalis. While the procedure carries risks, including potential reaccumulation of fluid and the need for multiple interventions, the overall prognosis with appropriate postnatal care is favourable. Neonatal management often involves respiratory support, chest drainage, and pharmacological therapies. Early diagnosis and timely intervention are crucial for optimising outcomes.

# Combined laparoscopic and hysteroscopic management of caesarean scar pregnancy with intraoperative uterine repair: A case report

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## ABSTRACT

**Introduction:** Caesarean scar pregnancy (CSP) is a rare ectopic pregnancy with risks of uterine rupture and haemorrhage. Early diagnosis and appropriate management are vital. A combined hysteroscopic-laparoscopic approach may offer a safe and definitive treatment option. **Case Description:** A 29-year-old woman, gravida 4 para 3 with three prior caesarean sections, presented with per vaginal bleeding and early pregnancy symptoms. Transvaginal ultrasound showed a mixed echogenic mass at the previous scar site. Serum beta-hCG decreased from 4259 to 3290 IU/L over 48 hours. As the patient declined medical therapy due to follow-up constraints, combined hysteroscopy and laparoscopy were performed. The gestational tissue was removed under hysteroscopic guidance using the Bigatti shaver system. Simultaneous laparoscopic supervision ensured real-time monitoring of uterine integrity. A thinned anterior wall at the scar site was identified and reinforced with a continuous V-Loc suture. Histopathology confirmed products of conception. Beta-hCG dropped to 846 IU/L at 12 hours and 24 IU/L at one week postoperatively. The patient recovered well and was satisfied with the outcome. **Discussion:** This case demonstrates that a combined hysteroscopic-laparoscopic approach is effective for CSP management. The Bigatti system allows precise, minimally invasive removal, while laparoscopy enables assessment and repair of uterine defects, potentially reducing future rupture risk.

# Robotic rectal shaving of a large invasive endometriotic plaque: A bowel-sparing approach

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**ABSTRACT**

We present a case of robotic-assisted excision of a large rectosigmoid endometriotic plaque in a patient with severe deep infiltrating endometriosis (DIE). MRI showed bilateral endometriomas, adenomyosis, haematosalpinges, and a 70 mm x 15 mm rectosigmoid lesion with muscularis involvement. Although lesions of this size (≥3 cm) are often considered for segmental resection, the patient was keen to avoid bowel surgery, and a conservative approach was planned. The procedure was performed using the Da Vinci robotic system at Lister Hospital, under the Endometriosis Hertfordshire service in collaboration with the colorectal surgical team. The robotic platform enabled meticulous dissection of the fibrotic plaque from the muscularis propria of the rectum without breaching the mucosa. The robotic system provided enhanced visualisation, refined instrument control, and stability, supporting precise dissection in a densely adherent pelvis. Endometriosis surgery is fundamentally about balancing disease excision with preservation of function. While laparoscopic approaches remain the standard of care in many centres, robotic assistance can be a valuable adjunct in complex cases. This case demonstrates the feasibility of bowel-sparing excision for large rectosigmoid lesions using robotic-assisted surgery, highlighting the importance of individualised planning and the evolving role of robotics in managing complex endometriosis.

# The classic art of closure reinvented: Video demonstration of modified Latzko repair for vesicovaginal fistula

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## ABSTRACT

**Introduction:** Vesicovaginal fistula (VVF) continues to profoundly affect the lives of women worldwide, causing physical discomfort and social isolation. Despite modern advances, some time-tested techniques still hold immense value. One such method is the modified Latzko procedure, originally described in 1942, which remains a safe, effective, and minimally invasive approach to VVF repair, though often underrepresented in contemporary training. **Objectives:** This video presentation aims to: 1. Demonstrate the modified Latzko technique in a clear, step-by-step video format. 2. Highlight critical surgical landmarks and procedural nuances. 3. Promote the technique's value in modern urogynaecological practice. **Materials and Methods:** A narrated surgical video showcases the transvaginal approach to modified Latzko procedure in its entirety—from patient positioning and dissection to multilayer closure and postoperative management. Operative tips and variations are discussed to guide both new and experienced surgeons. **Results:** The modified Latzko approach offers success rates consistently above 85%, with minimal morbidity and excellent preservation of vaginal anatomy. It remains particularly suitable for simple to moderate-sized fistulae. The video serves as an accessible, visual learning tool to support training and adoption. **Conclusion:** In an era focused on innovation, there is value in revisiting and refining the classics. The modified Latzko procedure continues to provide excellent outcomes for women with VVF. Through surgical video education, we aim to combine tradition and modern practice, ensuring that effective solutions are not lost to time.

# The adhesive veil: Labial fusion concealing endometrial malignancy

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## ABSTRACT

**Introduction:** Endometrial carcinoma, the most prevalent gynaecology malignancy in postmenopausal women, typically presents with abnormal uterine bleeding. However, atypical presentations can complicate timely diagnosis. **Case Description:** A 76-year-old postmenopausal woman presenting with abdominal discomfort. Physical examination revealed complete labial fusion with a pinhole opening, and imaging studies identified significant hydrometra. Surgical intervention to separate the labial adhesions facilitated drainage of the accumulated fluid. Subsequent hysteroscopic sampling confirmed the diagnosis of endometrioid adenocarcinoma. Laparotomy revealed bizarre polypoidal growth with adhesion to bowel, which was initially thought to be benign, but turned out to be malignant. **Discussion:** Labial fusion in postmenopausal women is an uncommon condition, often associated with hypoestrogenism and chronic inflammation. Factors such as genitourinary syndrome of menopause, lichen sclerosis, and skin malignancy can contribute to its development. In this case, the labial fusion likely impeded normal vaginal drainage, leading to hydrometra and masking the underlying endometrial carcinoma. Hydrometra can result from cervical stenosis or obstruction. In postmenopausal women, it may remain asymptomatic or present with nonspecific symptoms, delaying diagnosis. The combination of labial fusion and hydrometra in this patient obscured the classic symptom of postmenopausal bleeding, leading to a delayed diagnosis of endometrial carcinoma. This case underscores the importance of considering endometrial carcinoma in the differential diagnosis when encountering postmenopausal women with labial fusion and hydrometra, even in the absence of classic symptoms. Early recognition and intervention are crucial to prevent diagnostic delays and improve patient outcomes. A benign condition can mask a malignant malady.

# Targeted sperm retrieval: Step-by-step video of TESE mapping in non-obstructive azoospermia

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## ABSTRACT

**Introduction:** Non-obstructive azoospermia (NOA) is one of the most challenging causes of male infertility, often requiring surgical sperm retrieval techniques such as Testicular Sperm Extraction (TESE). Mapping biopsy techniques during TESE have improved sperm retrieval rates while minimising testicular damage. **Objectives:** To demonstrate a systematic approach to testicular sperm extraction (TESE) mapping in a patient with non-obstructive azoospermia, highlighting the surgical technique, intraoperative considerations, and post-operative care. **Materials and Methods:** This educational video presentation outlines the step-by-step process of TESE mapping, including preoperative planning, anatomical landmarks, multi-site sampling, tissue handling, and coordination with the embryology lab for immediate sperm identification. Key tips for optimising retrieval while preserving testicular function are discussed. The video features a real surgical case with commentary. **Results:** The video demonstrates successful sperm retrieval using a strategic mapping approach. The technique reduced the number of unnecessary biopsies and provided better localisation for potential future procedures, and ease of communication between clinicians **Conclusion:** Mapping-guided TESE is an effective, minimally invasive approach for sperm retrieval in NOA patients. This video aims to serve as a visual guide for clinicians, trainees, and reproductive surgeons to refine their surgical technique and improve outcomes in male infertility treatment.

# Bridging two lives: Prenatal management of conjoined twins – A case-based perspective

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## ABSTRACT

**Introduction:** Conjoined twins represent one of the rarest and most complex congenital anomalies in perinatal medicine, with an incidence of 1 in 50,000 to 1 in 200,000 live births. Their management demands precise prenatal diagnosis, multidisciplinary coordination, and sensitive parental counselling. **Objective:** This video presentation aims to illustrate our experience with regards to the challenges, strategies, and ethical considerations involved in the prenatal management of conjoined twins through a case-based narrative. **Materials and Methods:** We present the journey of three cases of conjoined twin pregnancies diagnosed at our fetal medicine unit. High-resolution ultrasonography and fetal MRI were employed to delineate the extent of anatomical fusion and organ sharing. A multidisciplinary team—including maternal-fetal medicine specialists, paediatric surgeons, neonatologists, and radiologists—collaborated to formulate a comprehensive antenatal and postnatal care plan. **Conclusion:** This case underscores the pivotal role of early diagnosis, multidisciplinary teamwork, and compassionate care in optimising outcomes for conjoined twin pregnancies. Through this visual narrative, we hope to inspire deeper understanding and empathy among practitioners managing such rare and demanding clinical scenarios.

# “Sweet Smelling” urine in pregnancy: First reported case in East Coast Malaysia with successful outcome

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## ABSTRACT

**Introduction:** Maple Syrup Urine Disease (MSUD) is a rare autosomal recessive genetic disorder caused by a deficiency of enzymes responsible for breaking down the branched-chain amino acids leucine, isoleucine, and valine (BCAAs). This results in the accumulation of these amino acids in the body, leading to a characteristic sweet-smelling urine and a toxic build-up in the blood, which can cause severe metabolic complications. Management includes emergency treatment, lifelong dietary restrictions under expert supervision, nutritional supplementation, and, in severe cases, a liver transplant to restore enzyme function. **Case Description:** A young patient, G1P0 at 36 weeks and 2 days, with a history of MSUD, well-controlled epilepsy, and intellectual disability, presented with PPROM and a non-reassuring CTG. She had a late antenatal booking at 27 weeks and was under the care of both genetics and high-risk pregnancy clinics. The foetus was SGA with normal Doppler studies. Based on the clinical findings, an emergency LSCS was performed. During postpartum, the patient was closely monitored in the high-dependency unit, with strict nutritional management to prevent metabolic decompensation. Both mother and baby remained stable and were discharged in good condition, with a follow-up appointment at the genetics clinic in four weeks. **Discussion:** MSUD is typically diagnosed through newborn screening and managed with a strict diet to limit BCAA intake. However, pregnancy in women with MSUD presents additional challenges due to increased metabolic demands, particularly in the third trimester, making it more difficult to maintain stable BCAA levels. Pregnant women with Maple MSUD are at an increased risk of metabolic crises, which can lead to symptoms such as lethargy, vomiting, and neurological deterioration. If left untreated, these complications may result in maternal death or long-term disability. PPC is crucial to ensure optimal amino acid control before pregnancy, particularly to prevent elevated leucine levels, which have been associated with congenital abnormalities and poor foetal outcomes. Fortunately, our patient maintained well-controlled amino acid levels throughout her pregnancy, reducing the risk of complications. Elevated BCAAs in the maternal bloodstream can cross the placenta, potentially leading to neurodevelopmental complications in the foetus, including cognitive impairment and developmental delays. Additionally, poorly controlled MSUD in pregnant women is associated with an increased risk of foetal growth restriction and congenital malformations, such as congenital heart defects. With careful management, neonatal outcomes can be significantly improved. However, affected infants may still require specialised care after birth to prevent metabolic crises and ensure stable amino acid levels.

# The role of IGFBP-1, IL-6, and cervical length in predicting impending preterm labour

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## ABSTRACT

**Introduction:** : Impending preterm labour contributes to neonatal morbidity and mortality. Early identification is crucial for timely intervention. Cervical shortening and inflammatory markers, including insulin-like growth factor binding protein-1 (IGFBP-1) and interleukin-6 (IL-6), have been associated with impending preterm labour. Understanding these relationships may improve screening and management. **Objectives:** To evaluate the association of IGFBP-1 expression, IL-6 levels, and cervical length with impending preterm labour. **Materials and Methods:** A retrospective study was conducted at Wahidin Sudirohusodo Hospital and affiliated networks. Medical records of pregnant women with impending preterm labour and those undergoing routine antenatal supervision were reviewed. Cervical length was measured via transvaginal ultrasound, while IGFBP-1 and IL-6 levels were analysed using ELISA. Fisher's exact test and logistic regression were used for analysis. **Results:** Fisher's exact test showed significant associations ($p < 0.05$) between impending preterm labour and IGFBP-1 positivity, higher IL-6 levels, and shorter cervical length. However, in multivariate logistic regression, only IGFBP-1 positivity remained independently associated (OR = 9.956, 95% CI: 2.496–39.708, $p = 0.001$), while IL-6 levels ($p = 0.532$) and cervical length ($p = 0.912$) were not significant. Further analysis showed a significant association between shorter cervical length (≤25 mm) and IGFBP-1 positivity ($p = 0.001$). **Conclusion:** IGFBP-1 positivity, IL-6 levels, and cervical length were associated with impending preterm labour in univariate analysis, but only IGFBP-1 remained an independent predictor. These findings support IGFBP-1 as a potential biomarker for risk assessment in impending preterm labour.

# Comparison of ICSI results in a group of patients with and without oral L-carnitine, acetyl-L-carnitine and nutrients supplementation

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## ABSTRACT

**Introduction:** Many animal and human studies show that certain metabolic compounds and nutrient supplementation play an important role in oocyte and embryo development. Nutrients such as vitamin C are important in human fertilisation. In vitro experiments with zinc and royal jelly demonstrate beneficial effects on both preimplantation and embryonic development in ovine models. L-carnitine and acetyl-L-carnitine are known to facilitate fertility-related processes in men by improving sperm motility and quality. However, the effects of using these substrates and nutrients to improve ICSI outcomes are not clear. **Objective:** The aim of this study is to demonstrate the effect of oral supplementation with L-carnitine, acetyl-L-carnitine and nutrient supplementation on ICSI results. **Materials and Methods:** The study consisted of treating a group of patients with a specific formulation (Proxeed Women) during the two months preceding the ICSI cycle. These patients had already done a cycle of ICSI without treatment by supplements. The group of patients underwent hormonal treatment followed by follicular aspiration, intra-cytoplasmic spermatozoa injection and embryo transfer. For each couple, we calculated the rate of oocyte maturation, fertilisation rate, cleavage rate, and top embryo rate and the presence or absence of pregnancy. **Results:** The average age of the patients and the duration of infertility were, respectively, 35±2.1 and 2.8±1.3 years. We obtained from the first cycle of ICSI (without supplementation) an average oocyte maturation rate of 69%, fertilisation rate of 55%, segmentation rate of 58% and a good embryo rate of 40%. These results were compared with the results of the 2nd cycle of ICSI with supplementation. We found a significant improvement in the oocyte maturation rate (84%), good embryo rate (65%), Blastocyst rate (45%) and top Blastocyst rate (45.2%). **Conclusion:** The significant improvement in one or more biological results of ICSI after treatment with the association of L-carnitine, acetyl-L-carnitine and nutrients could be beneficial in the overall rate of pregnancy in couples with male infertility.

# The impact of infertile women's stress on the ICSI outcomes

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## ABSTRACT

**Introduction:** A growing importance is given to stressor in fight against infertility problems. In fact, we seek to assess the physiological stress impact and its role in the reproductive process. **Objective:** The main purpose of this work is to puzzle out the relationship between stress and the biological results of ICSI. **Materials and Methods:** It is a prospective comparative study conducted at the unit of reproductive medicine of Farhat Hached Hospital in Sousse, collecting 45 cases, where the stress level was assessed with the Beck questionnaire and the cortisol dosage on the day of oocyte retrieval and the day of embryo transfer. Patients were divided into two groups: The first group consisted of 35 patients not exposed to the stressor and having a Beck score less than 21. The second group consisted of 10 hyper-stressful patients with a Beck score greater than 36. **Results:** The two groups were comparable regarding infertility duration, BMI, endometrial thickness and estradiol level on ovulation release day. There is no statistically significant difference between the two groups regarding the average cortisol level at the oocyte retrieval ($p = 0.09$) and the day of embryo transfer ($p = 0, 2$). Moreover, we found that 60% of the patients in the second group had an oocyte number less than 3 while there were only 37.1% of the patients in the first group who had it ($p = 0.3$); 50% of patients in the second group did not have an embryo transfer when 22.9% of the first group did not have it ($p = 0.3$). Then, there was no statistically significant difference between the two groups concerning the average rates of maturation, fertilisation and embryonic segmentation. **Conclusion:** In this study, we found that there is no statistically significant difference regarding physiological stress effect on ICSI outcomes. This can be explained by the size of the sample used as it was small. More cases will be added to improve our study.

# Hemostasis with a twist: A case report and lessons learned

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## ABSTRACT

**Introduction:** Surgicel is an oxidised regenerated cellulose (ORC) which is commonly used as a hemostatic agent in various surgical procedures. It helps control bleeding as the product contains cellulosic acid, which facilitates hemostasis by denaturing blood protein. Surgicel is bioabsorbable and typically dissolves within one to two weeks after application. We report a case of intestinal obstruction in a patient who underwent a caesarean section, potentially related to the use of Surgicel. **Case Description:** A 39-year-old para 5 on the second day post-operative following emergency caesarean section developed abdominal discomfort and distension. Upon examination, her abdomen was found to be tense and distended with no bowel sounds. A computed tomography scan was performed, which revealed small bowel dilatation (up to 4 cm diameter) and a pelvic collection. The case was referred to the surgical team, and an exploratory laparotomy was performed. Intraoperative findings included dilatation of both small and large bowel extending to the upper rectum. Notably, a segmental small bowel adhesion formed an interloop collection, and a clump of Surgicel with slough was found over the uterine incision site. The Surgicel was removed, and the small bowel content and bile were decompressed. Postoperatively, the patient was started on antibiotics and discharged on postoperative day 4 in stable condition. **Discussion:** This case highlights a rare complication of Surgicel use. Surgeons need to be aware of the potential complications of using Surgicel. Prompt identification and surgical intervention, as demonstrated in this case, are crucial to prevent further morbidity and ensure a positive patient outcome.

# Dual trigger and in-vitro fertilisation outcomes: A single hospital experience

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## ABSTRACT

**Introduction:** Dual triggering involves administering a gonadotropin-releasing hormone agonist and human chorionic gonadotropin (GnRHa and hCG, respectively) during downregulated in vitro fertilisation–intracytoplasmic sperm injection (IVF-ICSI) cycles downregulated by a GnRH antagonist. Dual triggering enhances the fertilisation and clinical pregnancy rates in women with poor ovarian response (POR). This study aimed to compare the laboratory and clinical outcomes of the single and dual trigger approaches. **Materials and Methods:** This study was a retrospective study that involved 124 patients who underwent IVF treatment from 1 January 2023 to 31 December 2023 at a single tertiary centre [Hospital Canselor Tuanku Muhriz Advanced Reproductive Centre (ARC HCTM)]. The patient demographics, embryology outcomes, and pregnancy outcomes were obtained and analysed. **Results:** The baseline characteristics of the two groups (hCG and dual trigger) were not significantly different. The mature oocytes (MII), fertilised embryos (2PN), blastocysts, top-quality blastocysts, discarded oocytes or embryos, and transferred embryos of the two groups were also not significantly different. However, significantly more oocytes were recovered from the dual trigger group (9.12 ± 8.99 vs. 6.79 ± 5.12, P = 0.0039). The hCG and dual trigger groups did not have significantly different rates of biochemical pregnancy (60% vs. 41.6%; P = 0.338), clinical pregnancy (16.7% vs. 12%; P = 0.574), or miscarriage (50% vs. 33.3%; P = 0.489). **Conclusion:** The results suggested that both protocols effectively support oocyte maturation and embryo development in assisted reproductive technology. However, the analysed parameters demonstrated that neither protocol was clearly superior. Hence, further research involving larger sample sizes and more comprehensive outcome measures is recommended to support our results and provide definitive guidance for clinical practice.

# Advanced abdominal pregnancy: A preventable near miss

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## ABSTRACT

**Introduction:** Abdominal pregnancy is a rare ectopic pregnancy in which an embryo implants within the abdominal cavity but outside of the reproductive organs. It represents 1% of ectopic pregnancies with an incidence between 1:10,000 to 1:30,000 pregnancies. Abdominal pregnancy is the only form of ectopic pregnancy that can result in the delivery of a viable newborn. **Case Description:** We report a case of advanced abdominal pregnancy in an otherwise asymptomatic patient at 34 weeks of gestation. MRI confirmed an abdominal pregnancy and an extrauterine placenta, which was implanted mainly at the uterine fundus with serosal-myometrium interface breach. The main blood supply was from the bilateral internal iliac arteries. Patient underwent midline laparotomy, delivery of baby and hysterectomy at 35 weeks of gestation. Bilateral internal iliac balloon occlusion was inflated to reduce intraoperative bleeding. A live newborn was delivered with a birth weight of 2280 g. Post-operatively, the patient developed a complication of right external iliac artery thrombosis secondary to femoral catheter insertion, in which an aspiration thrombectomy was performed. On day seven post-surgery, the patient was discharged well with no neurological deficit in the lower limbs. **Discussion:** A High index of suspicion is crucial in diagnosing abdominal pregnancy. Features including an empty uterus with gestational sac separated from uterus, adnexa and ovaries; absence of myometrium between the fetus and maternal abdominal wall or urinary bladder; placenta location out of uterine confines as well as wide mobility fluctuation of gestational sac evident with transvaginal probe pressure towards pouch of Douglas are suggestive of abdominal pregnancy. Late detection is associated with a high rate of maternal and fetal mortality and morbidity.

# Decoding perinatal deaths: A three-year retrospective review at Hospital Sultan Idris Shah, Serdang

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## ABSTRACT

**Objective:** To highlight leading causes of perinatal mortality using Wigglesworth pathophysiological classification and to also understand the maternal, placental and fetal factors contributing to it. **Materials and Methods:** This retrospective study analyses perinatal deaths over the past three years (2022-2024) using descriptive statistics. The inclusion criteria were stillbirths and early neonatal deaths after 22 weeks of completed gestation and or birthweight >500 grams. **Results:** During the study period, total births were 21,939. The PMR was calculated for each year in the study period, with values of 10.6 in 2022, 11.9 in 2023, and 12.8 in 2024. The leading cause of perinatal death was immaturity (60%), followed by lethal congenital anomalies (15%), normal macerated stillbirths (13%), other specific conditions (7.5%), and perinatal asphyxia (4.1%). Among the premature group, 9.1% had cervical length screening and among whom 26.3% were treated with Arabin pessary or cervical cerclage. Among lethal congenital anomalies, 31.9% had termination of pregnancy, and 68.1% continued with their pregnancy. Among those who did not perform termination,11.3% had no anomaly scan done,19.4% were due to late presentation, and 17.7% were not keen. Maternal comorbidities, including diabetes (19%), hypertension (13.5%), and obesity (12.9%), within the macerated stillbirths. In growth-restricted fetuses, 25.2% had more than 2 risk factors, and 37.9% of mothers were on aspirin. **Conclusion:** Improving outcomes requires addressing preventable factors such as prematurity, fetal growth restriction, and maternal comorbidities. Enhanced prenatal assessments, including the use of ultrasound, continue to offer opportunities for earlier detection and intervention.

# When one becomes two: The science of fetus in fetu phenomenon

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## ABSTRACT

**Introduction:** Rare presentation of fetus in fetu diagnosed antenatally. **Case Description:** A primigravida at 36 weeks gestation, with no known maternal illness, radiation exposure, or consanguinity, underwent a transabdominal ultrasound, which revealed a growth-restricted fetus and a fetus in fetu within it. The fetus in fetu was non-viable, fed by a vessel and had rudimentary limbs. MRI of the fetus demonstrated a large, well-defined, encapsulated cystic lesion in the central abdomen, measuring approximately 5 cm. Within the lesion, a small structure resembling a deformed fetus was observed, confirming the diagnosis of fetus in fetu in a male fetus. Maternal blood investigations and parental karyotyping were normal. At 40 weeks, the patient delivered a baby boy weighing 2.8 kg via caesarean section. Postnatally, the baby presented with hematemesis and underwent a laparotomy for excision of the fetus in fetu with ligation of the internal mesenteric artery. The excised cystic mass measured 6 cm and contained a formed fetus with rudimentary upper and lower limbs, a palpable spine and anencephaly. The baby was discharged well on day 15, with serial AFP monitoring. **Discussion:** Fetus in fetu is an extremely rare type of monozygotic twinning in which unequal division of the totipotent inner cell mass of the developing blastocyst leading to the inclusion of a smaller cell mass within a maturing sister embryo. It is distinguished from teratoma by the presence of axial organisation and organogenesis. This case was identified antenatally, managed through a multidisciplinary approach, and followed by successful postnatal treatment.

# Herlyn-Werner-Wunderlich syndrome (HWWS) or (OHVIRA): A late diagnosis

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## ABSTRACT

**Introduction:** Obstructed hemivagina and ipsilateral renal anomaly (OHVIRA), or Herlyn-Werner-Wunderlich syndrome (HWWS), is an abnormal development of the Mullerian and the Wolffian duct resulting in uterus didelphys, unilateral obstructed hemivagina, and ipsilateral renal agenesis. Its incidence is 1 out of 1,000,000 people. **Case Description:** A 33-year-old lady was under investigation and treatment for a few years for primary infertility. Her magnetic resonance imaging (MRI) abdomen and pelvis showed that there was bicornuate uterus with two separate endometrial cavities separated by a thin septum. The right uterine cavity led to the cervical os, but the left was a blind end. The left kidney was absent, and the right kidney was normal. Laparoscopic hysterotomy on the left side of uterus and left vaginal septectomy with vaginoplasty were done. The right salpingectomy was done as it was dilated. She had her menarche at 11 years old, and her cycles were regular. She had laparotomies twice at the ages of 18 and 21 years for tubo-ovarian abscess. **Discussion:** Diagnosis of OHVIRA syndrome can be misinterpreted as vagina obstruction is unilateral and menstruation is there. Sometimes symptoms are non-specific like dysmenorrhea, abdominal pain, foul smelling vaginal discharge, acute urinary retention, fever and vomiting. Delayed diagnosis may cause complications and adverse fertility outcomes. So, healthcare professionals must be aware of the possibility of OHVIRA syndrome to get an early diagnosis and timely management.

# Sexual and reproductive health literacy among adolescent girls attending a menstrual health seminar at a Malaysian tertiary hospital: A descriptive cross-sectional study

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## ABSTRACT

**Introduction:** Sexual and reproductive health (SRH) education provides individuals with essential knowledge and skills to make informed decisions regarding sexuality and reproduction, which are pivotal in preventing adverse health outcomes such as unintended pregnancies, HIV/AIDS, and other sexually transmitted infections. We aimed to assess SRH awareness, knowledge, attitudes, and behaviours among adolescent girls attending a menstrual health seminar at a tertiary hospital in Malaysia. **Materials and Methods:** A cross-sectional study was conducted among 341 female secondary school students aged 13-16 years who attended a one-day menstrual health seminar. Participants completed a pre-tested, self-administered questionnaire evaluating four domains: awareness of SRH topics, factual knowledge, attitudes towards SRH issues, and related behaviours. Data were analysed using descriptive statistics and bivariate analyses to examine associations between SRH literacy domains and educational levels. **Results:** The mean SRH awareness score among participants was 3.13 ± 1.45 out of 7, indicating moderate awareness across assessed topics. While knowledge related to menstrual health was high, knowledge of other SRH topics, such as contraception and HIV/AIDS was lower. Attitudes were predominantly conservative, and reported engagement in SRH-related behaviours, such as exposure to pornographic material, was minimal. Statistical analysis revealed significant associations between educational level with awareness, knowledge, and attitude scores ($p<0.001$). **Conclusion:** The study revealed that while adolescent girls demonstrated substantial knowledge in certain aspects of sexual and reproductive health (SRH), there were notable gaps in awareness, particularly concerning contraception and sexually transmitted infections (STIs), with attitudes influenced by cultural norms. These findings highlight the need for Malaysia to implement comprehensive, accurate, age-appropriate, and culturally sensitive SRH education programs while also addressing prevailing cultural stigmas and empowering adolescents to make informed decisions.

# A live advanced intra-abdominal pregnancy in Sarawak General Hospital: A case report

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## ABSTRACT

**Introduction:** Abdominal pregnancy is a rare and life-threatening form of ectopic pregnancy, accounting for less than 1% of all ectopic pregnancies. Advanced abdominal pregnancy, where the fetus survives to later gestational stages, is even more uncommon. This report discusses a case of a live advanced intra-abdominal pregnancy managed at Sarawak General Hospital. **Case Description:** A 41-year-old gravida 4 para 3 woman presented at 35 weeks gestation, initially diagnosed with anterior major placenta praevia at Hospital Sibu. Ultrasound raised suspicion of a fibroid, but MRI confirmed a live intra-abdominal pregnancy. She was transferred to Sarawak General Hospital, where a multidisciplinary team performed a midline laparotomy, total hysterectomy, and right salpingectomy. A live baby girl weighing 2.3 kg was delivered successfully. Post-operatively, the mother developed right external iliac artery thrombosis and ileus, both were managed successfully. **Discussion:** Both mother and baby were stabilised post-operatively. The mother's lower limb circulation normalised, and bowel function resumed by postoperative day 3. The baby was discharged in good health after monitoring in the neonatal unit. This case emphasises the complexity of managing advanced abdominal pregnancies, highlighting the importance of prompt diagnosis, advanced imaging, and multidisciplinary collaboration for successful outcomes.

# Celox: Uterine sandwich

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## ABSTRACT

**Introduction:** Celox is a novel chitosan-based hypoallergenic hemostatic agent that functions independently of the body's coagulation pathways. It has shown potential in managing postpartum haemorrhage (PPH), especially when conventional interventions fail. **Case Description:** We present a case of a 29-year-old woman who underwent spontaneous vaginal delivery complicated by retained placenta. After manual removal, she developed persistent uterine bleeding due to uterine atony. Conservative measures, including oxytocin administration and uterine massage, were unsuccessful. There was no retained placental tissue, and the use of carboprost was contraindicated due to bronchial asthma with recent bronchospasm. Estimated blood loss reached 1.5L, prompting the clinical decision to apply uterovaginal packing using Celox gauze – creating a "uterine sandwich" The packing remained in place for 12 hours. Upon removal, bleeding had ceased completely, and the patient stabilised without the need for surgical intervention. **Discussion:** Despite available interventions, PPH remains the leading cause of maternal mortality, much of which is preventable. Celox, composed of positively charged chitosan, promotes rapid clot formation via ionic interaction with negatively charged red blood cells. Its efficacy is independent of the clotting cascade, making it valuable in cases of coagulopathy or uterotonic failure. While not yet standard in obstetric practice, this case demonstrates Celox's potential as a safe, non-surgical adjunct in refractory PPH, particularly when invasive options are not immediately available.

# Distribution and positive predictive value of high-risk HPV genotypes in histologically confirmed high-grade cervical intraepithelial neoplasia (CIN2+): Implications for clinical triage and vaccination strategies

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## ABSTRACT

**Introduction:** While HPV genotypes 16 and 18 account for a substantial proportion of cervical cancer cases globally, emerging evidence highlights the contribution of other high-risk HPV genotypes to CIN2+. Understanding the broader genotype distribution is essential for informing screening strategies and vaccine policy. **Objective:** This study aims to identify the most prevalent HPV genotypes associated with histologically confirmed high-grade cervical intraepithelial neoplasia (CIN2+). **Materials and Methods:** This cross-sectional study was conducted at the University Malaya Medical Centre in Malaysia from July 2018 to June 2024. A total of 671 women referred for colposcopy following a positive HPV screening were enrolled. Cervical samples were tested using the BD Onclarity HPV assay for extended genotyping, and histological diagnoses were obtained based on colposcopy-guided biopsies. Descriptive statistics were used to determine genotype distribution and calculate genotype-specific positive predictive values (PPVs) for CIN2+ and CIN3+. **Results:** Among 58 women with confirmed CIN3+, HPV16 was the most prevalent genotype (41.4%) and had the highest PPV for CIN3+ (28.6%). HPV16, HPV18, HPV52 and HPV33/58 collectively contributed to 81.1% of CIN3+. HPV52 and HPV33/58, despite having lower PPVs (~16%), ranked the second and third frequently observed genotypes in CIN3+. **Conclusion:** These findings support genotype-informed triage algorithms and underscore the value of vaccines that include prevalent genotypes like HPV52 and 33/58, alongside HPV16 and 18, in high-grade lesions. PPV can be useful for clinicians to assess an individual woman's risk when HPV-positive, while the prevalence of specific genotypes serves to inform public health policy.

# Novel application of Celox for haemorrhage control in placenta accreta spectrum disorder

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## ABSTRACT

**Introduction:** Placenta accreta spectrum (PAS) disorders, characterised by abnormal placental invasion into the myometrium, pose a high risk of life-threatening haemorrhage. Rising caesarean section rates increase PAS incidence, necessitating optimised management to reduce maternal morbidity and mortality. This report presents a case of PAS-related haemorrhage managed with a novel approach. **Case Description:** A 39-year-old G2P1 woman with a prior caesarean scar was referred at 31 weeks and 2 days gestation for suspected PAS. Antenatal workup revealed gestational diabetes and ultrasound/MRI findings suggestive of focal placenta accreta. At 34 weeks, per vaginal bleeding occurred. A caesarean section confirmed placenta previa and focal accreta. Post-delivery, persistent bleeding from the accreta site was managed with topical Celox, alongside uterotonics and tranexamic acid. The patient required one unit of packed red blood cells and recovered well. **Discussion:** This case demonstrates Celox's successful use as an adjunct to standard management for haemorrhage from focal placenta accreta. While hysterectomy is often definitive, Celox offers a potentially fertility-sparing alternative in select cases. The report emphasises multidisciplinary PAS management and the need for further research on topical haemostatic agents like Celox in this challenging scenario.

# Genital myiasis, a rare case from rural Sabah

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## ABSTRACT

**Introduction:** Genital myiasis, a parasitic infestation by dipteran fly larvae, represents an uncommon clinical entity predominantly reported in tropical regions. This condition typically affects individuals with compromised hygiene, pre-existing cutaneous lesions, or immunodeficient states. Characteristic manifestations include localised tenderness, intense pruritus, and visible larval presence within affected tissues. **Case Description:** We present a case of labial myiasis in a 24-year-old healthy Rungus woman from the rural district of Kota Marudu, Sabah. The patient reported a 4-day history of perineal pain and swelling, which upon examination revealed active larval infestation. Approximately 120 live larvae were manually extracted, followed by daily debridement and a 7-day course of antibiotics. Due to significant tissue distortion from the infestation, labial reconstruction was performed on day 7. The patient recovered well, achieving complete wound healing within one-month post-intervention with no subsequent re-infection/infestation. **Discussion:** Consistent with existing literature, initial management involved meticulous wound debridement and larval extraction. Due to insufficient evidence supporting the topical application of turpentine or potassium permanganate on genital wounds, we cautiously placed turpentine-soaked gauze adjacent to the wound on day 2 post-extraction to induce a hypoxic environment for residual larvae, and subsequently, we found 3 dead larvae. An MRI abdomen and pelvis to observe the extent of infestation was performed but yielded inconclusive results. In retrospect, the novelty of this presentation led to a missed opportunity for species identification through larval sampling. We advocate for larval extraction followed by daily wound inspection and repeated extraction as needed, supplemented by broad-spectrum antibiotics (intravenous ampicillin-sulbactam 1.5 g QID for 7 days in this case). Persistent larvae were noted until day 3 post-intervention, and subsequent labial refashioning was done on day 7 due to tissue distortion. At the 6-week follow-up, the wound exhibited satisfactory healing.

# Honey-lidocaine versus honey-povidone iodine: A randomised controlled trial on second-degree perineal wound healing

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## ABSTRACT

**Introduction:** Second-degree perineal rupture involves vaginal mucosa and perineal muscle injury, influenced by factors like primiparity, macrosomia, and prolonged labor. Wound healing follows stages of hemostasis, inflammation, proliferation, and remodelling. To accelerate wound healing, honey has been used as an alternative due to its antimicrobial, anti-inflammatory, and antioxidant properties. **Objective:** This study evaluates the effectiveness of honey-lidocaine and honey-povidone iodine combinations in healing perineal wounds. **Materials and Methods:** This double-blind randomised controlled trial was conducted at Siti Khadijah 1 Mother and Child Hospital (February–August 2024) on postpartum women with second-degree perineal rupture. Participants were randomly assigned to three groups receiving Cream Code A, B, or C, applied twice daily for 14 days. Wound healing was assessed using the REEDA scale on days 0, 1, 7, and 14. Statistical analysis included ANOVA and Tukey's test for normally distributed data and Kruskal-Wallis with Mann-Whitney tests for non-normal data. Further, paired T-tests and Wilcoxon tests were used to compare the results of pre- and post-intervention. Analyses in this study were performed using IBM SPSS 24 with $p < 0.05$. **Results:** After 14 days of intervention, this study observed a significant decrease in the total REEDA scale for all types of creams. Among honey-povidone iodine and placebo, the honey-lidocaine combination cream was reported to have the lowest scale ($p < 0.01$). The study also found that most participants with normal BMI were nulliparous, aged 20–35. **Conclusion:** This study concludes that honey-lidocaine cream demonstrates faster healing than honey-povidone iodine and placebo. This finding offers a promising postpartum wound care option.

# Timing, teamwork, and a beating heart: Coordinated care in a cardiac pregnancy crisis

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## ABSTRACT

**Introduction:** Cardiac disease complicating pregnancy contributes significantly to maternal morbidity and mortality. Severe mitral stenosis, especially of rheumatic origin, presents a high-risk during pregnancy due to increased hemodynamic demands. This case highlights the complexity and success of managing a pregnant woman with decompensated severe mitral stenosis and atrial fibrillation through a multidisciplinary approach involving simultaneous cesarean delivery and mitral valve replacement. **Case Description:** A 32-year-old gravida 2 at 25 weeks gestation was diagnosed with dengue fever and fast atrial fibrillation was ventilated. Echocardiography showed severe rheumatic mitral stenosis (mitral valve area 0.8 $cm^2$, mean gradient 11 mmHg). She was discharged well with a follow-up but re-presented at 26 weeks with heart failure symptoms to the ER, requiring inotropic support and admission to our cardiac centre. Repeated echocardiography showed worsening stenosis with a mean gradient of 18 mmHg. A multidisciplinary team (MDT) comprising cardiology, cardiothoracic surgery, obstetrics, anaesthesia, and neonatology planned for inpatient monitoring, aiming to prolong pregnancy to 32 weeks. However, rising pro-BNP levels indicated decompensation. At 29 weeks, the patient underwent elective cesarean section with bilateral salpingectomy followed immediately by mitral valve replacement with a mechanical prosthesis in the same setting. She was extubated on postoperative day 2 and discharged well on postoperative day 10. **Discussion:** Cardiac surgery in pregnancy is usually avoided due to its high mortality; however, this case demonstrates that performing caesarean section and valve replacement in a tertiary cardiac centre with a group of experts is an option to improve maternal and perinatal survival.

# Aortic dissection in pregnancy: The silent signal of wide pulse pressure – A Sarawak General Hospital experience

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## ABSTRACT

**Introduction:** Aortic dissection in pregnancy is a rare but potentially life-threatening condition, often presenting with nonspecific symptoms that can hinder timely diagnosis. Stanford type A dissections are especially perilous, with high risks of maternal and fetal mortality if not promptly treated with surgical intervention. **Case Description:** A 35-year-old woman, G3P2 at 39 weeks' gestation, presented with sudden-onset epigastric pain. Her blood pressure was 103/43 mmHg, with a widened pulse pressure of 60 mmHg - a subtle yet significant indicator. The initial examination was unremarkable; however, an urgent echocardiography and CT aortography confirmed a Stanford type A aortic dissection, extending from the aortic root to the infrarenal abdominal aorta. An urgent interdisciplinary discussion (MDT) was convened. Given the complexity of the case, which required the expertise of a highly experienced cardiothoracic surgeon, a surgeon was flown in from Peninsular Malaysia. She was transferred to the Sarawak Heart Centre, where she underwent an emergency caesarean section, delivering a baby boy weighing 2.7 kg. This was followed by a 13-hour Bentall procedure and coronary artery bypass grafting. Although the surgery was technically successful, she sadly succumbed to postoperative heart failure seven hours later. **Discussion:** This case highlights the importance of early recognition and timely intervention in aortic dissection during pregnancy. Although rare, pregnancy-associated aortic dissection carries significant risks for both mother and fetus. Despite the tragic outcome, the swift and coordinated response by the multidisciplinary team is commendable and reflects their commitment to providing high-risk care in a challenging and resource-limited setting.

# A silent threat: Unmasking postpartum choriocarcinoma

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## ABSTRACT

**Introduction:** Choriocarcinoma is a rare and aggressive form of gestational trophoblastic neoplasia (GTN), with an incidence of approximately 1 in 40,000 pregnancies. It is even more uncommon following a term vaginal delivery, making early recognition particularly difficult. The nonspecific symptoms often mimic more common postpartum complications, requiring a high index of suspicion and timely clinical assessment. **Case Description:** A 36-year-old woman, para 8, who presented on postpartum day 40 with per vaginal bleeding and a presyncopal episode. She was found to have symptomatic, severe anaemia and required multiple blood transfusions. Suction and curettage were performed for suspected retained products of conception. Despite intervention, she experienced persistent bleeding and was readmitted multiple times. Histopathological examination confirmed choriocarcinoma, and CT imaging revealed pulmonary metastases. In view of continued bleeding despite massive transfusions, the case was referred to a multidisciplinary team and total abdominal hysterectomy (TAH) was performed, with an initially uneventful postoperative course. However, on postoperative day 8, the patient re-presented with recurrent vaginal bleeding. Chemotherapy was promptly initiated by the gynaecologic oncology team. **Discussion:** Diagnosing postpartum choriocarcinoma remains a clinical challenge due to its rarity and overlapping presentation with other obstetric conditions. This case underscores the importance of maintaining clinical vigilance, utilising beta-hCG testing, imaging, and histopathology for diagnosis. Multidisciplinary collaboration is essential to ensure timely treatment and improve patient outcomes.

# Universal screening of Group B Streptococcus in pregnant women at Hospital Sultan Abdul Aziz Shah (HSAAS), Serdang: Proportion and association of socio-demographic factors on maternal and perinatal outcomes

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## ABSTRACT

**Introduction:** Group B Streptococcus (GBS), is a Gram-positive commensal bacterium of the rectovaginal area in women. Pregnant women carrying GBS can experience chronic, intermittent, or transient colonisation, contributing to issues such as urinary tract infections, premature rupture of membranes, and preterm birth. The prevalence of GBS invasive diseases in pregnant women is reported to be double that in nonpregnant women. The transmission of GBS from colonised mothers to infants during or just before delivery can result in early or late-onset invasive neonatal GBS disease with potentially poor perinatal outcomes. Current practices advise screening only high-risk women, not universally. **Objectives:** This study determines the proportion of GBS among pregnant women at Hospital Sultan Abdul Aziz Shah (HSAAS). It explores the association of socio-demographic factors with maternal and perinatal outcomes in GBS-positive mothers. **Materials and Methods:** A cross-sectional study comprising 213 women with singleton pregnancy in HSAAS underwent universal GBS screening, and the maternal and perinatal outcomes were evaluated. A set of study proformas, the delivery book, and the PUTRA-HIS database were utilised for data collection. **Results:** The proportion of GBS infection among pregnant women screened at HSAAS was 41.3%. Socio-demographic factors, including maternal age, gestational age, parity, Diabetes Mellitus, educational and socioeconomic level, had no association with GBS status. However, preterm prelabour rupture of membranes (PPROM), prelabour rupture of membranes (PROM) and neonatal infections showed significant association with GBS status. **Conclusion:** The proportion of GBS colonisation among pregnant women at HSAAS is considerable, highlighting the importance of universal screening.

# Bilateral simultaneous tubal ectopic pregnancy with suspected tranperitoneal migration of trophoblastic tissue: A case report

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## ABSTRACT

**Introduction:** Bilateral tubal ectopic pregnancy (BTP) is an exceedingly rare variant of ectopic gestation, particularly in the absence of assisted reproductive techniques. It poses significant diagnostic and therapeutic challenges due to its nonspecific clinical presentation and rarity. **Case Description:** We report a case of a 37-year-old gravida 4 para 2+1 woman with a history of secondary subfertility, who conceived spontaneously and presented with acute abdominal pain at 5 weeks and 4 days of gestation. Initial diagnostic laparoscopy revealed a right tubal ectopic pregnancy, and a right salpingectomy was performed; the contralateral tube appeared normal. One week later, she re-presented with recurrent abdominal pain and rising serum β-hCG levels. Imaging suggested a left adnexal mass. A second diagnostic laparoscopy revealed a ruptured left tubal ectopic pregnancy requiring conversion to laparotomy and left salpingectomy. Histopathological examination confirmed chorionic villi and trophoblastic tissue in both fallopian tubes. Trophoblastic implants were also identified on the uterine serosa, suggesting possible transperitoneal migration. **Discussion:** This case illustrates the diagnostic complexity of spontaneous, nonsimultaneous BTP. Theories include sequential ovulation, missed initial diagnosis, or transperitoneal migration of trophoblastic tissue. Despite the absence of conventional risk factors, bilateral ectopic pregnancy should remain a differential consideration in persistent or recurrent symptoms. Careful intraoperative inspection of both fallopian tubes and close postoperative β-hCG monitoring are essential to avoid delayed or missed diagnosis. This report underscores the importance of heightened clinical awareness and supports further research into the pathophysiology and management of BTP.

# Delayed spontaneous bladder rupture post vaginal delivery: A rare puerperal emergency

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## ABSTRACT

**Introduction:** Spontaneous bladder rupture is an uncommon but potentially life-threatening complication, an often-overlooked cause of acute abdomen in the postpartum period. Though more frequently linked to obstructed labour, trauma, or instrumentation, it can also occur unexpectedly following a seemingly normal delivery, posing a diagnostic and clinical challenge. **Case Description:** We present the case of an 18-year-old primigravida who developed severe lower abdominal pain and acute urinary retention on postpartum day three, preceded by a distinct 'popping' sensation. Her spontaneous vaginal delivery was uncomplicated, with no use of induction, augmentation, or instrumentation. Initial imaging raised suspicion of intraperitoneal fluid, prompting diagnostic laparoscopy, which was later converted to laparotomy. Intraoperative findings confirmed a spontaneous bladder rupture. The bladder was repaired, and she recovered well postoperatively. No predisposing urological pathology was identified. **Discussion:** This case highlights the importance of considering spontaneous bladder rupture as one of the differential diagnoses of postpartum acute abdomen, even in patients without classical risk factors. Spontaneous bladder rupture during precipitate labour is theoretically possible, especially if the bladder is distended and uncatheterized, but it is exceedingly rare and usually associated with other predisposing factors, whereby in this patient possible cystitis or chronic recurrent infection. This case also highlights that spontaneous bladder rupture can still occur even in the absence of labour trauma or instrumentation. Early recognition and prompt surgical intervention are essential for a favourable outcome.

# Carrying more than a baby: A rare case of phyllodes tumour in pregnancy

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## ABSTRACT

**Introduction:** Phyllodes tumour is a rare fibroepithelial breast neoplasm, accounting for less than 1% of all breast tumours. Its occurrence during pregnancy is exceptionally uncommon, posing a challenging interplay between clinical decision-making, hormonal influences, and the emotional well-being of the expectant mother. **Case Description:** We present a case of a primigravida at 16 weeks of gestation with a rapidly enlarging, painless breast mass initially diagnosed as fibroadenoma. Pre-pregnancy fine needle aspiration and early pregnancy tru-cut biopsy ruled out malignancy, favouring a benign phyllodes tumour. A multidisciplinary approach was employed, but the patient declined surgical excision despite its relative safety in pregnancy. As the tumour continued to grow, likely driven by hormonal changes, it resulted in significant physical discomfort, particularly in late pregnancy and breastfeeding. Beyond the physical burden, the patient faced profound anxiety and uncertainty, leading to psychiatric intervention for emotional support. She ultimately delivered a healthy term infant via spontaneous vaginal birth. **Discussion:** Phyllodes tumours in pregnancy are rare yet potentially aggressive. This case underscores the complexity beyond the clinical diagnosis, highlighting the psychological impact of managing a rare tumour during pregnancy. While surgical guidelines favour intervention, respecting patient autonomy and emotional preparedness is equally critical. A compassionate, multidisciplinary approach ensures both medical safety and psychological resilience, reinforcing the importance of patient-centred care, one that prioritises empathy, timing, and trust beyond protocol.

# Intracranial haemorrhage secondary to antiphospholipid syndrome in a postpartum patient

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## ABSTRACT

**Introduction:** Antiphospholipid syndrome (APS) is an autoimmune prothrombotic disorder that can present during or after pregnancy with significant maternal morbidity. Neurological complications such as cerebral venous thrombosis and intracranial haemorrhage, although rare, can be life-threatening and require a high index of suspicion. **Case Description:** A 20-year-old woman, 20 days postpartum after delivery for severe preeclampsia, presented with persistent occipital headache and drowsiness. CT brain showed a right parieto-occipital intraparenchymal haemorrhage with mild midline shift and surrounding oedema. CT venography suggested a possible right transverse sinus thrombosis. Thrombophilia screening revealed positive lupus anticoagulant and β2 glycoprotein I antibodies, supporting a diagnosis of primary APS. Due to the intracerebral bleed, anticoagulation was initially withheld. She was treated with supportive care and antiepileptic therapy (Keppra), with gradual clinical improvement. Subsequent MRI and MRA showed no vascular malformations or new haemorrhage. MRV demonstrated normal opacification of the venous sinuses without evidence of thrombosis. **Discussion:** This case highlights the importance of recognising APS as a potential cause of neurological symptoms in postpartum women, especially those with prior obstetric complications. Persistent headache in the postpartum period should prompt urgent neuroimaging and consideration of both thrombotic and hemorrhagic events. Early diagnosis, appropriate imaging, and coordinated multidisciplinary care are essential to guide safe management and prevent long-term sequelae

# After the cry, a curse: Postpartum choriocarcinoma following normal delivery

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## ABSTRACT

**Introduction:** Postpartum choriocarcinoma is a rare but life-threatening complication occurring in approximately 1 in 40,000 normal deliveries. This aggressive gestational trophoblastic neoplasm often presents with nonspecific symptoms mimicking benign postpartum conditions, leading to frequent diagnostic delays. Although highly chemosensitive, outcomes deteriorate significantly with advanced disease at presentation. **Case Description:** A 36-year-old multiparous woman presented with severe vaginal bleeding two weeks after an uncomplicated home delivery. Initial management for retained products revealed choriocarcinoma on histopathology. Imaging demonstrated an 8 cm uterine mass with lung metastases (β-hCG >100,000 IU/L), classifying as FIGO Stage III disease. Emergency hysterectomy controlled haemorrhage, but progressing metastases necessitated urgent chemotherapy referral. **Discussion:** This case underscores the diagnostic challenges of postpartum choriocarcinoma, particularly following unsupervised deliveries. Three critical lessons emerge: (1) choriocarcinoma must be considered in refractory postpartum haemorrhage regardless of delivery circumstances, (2) routine β-hCG monitoring is essential for early detection, and (3) while surgery manages acute complications, timely chemotherapy remains curative. The case highlights the importance of maintaining high clinical suspicion for this treatable but potentially fatal malignancy in postpartum care.

# Correlation of vitamin D level in cervical cancer: Systematic literature review

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## ABSTRACT

**Introduction:** Vitamin D and its receptor (VDR) are essential in the progression of gynaecological cancers. The change in perspective regarding vitamin D as a potential anti-cancer treatment has led to new opportunities for investigating how intracellular signal transduction initiates various cellular activities. The active hormonal form of vitamin D is vitamin D 1.25 (OH). Vitamin D is thought to influence carcinogenesis through mechanisms such as inflammation, apoptosis, cell growth and differentiation, angiogenesis, cancer invasiveness, and metastasis. It promotes apoptosis, decreases cell proliferation, and stimulates the production of molecules that inhibit growth. **Materials and Methods:** Using suitable search terms. A systematic review was carried out utilising the PubMed, Research Gate and Google Scholar databases. The review included English-language publications from 2020 to 2025 that addressed the keyword "Vitamin D and cervical cancer". **Results:** The Articles found 100 articles from ResearchGate, 6 articles from the Google Scholar database, and 35 articles from the PubMed database. Articles were filtered, but 3 articles met the criteria. Those that were filtered satisfied the requirements. 341 women as participants, 104 women with cervical cancer and 237 women without cervical cancer. In this study, the same threshold was not used in determining the vitamin D value, but in all studies, it was found that women with cervical cancer had vitamin D values below normal, and the comparison of vitamin D levels in women with cervical cancer at $P < 0.05$. Recent studies have explored the association between vitamin D deficiency and cervical cancer. Multiple cross-sectional studies found significantly lower vitamin D levels in women with cervical cancer compared to those without. A higher prevalence of vitamin D deficiency (25-OH-vitamin D < 50 nmol/l) was observed in cervical cancer. **Conclusion:** These findings suggest that vitamin D deficiency might be an important systemic factor associated with cervical cancer. Researchers recommend determining vitamin D levels and addressing deficiencies as a potential preventive measure for cervical cancer.

# The influence of mercury maternal hair and placental blood to neonatal outcomes

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## ABSTRACT

**Introduction:** Mercury contamination can cross cellular membranes and bioaccumulate in various tissues, including the placenta during pregnancy. This study evaluates the correlation between maternal hair and placental blood mercury levels and their impact on neonatal outcomes. **Objectives:** This study evaluates the correlation between maternal hair and placental blood mercury levels and their impact on neonatal outcomes. **Materials and Methods:** This cross-sectional study involved 98 pregnant women. Mercury levels in hair and placental blood were measured using atomic absorption Spectrophotometry. Statistical analyses, including Chi-Square and Pearson correlation tests, were performed using SPSS. **Results:** Maternal hair mercury levels were positively correlated with placental blood mercury levels ($\rho$=0.26, p=0.01), indicating maternal-to-fetal transfer. Placental blood mercury levels were negatively correlated with placental weight ($\rho$=-0.24, p=0.02) and head circumference ($\rho$=-0.29, p=0.01). No significant associations were found between maternal hair mercury levels and neonatal outcomes. **Conclusion:** Maternal hair mercury levels correlate with placental mercury levels, indicating transfer from mother to fetus. Placental blood mercury negatively impacts placental weight and head circumference, emphasising its significance as an indicator of neonatal outcomes. Awareness campaigns about mercury exposure could help mitigate these risks.

# Association and diagnostic value of serum uric acid level and perinatal outcomes in women with preeclampsia in Hospital Seberang Jaya

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## ABSTRACT

**Introduction:** In pregnancies complicated by preeclampsia, elevated uric acid levels are recognised as potential markers of disease severity and adverse outcomes. While high uric acid is linked to complications like preterm birth and fetal growth restriction, a definitive threshold level for predicting these outcomes remains elusive. This lack of clarity hampers the effective use of uric acid measurements in clinical practice for managing preeclampsia. **Objectives:** To establish a predictive threshold value of serum uric acid level in preeclampsia and to study its association with perinatal outcomes. **Materials and Methods:** A retrospective study was conducted involving 326 preeclamptic women admitted to Hospital Seberang Jaya, Penang, between 1st January 2019 and 31st December 2022. Preeclampsia was diagnosed based on ISSHP criteria. Serum uric acid levels were measured, and Receiver Operating Characteristic (ROC) analysis with Youden's Index was employed to identify optimal threshold values for various outcomes. Binary logistic regression was used to examine associations between uric acid levels and perinatal outcomes. **Results:** Distinct uric acid thresholds were found to predict specific adverse outcomes. A level >351 µmol/L was significantly associated with preterm birth (OR 2.430; 95% CI 1.537–3.872; p<0.001), while levels >299 µmol/L predicted low Apgar scores (OR 7.784; 95% CI 2.760–32.618; p=0.001). Levels >401 µmol/L were linked to fetal death (OR 12.224; 95% CI 2.036–233.474; p=0.022), and levels >433 µmol/L correlated with small-for-gestational-age infants (OR 2.996; 95% CI 1.729–5.192; p<0.001). Additionally, intrauterine growth restriction was associated with levels >428 µmol/L (OR 2.533; 95% CI 1.029–6.126; p=0.039), and low birth weight with levels >353 µmol/L (OR 2.221; 95% CI 1.418–3.501; p=0.001). **Conclusion:** Serum uric acid levels above specific thresholds were significantly associated with higher risks of various adverse perinatal outcomes. These thresholds could aid in risk stratification and clinical decision-making in the management of preeclamptic pregnancies.

# Beyond morning sickness: Unmasking cerebral venous sinus thrombosis in early pregnancy

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## ABSTRACT

**Introduction:** Cerebral venous sinus thrombosis (CVT) is a rare but serious cause of stroke in pregnancy, accounting for 0.5%-1% of all strokes, due to hypercoagulability. While CVT is more commonly reported in the postpartum period, its occurrence in early pregnancy is rare and often misdiagnosed due to nonspecific symptoms overlapping with common pregnancy-related conditions. We report a case of CVT in the first trimester, initially misdiagnosed as hyperemesis gravidarum, to emphasise the importance of early recognition and timely intervention. **Case Description:** A 25-year-old primigravida at 10 weeks of gestation, with no prior medical history, non-obese, presented with persistent nausea, vomiting and poor oral intake for 1 week, followed by headache over 3 days. She was initially diagnosed with hyperemesis gravidarum and admitted for supportive care. On Day 2 of admission, she developed acute delirium, prompting further evaluation. Neurological examination revealed confusion and disorientation, but no other focal deficits. The patient was immediately transferred to the tertiary centre for further evaluation. Routine blood tests, including inflammatory markers and thrombophilia screening, were unremarkable. A contrast-enhanced CT venography (CECT) reveals cerebral venous sinus thrombosis at the posterior inferior sagittal sinus, great vein of Galen, straight sinus and right transverse sinus with bilateral thalamic oedema. The patient was promptly started on therapeutic low-molecular-weight heparin (LMWH), and her neurological symptoms gradually improved with anticoagulation. She was continued on LMWH throughout pregnancy and for six weeks postpartum, with close multidisciplinary follow-up involving obstetrics and neuromedical. **Discussion:** CVT in pregnancy is well-documented in the postpartum period but is underreported in the first trimester, often due to diagnostic challenges. In this case, the symptoms mimicked hyperemesis gravidarum, delaying recognition. Pregnancy-related hypercoagulability, dehydration, and hormonal changes contributed to the risk. Neuroimaging is crucial for early diagnosis, with MRI/MR venography being the gold standard. In resource-limited settings, CT venography serves as an alternative. Our case underscores the need for heightened clinical suspicion and prompt imaging in pregnant patients presenting with persistent or atypical headaches, altered mental status, or neurological symptoms. The International Study on Cerebral Vein and Dural Sinus Thrombosis (ISCVT) has shown that early anticoagulation with LMWH significantly improves outcomes, as seen in this case. **Conclusion:** CVT in early pregnancy is rare but potentially life-threatening. This case highlights the need for increased awareness among clinicians, early neuroimaging in persistent headaches or altered mental status, and prompt anticoagulation to prevent complications.

# Correlation of BRCA genetic mutations with family history of malignancy and survival rate in epithelial ovarian carcinoma

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## ABSTRACT

**Introduction:** Epithelial ovarian carcinoma is one of the gynaecological malignancies with high mortality. BRCA genetic mutations have been identified as important risk factors, but their association with family history and survival rate still requires further investigation. **Objective:** The study evaluates the relationship of BRCA genetic mutations with family history of malignancy and survival rate in epithelial ovarian carcinoma. **Materials and Methods:** This observational analytical study with a retrospective cohort design involved 62 patients with epithelial ovarian carcinoma. Data were collected through medical records, interviews, and paraffin block sample analysis. Statistical analysis included the Chi-square test and Kaplan-Meier survival analysis. **Results:** The prevalence of BRCA mutations in patients with epithelial ovarian carcinoma was 50%, with 90.3% having BRCA1 mutations and 9.7% having BRCA2 mutations. There was a significant association between BRCA mutations and family history of malignancy (p=0.020), with 58.1% of BRCA-positive patients having a positive family history compared to 12.9% of BRCA-negative patients having a positive family history. BRCA status was significantly correlated with the final status of the patient (p = 0.038), where the BRCA-positive group showed a higher survival rate (67.7%) than the BRCA-negative group (64.5%). Kaplan-Meier survival analysis for Overall Survival (OS) showed that patients with positive BRCA mutations had a median survival time of 20.87 months (SE 1.10), slightly higher than the BRCA-negative group with a median of 19.03 months (SE 1.32). Although there was a difference of about 1.84 months, this result did not show statistical significance (p=0.64). As for Progression Free Survival (PFS), patients with BRCA-positive had a median time of 22.72 months (SE 0.73) compared to 21.67 months (SE 1.14) in the BRCA-negative group. This difference of 1.05 months also did not show statistical significance (p=0.48). **Conclusion:** BRCA genetic mutations have a high prevalence in patients with epithelial ovarian carcinoma and are significantly associated with a history of malignancy in the family, chemotherapy administration, and the final status of the patient. Survival analysis using the Kaplan-Meier method for Overall Survival (OS) and Progression Free Survival (PFS) for 2 years did not show significant results.

# Undiagnosed partial hydatidiform mole with live baby: A case report

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## ABSTRACT

**Introduction:** Partial hydatidiform mole (PHM) with a coexisting live fetus is a rare obstetric condition resulting from triploidy, typically due to dispermic fertilisation. Unlike a complete mole, PHM may progress with a viable fetus, making prenatal diagnosis challenging, especially when ultrasound findings are unremarkable. PHM is associated with an increased risk of gestational complications, including fetal growth restriction (FGR), gestational thyrotoxicosis, preeclampsia, and progression to gestational trophoblastic disease (GTD). Early recognition is essential to optimise maternal and fetal outcomes. **Case Description:** We present the case of a 25-year-old Gravida 2 Para 1 at 33 weeks of gestation who developed symptoms of palpitation during early pregnancy, where she was diagnosed as gestational thyrotoxicosis, requiring medical management. Ultrasound findings were unremarkable during her first presentation. Routine follow-up later revealed FGR at 33 weeks with abnormal Doppler studies, confirmed placental insufficiency and was admitted for fetal monitoring, started on intravenous magnesium sulfate for neuroprotection and intramuscular dexamethasone for fetal lung maturation. Due to pathological cardiotocography, an emergency caesarean section was performed to expedite the delivery. Intraoperatively, multiple grape-like structures were observed within the placenta, raising suspicion of PHM. A male infant weighing 1.12 kg was delivered with Apgar scores of 9 at 1 minute and 10 at 5 minutes. The baby was admitted to the neonatal intensive care unit (NICU) for prematurity-related care, and the baby's growth was within normal limits. Histopathological examination of the placenta confirmed the diagnosis of PHM. Postpartum, the patient was closely monitored with serial β-hCG levels until normalisation to rule out persistent GTD. **Discussion:** This case underscores the diagnostic challenges of PHM in the absence of classical ultrasound findings. The presence of gestational thyrotoxicosis and FGR should prompt suspicion for an underlying molar pregnancy, with early intervention required once the fetus is affected. Early recognition, multidisciplinary management, and postpartum β-hCG surveillance are essential to prevent complications such as persistent GTD.

# Association of leptin levels with body mass index and weight change in DMPA (Depot Medroxyprogesterone-Acetate) acceptors

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## ABSTRACT

**Introduction:** Hormonal contraceptive DMPA (Depot Medroxyprogesterone-Acetate) has several side effects, one of which is weight gain. Leptin and its receptors have been identified as the main regulators of body weight. This study aims to analyse the relationship between leptin levels and Body Mass Index (BMI) and weight change in DMPA acceptors. **Objective:** To examine the association of leptin levels with body mass index and weight change in DMPA (Depot Medroxyprogesterone-Acetate) acceptors. **Materials and Methods:** This study is an analytical observational study with a Prospective Cohort design. The sample consisted of 61 adolescent DMPA injection KB acceptors at the Health Centre in Makassar. Statistical analysis used Kolmogorov-Smirnov and Wilcoxon test. **Results:** DMPA users (from the 6th to the 12th month) experienced an increase in BMI (obesity). Statistical analysis showed a significant relationship between the duration of DMPA use and BMI ($P < 0.001$). Serum leptin levels increased after DMPA use from the 6th to the 12th month. Statistical analysis showed a significant relationship between the duration of DMPA use and leptin levels ($p < 0.001$). A significant relationship was observed between BMI, weight change and leptin levels at the 12th month of DMPA use ($p < 0.001$), but not at the 6th month ($p > 0.05$). **Conclusion:** The use of DMPA at the 12th month resulted in an increase in leptin levels, weight change and Body Mass Index (obesity).

# The prevalence of bacterial vaginosis in women at risk of preterm birth and pregnancy outcomes following treatment: A retrospective observational study

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## ABSTRACT

**Introduction:** Bacterial vaginosis (BV) is a common vaginal infection among pregnant women, with reported prevalence rates ranging from 6.4% to 16%. There is a lack of guideline recommendations supporting routine screening for BV in pregnant women at increased risk for preterm delivery. **Objectives:** This study aimed to determine the prevalence of BV in pregnant women at risk of preterm birth or presenting with BV-related symptoms, and to compare pregnancy and neonatal outcomes between BV-positive women (after treatment) and BV-negative counterparts. **Materials and Methods:** This retrospective observational study included pregnant women at risk for preterm birth because of prior delivery before 37 weeks, preterm prelabour rupture of membranes, or suspected preterm labour, as well as those with symptoms suggestive of BV. All participants were screened using the BVBLUE® test kit. BV-positive women received oral metronidazole 400 mg twice daily for 7 days. Pregnancy and neonatal outcomes were subsequently analysed for all participants. **Results:** Among 217 subjects, 24 (11.1%) tested positive for BV and 193 (88.9%) tested negative. There were no significant demographic differences between the two groups. Key pregnancy and neonatal outcomes, including rates of preterm birth, low birth weight, APGAR scores, and NICU admissions, were comparable between BV-positive (treated) and BV-negative groups. **Conclusion:** In this cohort, pregnancy outcomes in BV-positive women who received treatment were similar to those in BV-negative women. These findings suggest that targeted screening and timely treatment for BV in high-risk populations may contribute to favourable pregnancy outcomes and may help reduce risks associated with preterm birth.

# A wolf in sheep's clothing: Pelvic tuberculosis masquerading as ovarian malignancy

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## ABSTRACT

**Introduction:** Miliary tuberculosis (TB) is a rare form of disseminated TB that can present with nonspecific symptoms. Extra-pulmonary TB involving the female pelvis is uncommon but may closely mimic ovarian malignancy, especially when associated with complex cystic masses and elevated tumour markers like CA-125. **Case Description:** A 27-year-old woman, Para 0+1, presented with one week of per vaginal (PV) staining. Abdominal examination revealed no palpable masses. Trans-vaginal ultrasound (TVS) showed a normal-sized uterus (5.8 × 4.3 cm) with a thin endometrial lining. A large, multiloculated cystic mass with solid areas and ground-glass appearance was seen in the pouch of Douglas, measuring 10 × 5.3 cm. Tumour markers revealed CEA 1.9 ng/mL, CA-125 markedly elevated at 738.3 U/mL, and CA 19-9 at 25.3 U/mL. Due to suspicion of ovarian malignancy, contrast-enhanced CT (CECT) of the thorax, abdomen, and pelvis was performed. It revealed findings consistent with miliary TB: pulmonary involvement, cervical and abdominopelvic lymphadenopathy, TB peritonitis, hepatic lesions, and a tubo-ovarian abscess. The patient was referred to the chest medical team and commenced on anti-TB therapy. Follow-up imaging after one month showed a reduction in the pelvic mass size to 4.2 × 5.3 cm. **Discussion:** This case highlights the diagnostic challenge of pelvic TB mimicking ovarian cancer. Elevated CA-125 and complex cystic masses may mislead clinicians. Early imaging and multidisciplinary collaboration are essential for accurate diagnosis and management.

# A miracle pregnancy with unilateral pulmonary agenesis and corrected tracheo-esophageal fistula

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## ABSTRACT

**Introduction:** Congenital unilateral lung agenesis with tracheoesophageal fistula is rare. Even with corrected fistulae, a pregnancy with a single-functioning lung is at risk of respiratory failure, lung infection, pulmonary hypertension, anaesthetic risk, preterm labour and a small baby, leading to a challenging maternity care. **Case Description:** We are sharing a case of a 29-year-old primigravida with congenital left lung agenesis and surgically corrected tracheo-esophageal fistula. Left hemithorax was occupied by hyperinflated right lung, stomach and spleen with elevated left diaphragm. She is kyphoscoliosis, limping, is underweight, yet independent. She presented at 11 weeks of gestation without pre-pregnancy care consultation and baseline investigations. Lung function test at the first trimester was non-conclusive. Echocardiography was normal despite cardiac malposition. No pulmonary hypertension. MDT discussion consisted of O&G Specialist, Maternal Fetal Medicine Specialist, Chest Physician, ORL Surgeons and Family Medicine Specialist, and her wish to continue her pregnancy was supported. Her antenatal care was planned for her and she was advised to inform if any symptoms of respiratory failure. 3 out of 5 pre-delivery ward admissions were due to pneumonia. Despite a normal mid-trimester scan, the fetus developed early fetal growth restriction. She required portable oxygen supplementation due to type-1 respiratory failure from 30 weeks onwards. Elective caesarean section was scheduled at 33 weeks due to worsening respiratory function. She was discharged after 4 days and given a subdermal contraceptive implant. The child was discharged 7 days later. Surveillance is maintained under pre-pregnancy care services. **Discussion:** This is a challenging clinical case that demonstrates an increased cardiopulmonary physiological demand as the pregnancy progresses. Albeit limited scientific evidence is available, MDT care and patients' insight remain a critical component in determining optimal pregnancy outcome even in a rare and high-risk case.

# Discordant triplets: A rare case of sFGR in a monochorionic triamniotic pregnancy

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## ABSTRACT

**Introduction:** Monochorionic triamniotic (MCTA) triplet pregnancies are rare and associated with significant perinatal risks, including twin-to-twin transfusion syndrome (TTTS), twin anaemia-polycythemia sequence (TAPS), and selective fetal growth restriction (sFGR). Selective FGR occurs due to unequal placental sharing and presents unique challenges in prenatal surveillance and intervention, especially in higher-order multiple pregnancies. **Case Description:** A 22-year-old primigravida with a spontaneously conceived triplet pregnancy was referred at 20 weeks of gestation following a first-trimester ultrasound that confirmed a monochorionic triamniotic pregnancy. Serial ultrasound assessments were initiated every two weeks. At 24 weeks, ultrasound revealed discordant fetal growth with one fetus measuring below the 10th percentile and abnormal umbilical artery Doppler findings (AEDF) – consistent with Type II sFGR in one triplet (Triplet C). Doppler studies showed absent end-diastolic flow in the umbilical artery of the growth-restricted fetus, while the other two fetuses exhibited normal growth and Doppler parameters. No signs of TTTS or TAPS were observed. Multidisciplinary counselling was conducted with maternal-fetal medicine specialists and neonatologists regarding prognosis, monitoring strategies, and possible interventions. The pregnancy was closely monitored with biweekly growth scans and Doppler studies. The restricted fetus demonstrated stable but persistently abnormal Dopplers without signs of fetal compromise. At 26 weeks, Triplet C umbilical Dopplers remained AEDF and this was followed by Triplet B. More frequent advanced Dopplers were performed to monitor these Triplets throughout which the DV- A wave remained positive, although there were multiple episodes of AEDF & normal EDF in the umbilical Dopplers of Triplet B, C. At 28 weeks onward, both Triplet B, C demonstrated raised PI in their umbilical Dopplers which is evidence of the complexity the vasculature of these MCTA twins. We closely monitored these triplets while preparing for early delivery. At 30 weeks 3 days patient went into labour and 3 fetuses were delivered via EMLSCS with good AS of 8, 9. All infants were discharged home in stable condition. **Discussion:** Selective fetal growth restriction in MCTA triplets is rare and poses complex management challenges due to shared placental circulation and the risk of inter-fetal hemodynamic compromise. In this case, expectant management with close surveillance allowed for prolonged gestation and favourable neonatal outcomes. Management decisions must be individualised, taking into account gestational age, Doppler findings, signs of fetal compromise, and parental preferences. Early referral to specialised centres is essential for optimal outcomes.

# Unmasking a giant kidney in pregnancy

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## ABSTRACT

**Introduction:** A Huge cystic mass in pregnancy is rare and difficult to diagnose, especially in the presence of a gravid uterus. They are usually discovered as an incidental finding during routine obstetric ultrasonography. **Case Description:** Our case describes an incidental finding of a large cystic mass during second trimester in a 25-year-old woman. She was in her second pregnancy and was referred by primary care team for further evaluation and assessment. Ultrasonography revealed a uniloculated cystic mass measuring 19 x 22 cm, without septation, solid components or doppler uptake. Baseline investigations were unremarkable. An initial diagnosis of ovarian cyst was made. She was planned for caesarean section and unilateral salphingoophorectomy at 34 weeks of gestation. Intraoperatively, a cystic mass measuring 15 x 20 cm was found adherent to the right ovary. The surgical team was consulted intraoperatively. However, the cyst ruptured during manipulation and drained approximately 3 litres of straw-coloured fluid. Postoperatively, the patient had a computed tomography (CT) scan of abdomen and pelvis discovering a right hydronephrosis that was increasing in size. Further investigations including retrograde pyelogram and MAG3 renogram were performed, which were suggestive of a right cystic nephroma. **Discussion:** Large cystic mass is rare during pregnancy and the diagnosis is very challenging with limited imaging. Although commonly arising from adnexa, nevertheless, renal origin masses should also be considered in the differential diagnosis. A diagnosis of cystic nephroma antenatally will require multidisplinary discussion and approach to facilitate appropriate surgical planning and further improve management and outcome of patient.

# More than just an ectopic: A hidden Müllerian puzzle

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## ABSTRACT

**Introduction:** A unicornuate uterus is a rare Müllerian anomaly, occurring in about 0.1% of women, with 74% associated with a rudimentary horn due to incomplete Müllerian duct fusion. In 70-90% of these cases, the rudimentary horn is non-communicating. Müllerian anomalies are known to increase the risk of ectopic pregnancy, highlighting the importance of early diagnosis to guide fertility planning. **Case Description:** Our case describes a 30-year-old primigravida who presented at 4 weeks of amenorrhea with suprapubic pain. She had underlying congenital anomalies including clubfoot, torticollis and hydrocephalus. Abdominal examination was unremarkable. Transvaginal ultrasound showed a retroverted uterus, a right adnexal mass (2.2 x 2.8 cm), and the presence of free fluid in the pelvis. Serum ßeta human chorionic gonadotropin (ßhCG) level was 2483 IU/L. A diagnosis of ruptured ectopic pregnancy was suspected and she was planned for a diagnostic laparoscopy. Intraoperatively, a unicornuate uterus of normal size was visualized deviated to the left, along with a leaking left tubal pregnancy. There was a non-communicating right rudimentary horn, with the right fallopian tube was joined to the rudimentary horn. The right ovary was identified in the right lumbar region. Left salphingectomy was performed. Postoperatively, the patient was scheduled for further imaging studies. **Discussion:** This case highlights the diagnostic challenges when uterine anomalies coexist with ectopic pregnancy. The presence of systemic congenital anomalies should prompt evaluation for associated Müllerian defects, as they frequently co-occur. Early identification of uterine anomalies allows for conservative management, fertility preservation, and informed pregnancy planning.

# Lymphoma masquerading as primary ovarian malignancy: An atypical presentation in a young woman

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## ABSTRACT

**Introduction:** Lymphoma involving the ovaries is rare and can mimic primary gynaecologic malignancies. Early recognition is crucial to avoid unnecessary surgery and improve outcomes. **Case Description:** We are presenting a case of a 22-year-old Malay woman who presented with a brief history of lower back pain which progressed to bilateral lower limb weakness and urinary incontinence. MRI and CT imaging showed bilateral solid adnexal masses, tumour metastases to bilateral renal + lung. Tumour markers were inconclusive, except for a markedly elevated LDH and slightly elevated CA-125. The initial diagnosis was ovarian malignancy with possible spine metastases. Diagnostic laparoscopy revealed bilateral ovarian tumours; intraoperative findings and tissue biopsy confirmed Diffuse Large B-Cell Lymphoma (DLBCL), Germinal Centre B-cell (GCB) type. Postoperatively, the patient deteriorated due to sepsis and succumbed shortly after diagnosis. **Discussion:** DLBCL can rarely present as bilateral adnexal masses with systemic involvement in young patients. Clinicians should consider lymphoma in the differential diagnosis of ovarian masses, particularly when accompanied by atypical systemic signs.

# Implementation rate of low-dose aspirin for pre-eclampsia prevention in high-risk pregnancies: A study in Kelantan

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## ABSTRACT

**Introduction:** Aspirin use in high-risk pregnancies has proven benefits in pre-eclampsia prevention. However, inconsistencies in aspirin prescription have been observed, whereby some patients with high-risk profiles or combinations of moderate-risk factors continue to be overlooked. **Objectives:** To study the implementation rate of low-dose aspirin 150 mg in high-risk pregnancies for pre-eclampsia prevention. **Materials and Methods:** A prospective cohort study was conducted in HPUSM from September 2023 till September 2024 for a 1-year duration. All postnatal patients were screened for the presence of ≥ 1 high-risk factor or ≥ 2 moderate-risk factors for pre-eclampsia using their antenatal books. Eligible women who, antenatally, received 150 mg of aspirin daily were labelled the ASPIRIN group. High-risk individuals who were not prescribed aspirin were considered the control group, labelled the NON-ASPIRIN group. Characteristics and outcomes of these groups were analysed. The implementation rate of aspirin in these high-risk pregnancies was determined. **Results:** Of 774 eligible patients, only 464 (60%) received aspirin. Among patients with ≥1 high-risk factor, 149 out of 476 (31.3%) were missed. Notably, 54% (161/298) of patients with combined moderate-risk factors were neglected, exposing lapses in guideline adherence. This under-utilisation highlights a critical gap and inconsistencies in practice, despite strong evidence demonstrated by this study supporting aspirin's effectiveness in preventing pre-eclampsia, preterm birth, gestational hypertension, and IUGR ($p<0.001$, $p=0.002$, $p<0.001$, $p=0.003$, respectively). **Conclusion:** These findings highlight the need for further evaluation of guideline implementation. Greater efforts should be made to ensure timely aspirin initiation for all high-risk pregnancies. The benefit of aspirin in these pregnancies remains undebatable.

# Early urinary catheter removal post-pelvic organ prolapse surgery – An RCT

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## ABSTRACT

**Introduction:** Pelvic organ prolapse (POP) vaginal native tissue repair surgeries are performed as same-day surgery in some countries and are postulated to improve cost-effectiveness and patient satisfaction, with same day urinary catheter (IDC) removal being crucial in reducing time to spontaneous void and ambulation. **Objectives:** We hypothesised that early IDC removal after POP surgery reduces time to spontaneous void, length of admission, and pain score, without affecting patient anxiety or urinary retention. **Materials and Methods:** An RCT was conducted with participants allocated equally to two groups: IDC and vaginal pack removal six hours later on POD 0 (study arm group 1), versus removal at 6 am on POD 1 (control arm group 2). The study was double-blinded until the operation was complete. A target of <150 ml post-void residual urine within 6 hours of IDC removal was set. **Results:** 42 and 36 patients were recruited to groups 1 and 2. Patient demographics and operation details were similar in both groups except mean cystocoele stage of 2.88 vs 2.58 (p=0.04) in groups 1 and 2. Group 1 had a lower rate of successful TOC 40% vs 75% (p=0.006) at first attempt. Mean time to ambulation was improved in group 1 at 0.55 vs 0.97 days (p=0.001). There was no difference regarding pain and anxiety scores, time to discharge, post-operative UTI rate, unplanned outpatient visits within one week, and complications within one month. **Conclusion:** Earlier IDC removal on POD 0 does not necessarily improve post-operative recovery, given the higher rate of IDC reinsertion and non-significant recovery parameters apart from earlier ambulation.

# When life gives you lemons, we give you a new liver

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## ABSTRACT

**Introduction:** Acute fatty liver of pregnancy (AFLP) is a rare condition with 1 in 13,000 deliveries but potentially life-threatening condition that can occur during the third trimester or postpartum period. It can cause hepatic failure and encephalopathy, potentially leading to death for both mother and fetus if the diagnosis is delayed. Patients with severe liver dysfunction may require immediate listing for transplantation if they do not show signs of recovery post-delivery. There is no specific "window period" universally agreed upon for AFLP diagnosis to liver transplantation, thus decision for transplantation is typically made on a case-by-case basis. Living donor liver transplantation (LDLT) versus cadaveric, both methods have their risk and benefits. LDLT generally offers better survival rates and reduced inflammation, making it a preferable option when feasible. However, cadaveric liver transplantation remains a vital option due to the limited availability of living donors. **Case Description:** We report a case of a 24-year-old primigravida at 37 weeks who presented with jaundice, vomiting and coagulopathy. Urgent ultrasound HBS confirmed the diagnosis of fatty liver. However, the maternal condition was critical with acute fulminant liver failure and hepatorenal syndrome, needing blood products transfusion. Fetus was also affected with fetal growth restriction. She needed an ICU care and stabilisation involving a multidisciplinary team prior to caesarean section. Postoperatively, her condition remained critically ill and did not respond to aggressive treatment of fulminant liver failure. The decision for liver transplantation was made within 48 hours to the Hepatobiliary Centre. Despite the critical nature of her condition, the patient underwent successful cadaveric liver transplantation and experienced a remarkable recovery. **Discussion:** This case highlights the need for early recognition, aggressive management of AFLP, and the potential life-saving role of liver transplantation in selected cases. The successful outcome underscores the need for multidisciplinary team involvement and prompt intervention to improve maternal and fetal outcomes.

# Successful prenatal management of cardiac rhabdomyoma with mTOR pathway inhibitor

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## ABSTRACT

**Introduction:** Cardiac rhabdomyoma (CR) is a rare benign tumour often associated with tuberous sclerosis complex, with an incidence reported 1 in 6,000 live births. In cases where CR lesions do not lead to severe complications, the pregnancy outcome is generally favourable. Complications associated with CR include arrhythmias, valvular regurgitation, outflow tract obstruction, heart failure, pericardial effusion, fetal oedema, and, rarely, stillbirth. This case report shares the successful prenatal treatment of fetal CR with sirolimus to prevent cardiac failure, which improved neonate outcome. **Case Description:** A case of a 36-year-old woman at 24 weeks in her first pregnancy, an ultrasound scan examination revealed CR in the left and right ventricles of the fetus. Serial scans revealed progression in the size of CR and impending cardiac failure. There was reduced contractility of the right and left ventricles. Ventricular filing was compromised due to obstruction by the tumour. Considering impending cardiac failure, therapy by sirolimus (mammalian target of rapamycin) was administered to the mother at 32 weeks of gestation. Pre-treatment screening of the mother's blood parameters was normal, and no contraindication for starting sirolimus. Mother was monitored for side effects and blood parameters, and she tolerated very well to the treatment. **Discussion:** Successful treatment of life-threatening CR in a fetus by administering sirolimus to the pregnant mother without exceeding 10 ng/ml of blood concentration. Significant reduction of the size rhabdomyoma improved the clinical outcome of the newborn. Sirolimus is a safe option for prenatal treatment in fetuses with CR.

# Airway in crisis, fetus at risk: Obstetric navigation through TB laryngitis and supraglottitis

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## ABSTRACT

**Introduction:** Tuberculosis (TB) in pregnancy presents unique challenges, particularly when compounded by rare extrapulmonary manifestations such as TB laryngitis. Severe maternal malnutrition further complicates disease progression and fetal outcomes. Prompt recognition and multidisciplinary coordination are essential to optimise both maternal and fetal health. **Case Description:** A 29-year-old gravida 2 para 1 woman at 24+2 weeks gestation presented with persistent sore throat, hoarseness, and odynophagia, along with a 10 kg weight loss and a BMI of 13 kg/m². Initial laryngoscopy revealed erythematous laryngeal mucosa with ulceration. Chest X-ray and sputum AFB confirmed TB laryngitis. Despite treatment initiation, her condition worsened at 30+6 weeks with the development of acute supraglottitis, necessitating ICU admission and airway monitoring. Fetal ultrasound showed growth restriction (EFW 0.2nd centile), oligohydramnios, and high-resistance Doppler flow. At 35 weeks, an elective caesarean section was performed after confirming airway patency. A live infant (birth weight 1,675 g) was delivered. Placental histopathology showed maternal vascular malperfusion. **Discussion:** This case underscores the complexities of managing rare TB manifestations in pregnancy. TB laryngitis with supraglottitis posed a significant airway risk, while severe malnutrition contributed to poor fetal growth. Early involvement of a multidisciplinary team (O&G, ENT, anaesthesia, respiratory, paediatrics) facilitated appropriate timing of delivery and maternal stabilisation. Nutritional rehabilitation and ongoing TB therapy remain key to postnatal recovery. This case highlights the importance of clinical vigilance and coordinated care in managing high-risk obstetric patients with systemic infections.

# The relationship between anxiety levels and cortisol concentrations in young and elderly primigravida women at Makassar, South Sulawesi, Indonesia

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## ABSTRACT

**Introduction:** Pregnancy, particularly in young (<20 years) and elderly (≥35 years) primigravidas, is often associated with increased psychological stress. Anxiety during pregnancy is a common condition that may affect maternal well-being and fetal development. Cortisol, a key stress hormone, has been suggested as a biological marker of anxiety. However, limited studies have explored the relationship between anxiety and cortisol levels specifically in these age groups. **Objective:** To determine the correlation between anxiety levels and cortisol concentrations in young and elderly primigravidas. **Materials and Methods:**This cross-sectional analytical study involved primigravida patients meeting inclusion criteria at two referral hospitals. Anxiety levels were assessed using the Perinatal Anxiety Screening Scale (PASS), while serum cortisol levels were measured using enzyme-linked immunosorbent assay (ELISA). Data were analysed using Pearson's correlation and linear regression. **Results:** Elderly primigravidas showed significantly higher PASS scores compared to young primigravidas. A statistically significant positive correlation was found between anxiety levels and cortisol concentrations ($p<0.05$), with moderate correlation strength. Linear regression indicated that anxiety levels were a significant predictor of increased cortisol concentrations, particularly among elderly primigravidas. **Conclusion:** There is a significant positive correlation between anxiety and cortisol levels in both young and elderly primigravidas, with a higher impact observed in the elderly group. Monitoring psychological well-being and cortisol biomarkers during pregnancy, especially in high-risk age groups, is important to anticipate complications and support maternal-fetal health.

# A rare encounter with small cell carcinoma of the ovary, hypercalcemic type (SCCOHT): Diagnostic dilemma and management approach

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## ABSTRACT

**Introduction:** Small-cell carcinoma of the ovary, hypercalcemic type, is a rare and aggressive ovarian malignancy accounting for less than 0.01% of all ovarian tumours. It predominantly affects young women, with a median age of 24 years, and is associated with hypercalcemia in approximately two-thirds of cases. The disease is driven by inactivating mutations in the SMARCA4 gene. Due to its rarity, there is no standardised treatment protocol, and long-term survival remains poor even in early-stage disease. **Case Description:** A 26-year-old woman with no significant medical history presented with a 2-week history of rapidly increasing abdominal distention. Examination revealed a firm suprapubic mass equivalent to a 28-week gravid uterus. CT imaging identified a large solid-cystic pelvic mass (10.6 × 21.8 × 23.6 cm) without ascites or metastases. Laboratory investigations showed asymptomatic hypercalcemia (4.91 mmol/L), which was managed with hydration and bisphosphonates. Surgical resection was performed. Histopathology was inconclusive for common ovarian tumours but suggested SCCOHT based on immunohistochemical findings (WT1, CD99, CD10, calretinin, p16, CKAE1/AE3, and synaptophysin positivity). Genetic testing for SMARCA4 was initiated. She received three cycles of BEP chemotherapy but developed an allergic reaction to etoposide. Residual FDG-avid disease was noted on PET scan. She completed six cycles of carboplatin and paclitaxel, later developing a pulmonary embolism treated with rivaroxaban. **Discussion:** This case illustrates the diagnostic and therapeutic complexity of SCCOHT. Despite aggressive management, the prognosis remains poor. Hypercalcemia in young women with adnexal masses should raise suspicion for SCCOHT. Multidisciplinary care and continued reporting of such rare cases are crucial to advance understanding and develop evidence-based treatment strategies.

# Seeing beyond obstetrics: Interventional radiology in the management of orbital lymphangioma during pregnancy

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## ABSTRACT

**Introduction:** Orbital lymphangiomas are rare congenital vascular malformations with limited systemic connection, often presenting with intralesional haemorrhage and sudden vision loss. Their occurrence in pregnancy is exceptionally rare, complicating management due to fetal safety considerations and contraindications to first-line treatments such as sclerotherapy. **Case Description:** We report a case of a pregnant woman who presented with progressive right eye proptosis, later diagnosed with a haemorrhagic venolymphatic orbital malformation. MRI confirmed a fluid-fluid level lesion with mass effect and no intracranial extension. Within days, the patient developed high intraocular pressure and loss of vision due to central retinal artery occlusion. An urgent multidisciplinary team meeting (MFM, IR, Ophthalmology and Anaesthesia) was convened. Due to the contraindication of intralesional bleomycin in pregnancy, the patient underwent interventional radiology-guided intraorbital embolisation using gel foam and aspiration of haemorrhagic content with fetal monitoring and radiation shielding. The procedure was uneventful and resulted in stabilisation of the lesion. The pregnancy was successfully prolonged, and an elective lower segment caesarean section (LSCS) with intrauterine contraceptive device (IUCD) insertion was performed at 37 weeks due to breech. **Discussion:** This is among the first reported cases where IR was safely employed in the antenatal management of orbital lymphangioma in pregnancy. It underscores the critical importance of timely multidisciplinary discussion and planning in the management of complex non-obstetric pathologies during pregnancy, ensuring both maternal and fetal safety.

# Unusual pelvic vascular anatomy: Post delivery hematoma arising from middle sacral artery anastomosis with middle rectal arteries

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## ABSTRACT

**Introduction:** Postpartum hematomas are uncommon but potentially serious complications that may result from trauma, vascular injury, or anatomical variations. While most pelvic hematomas arise from branches of the internal iliac artery, bleeding from atypical vascular sources such as the middle sacral artery is rarely reported. The middle sacral artery, a small vessel arising from the posterior aorta, can form anastomoses with adjacent pelvic arteries, including the middle rectal arteries. These connections, though uncommon, may become clinically significant in cases of obstetric trauma. We report a rare case of postpartum haemorrhage secondary to a hematoma arising from a middle sacral–middle rectal artery anastomosis. **Case Description:** A 27-year-old primigravida at 38+2 weeks gestation delivered vaginally following a precipitated labour. Nine hours postpartum, she developed severe perineal pain and hemodynamic instability (BP 85/43 mmHg, HR 130 bpm). Examination revealed a contracted, left-deviated uterus and a right vulvar hematoma. Ultrasound demonstrated a 9.8 × 8.7 cm vaginal hematoma with minimal free fluid. Laboratory tests showed a haemoglobin of 3.9 g/dL. She received 4 units each of packed red cells, FFP, platelets, and cryoprecipitate. CT angiography identified the bleeding source, and selective embolisation of a terminal branch of the middle sacral artery was performed at a tertiary centre. **Discussion:** This case illustrates the importance of considering rare vascular variants in unexplained postpartum bleeding. CT angiography was essential in diagnosis, and interventional radiology enabled successful haemorrhage control. Awareness of pelvic vascular anatomy and early multidisciplinary intervention are crucial in managing atypical sources of postpartum haemorrhage.

# Beyond the usual suspects: Acquired haemophilia A as a cause of secondary postpartum haemorrhage

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## ABSTRACT

**Introduction:** Postpartum acquired haemophilia A (PAHA) is an uncommon autoimmune disorder in which women develop abnormal bleeding, commonly occurring 1 to 4 months after childbirth. **Case Description:** We report a 27-year-old Para 1 that presented to us with excessive per vaginal bleeding at day 7 post vaginal delivery. During this encounter, she was stable and investigations were unremarkable, thus, she was treated for endometritis. However, subsequently she had multiple admission for excessive per vaginal bleeding that requires transfusion of blood products. During her 2nd admission, her haemoglobin dropped to 6.4 mg/dL, ultrasonography showed collection in the uterus, and she underwent suction and curettage and was discharged well, but returned with similar symptoms. Subsequently, PAHA was suspected in view of isolated elevation of activated partial thromboplastin time (aPTT) with normal prothrombin time (PT) & international normalised ratio (INR). Haematological services were consulted for coagulopathy evaluation and mixing study, factor assay and inhibitor level were performed, thus confirming the diagnosis of PAHA. She was started on steroids, and hemostasis was achieved. **Discussion:** PAHA is a rare cause of postpartum haemorrhage (PPH), and delayed diagnosis is common. An isolated prolonged aPTT should prompt further investigation into haematological disorders in patients with refractory bleeding. Early detection and diagnosis are crucial to reduce maternal morbidity related to haemorrhage.

# The diagnostic accuracy between the insulin-like growth factor binding protein-1 (IGFBP-1) immunoassay test and the Nitrazine test in detecting premature rupture of membranes

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## ABSTRACT

**Introduction:** Premature rupture of membranes (PROM) is the amniotic sac rupture before the onset of labour and accounts for one-third of all preterm births. Various diagnostic methods have been developed, including PAMG-1, IGFBP-1, and AFP, however not fully replaced the Nitrazine test, vaginal pH measurement, and the Phenol test. **Objectives:** This study aims to compare the diagnostic accuracy of the IGFBP-1 test with the Nitrazine test. **Materials and Methods:** This study is a multicenter research conducted in the cities of Makassar, Gowa, and Maros, using a comparative approach with a cross-sectional design on pregnant women with suspected PROM, examined using the IGFBP-1 test and the Nitrazine test. **Results:** Cases of PROM were more common among pregnant women aged 20-30 years (61%), those with multiparous pregnancies (46%), and at a gestational age of 28-32 weeks (71%). The Nitrazine test showed a sensitivity of 82%, specificity of 70%, positive predictive value (PPV) of 73.2%, and negative predictive value (NPV) of 79.5%. In comparison, the IGFBP-1 test had a sensitivity of 90%, specificity of 92%, PPV of 91.8%, and NPV of 90.2%. **Conclusion:** The IGFBP-1 test demonstrates superior diagnostic performance compared to the Nitrazine test, with higher sensitivity and specificity, as well as better PPV and NVP.

# Not just heartburn: The hidden dangers of chest pain in pregnancy: A rare case report at a district hospital

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## ABSTRACT

**Introduction:** Although acute myocardial infarction (AMI) in pregnancy is rare, with an incidence of 0.06 to 10 per 100,000 pregnancies, it poses serious risks. Risk factors such as obesity, advanced maternal age, comorbidities, and the hypercoagulable state of pregnancy can increase the likelihood of acute coronary syndrome (ACS). **Case Description:** We present a case of a 38-year-old Indian woman, G1P0, at 4 weeks of amenorrhea. She had no known medical conditions and was a non-smoker, but had a strong family history of myocardial infarction. She presented with sudden chest pain and diaphoresis. Initially treated by a general practitioner for gastritis, she returned the same day with recurrent pain and was admitted to the Emergency Department. Her vital signs were stable, but ECG revealed ST elevation in V2–V5. Intravenous Streptokinase was administered, relieving her symptoms. Follow-up ECG showed sinus rhythm. She was referred to a tertiary centre where angiography revealed occlusion in the left anterior descending artery, successfully treated with stenting. The patient continued her pregnancy without complications and delivered via caesarean section at 37 weeks. **Discussion:** Chest pain in pregnancy requires careful evaluation to rule out life-threatening causes such as ACS, pulmonary embolism, or aortic dissection. Pregnancy-related physiological changes increase thrombotic risk. A high index of suspicion is essential. Multidisciplinary management involving obstetricians, cardiologists, and anaesthesiologists is critical to optimising maternal and fetal outcomes.

# Familial hypercholesterolemia in pregnancy: Management challenges

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## ABSTRACT

**Introduction:** Familial hypercholesterolemia (FH) affects approximately 1 in 250 individuals worldwide and is characterised by markedly elevated low-density lipoprotein cholesterol (LDL-C) levels, leading to premature atherosclerotic cardiovascular disease. During pregnancy, physiological hyperlipidemia occurs to support fetal development. However, in women with FH, this compounded lipid burden increases the risk of vascular complications, including myocardial infarction, thromboembolism, and stroke. Lipid-lowering agents such as statins can sometimes be difficult to improve lipid profile hence, other safer strategies are needed. **Case Description:** We report a 41-year-old primigravida with FH diagnosed a decade earlier and was maintained on monthly lipoprotein apheresis via a left distal arteriovenous fistula. She had a background of two-vessel coronary artery disease, previously treated with percutaneous coronary intervention. At booking (10 weeks' gestation), she was also found to have protein S deficiency. Multidisciplinary care involved cardiology, nephrology, and haematology teams. She received prophylactic low-molecular-weight heparin, aspirin, and continued monthly lipid apheresis until 26 weeks, after which the frequency was increased to biweekly due to rising LDL-C levels. At 26 weeks, pravastatin therapy was reintroduced. Serial fetal assessments showed fetal growth trajectory at the lower centile. Non-invasive prenatal testing and nuchal translucency screening were normal. Pregnancy surveillance and delivery planning were coordinated via multidisciplinary discussions. **Discussion:** Managing FH in pregnancy necessitates individualised care. The use of statins, which were previously cautioned during pregnancy, has now been shown to be safe. Lipoprotein apheresis remains the cornerstone of therapy in severe cases, especially when pharmacotherapy is limited. This case highlights the complexity of FH management in pregnancy and accentuates the need for multidisciplinary strategies to optimise maternal and fetal outcomes.

# Strategies in managing idiopathic intracranial hypertension in pregnancy: A case report

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## ABSTRACT

**Introduction:** Idiopathic intracranial hypertension (IIH) is a rare disorder in pregnancy, with an estimated prevalence of 0.02-1.6%. The condition is characterised by raised intracranial pressure without radiological or laboratory evidence of an underlying cause. Obesity remains the strongest risk factor. In pregnancy, the safety concerns of pharmacotherapy pose management challenges, as symptoms may mimic or overlap with conditions such as preeclampsia. IIH in pregnancy is associated with increased risk of preterm birth, hypertensive disorders, and fetal anomalies. **Case Description:** A 29-year-old primigravida with stable systemic lupus erythematosus (SLE) presented at 10 weeks' gestation. She had been diagnosed with IIH prior, confirmed by papilledema, normal brain imaging, and a lumbar puncture with opening pressure of 29 $cmH_2O$. Acetazolamide 500 mg twice daily was initiated preconceptionally. In early pregnancy, the drug was withheld but reinstated after symptom exacerbation. At 30 weeks, she developed blurred vision and central scotoma. MRI/MRV were normal, and multidisciplinary consensus supported continuation of acetazolamide. At 32 weeks, she underwent emergency caesarean for fetal compromise. A lumbar puncture during spinal anaesthesia revealed an opening pressure of 37 $cmH_2O$. Postpartum, her medication was titrated for symptom control. **Discussion:** Management of IIH in pregnancy requires balancing maternal neurological stability with fetal safety. While data on acetazolamide use in pregnancy are limited, emerging evidence supports its relative safety. Therapeutic lumbar puncture may be needed in refractory cases. Postpartum relapse risk stresses the importance of close monitoring. Individualised, multidisciplinary care is essential in managing IIH during pregnancy and lactation.

# Placenta percreta: A case report on the role of rotational thromboelastometry (ROTEM) and intraoperative cell salvage in a caesarean hysterectomy

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## ABSTRACT

**Introduction:** According to the World Health Organization (WHO), caesarean section (CS) rates have tripled from 7% in the year 1990 to 21% (1 in 5 of all childbirths) and is seen to increase further up to 29% in the year 2030 overriding the caesarean section acceptance rate worldwide. With the increase of CS, the prevalence and the incidence of placenta accreta spectrum (PAS) disorder continue to rise. Although caesarean hysterectomies (CH) are the mainstay of management for PAS, the main cause of morbidity and mortality is life-threatening haemorrhage associated with CH. Multiple strategies, such as planned preterm CH, refined operative techniques and prophylactic internal iliac artery balloon occlusion, have been implemented to minimise the bleeding intraoperatively in a CH. However, despite multiple strategies, roles of ROTEM and intraoperative cell salvage in a CH for PAS are minimally understood. **Case Description:** We present the case of a 38-year-old pregnant woman with a previous caesarean section diagnosed with placenta previa and suspected placenta percreta on magnetic resonance imaging (MRI) after presenting with two episodes of antepartum haemorrhage at 29 weeks. A preoperative, multidisciplinary team was designed, involving the anesthesiologist, interventional radiologist, transfusionist, paediatrics and the urology team. The caesarean section was performed at 34 weeks of gestation. Prophylactic internal iliac artery balloon occlusion was successfully performed, ROTEM was conducted, and intraoperatively cell-salvaged bloods were transfused to minimise the blood loss in the caesarean hysterectomy. **Discussion:** ROTEM and cell salvage are essential tools used in CH alongside balloon tamponade, which aims to reduce intraoperative blood loss and improve haemostatic resuscitation. ROTEM provides value on the coagulation status of patients and prevents unnecessary transfusion. Intraoperative cell salvage is an autologous blood transfusion which reduces the need for donor blood (allogenic) and improves oxygen delivery in patients. Although cost effectiveness and safety of these tools remain subjects of ongoing debate, current evidence supports their use as safe and beneficial, which significantly minimises blood loss for patients with placenta percreta undergoing CH.

# Comparing Nystatin and betel leaf extract action towards the growth of *Candida albicans*

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## ABSTRACT

**Introduction:** *Candida albicans* infection of the vagina is one of the commonest fungal which causes distress among women. In Malaysia, Nystatin pessary is commonly used to treat *Candida Albicans* infection. However, traditionally, women have been known to use Piper betel (Sireh) leaves for a quick relief. We compare the effect of Nystatin pessary and betel leaf extract in lab-grown *Candida Albicans*. **Materials and Methods:** The active ingredients of Piper betel leaves was extracted and tested against lab-grown *Candida albicans* on Saboruad Dextrose Agar (SDA). Active ingredients from Piper betel leaves were extracted at concentrations of 0.2545%, 0.1273%, 0.0636%, and 0.0318%, respectively. We also tested on Nystatin, a chemically produced anti-fungal. **Results:** The betel leaf extract confirmed significant anti-fungal activities against *Candida albicans*. In SDA medium, Piper betel extract had a maximum 29.0 mm inhibition zone at 0.2545% concentration. However, 10 mg Nystatin only has 8.0 mm of inhibition zone. The p-value is 0.000*, indicating a highly significant difference compared to Nystatin. **Conclusion:** Betel leaf extract has good anti-fungal effects against *Candida albicans* and is better than Nystatin.

# Failed medical termination at second trimester due to a massive uterine fibroid: A rare case requiring surgical myomectomy for fetal bone extraction

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## ABSTRACT

**Introduction:** Termination of pregnancy (TOP) for fetal anomalies is typically managed medically in the second trimester. However, large uterine fibroids can distort uterine anatomy, complicating medical evacuation. **Case Description:** We report a rare case of a 38-year-old Gravida 2 Para 1 woman who underwent TOP at 21 weeks' gestation for holoprosencephaly, with a massive right broad ligament and cervical fibroid and a prior caesarean section. Medical therapy using Cervagem (five cycles) and misoprostol (one cycle) led to placental expulsion, but fetal bones were retained. A month later, hysteroscopy and ultrasound-guided evacuation revealed fetal bone fragments embedded within the endometrial cavity. Retrieval was difficult due to severe anatomical distortion and limited cervical access. Multiple courses of antibiotic coverage were given. The patient later received a single dose of subcutaneous Zoladex 3.6 mg and underwent elective laparotomy myomectomy three months post-TOP. Intraoperatively, a right broad ligament fibroid measuring 20 × 15 cm was identified, extending into the right lateral cervix, with fetal bones embedded within the fibroid. The fibroid was excised, the uterus preserved, and recovery was uneventful. **Discussion:** Although rare, surgical myomectomy may be required following failed medical TOP when fibroids cause significant distortion of the uterine anatomy, hindering fetal expulsion. In such cases, the risk of infection must be carefully weighed against the timing and feasibility of surgical intervention. Multidisciplinary planning is essential for safe and effective management.

# A silent threat: Clear cell carcinoma within a benign-appearing endometrial polyp

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## ABSTRACT

**Introduction:** Endometrial polyps are typically benign, but in postmenopausal women, the risk of malignancy increases. Clear cell carcinoma (CCC) of the endometrium is a rare and aggressive subtype, comprising 1-6% of endometrial cancers. Its occurrence within a polyp, especially without myometrial invasion, is exceedingly uncommon. **Case Description:** We report the case of a 52-year-old postmenopausal Malay woman who presented with abnormal uterine bleeding. Initial Pipelle biopsy suggested a benign endometrial polyp, and she was treated with medroxyprogesterone acetate. Due to persistent symptoms, she underwent total laparoscopic hysterectomy with bilateral salpingo-oophorectomy (TLHBSO). Gross examination revealed a 40 x 20 x 10 mm polyp near the uterine fundus. Histopathology confirmed clear cell carcinoma confined to the polyp, with no evidence of myometrial invasion. Immunohistochemistry showed diffuse AMACR and PAX8 positivity, patchy Napsin A and estrogen receptor expression, null-type p53 staining, and a low Ki-67 index (<5%). No malignancy was detected in the remaining uterus, ovaries, or fallopian tubes. **Discussion:** This case underscores the rare but significant potential for malignant transformation of endometrial polyps, particularly in postmenopausal women. While most polyps are benign, risk factors including advanced age, postmenopausal status, abnormal uterine bleeding, obesity, larger polyp size, and hormone-related conditions such as PCOS or tamoxifen use have been associated with increased malignant risk. This case highlights the importance of maintaining a high index of suspicion and considering early surgical intervention in symptomatic postmenopausal women, even when initial findings appear benign. Long-term follow-up is crucial due to the uncertain behaviour of polyp-confined malignancies.

# Successful pregnancy with very low ovarian reserve with controlled ovarian stimulation with urinary gonadotropins: A case report

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## ABSTRACT

**Introduction:** Low ovarian reserve is an important factor when fertility treatment is contemplated.It makes the treatment very difficult, and the success rate is very low in such patients. Some even consider whether it is cost-effective to do fertility treatment in these kinds of patients. **Case Description:** Mrs MV, 36 years of age, married for 10 years, had undergone fertility treatments in various fertility centre. Her antimullerian hormone was very low (AMH) 0.1 pmol. She was advised for adoption or gamate donor programme by other centres. However, she was not keen on these, thus consulted us for doing a controlled ovarian stimulation (COS) on herself. The outcome of COS with very low AMH was counselled to the couple. On examination she had a huge multiloculated right ovarian cyst (20 x 25 cm), her tumour markers & CT scan were normal & did not show any malignancy signs. After proper counselling the couple agreed for a surgery. A laparoscopic right salpingooherectomy was done and she recovered well. She also had a left ovarian cystectomy in a different centre few years ago. The couple were advised for acupuncture & given some supplements as a preparation for IVF. A short antagonist protocol was planned & she was started on urinary FSH 300 iu (Folliculin) & LH 150 iu (HUMOG) from day 2 of her menses. She responded well for her low ovarian reserve. There were 2 good-sized follicles measuring 18 x 20 mm on her left ovary. Her oocyte pick-up was uneventful with 2 good oocytes. ICSI was done & there were 2 good grade embryos on day 3. The couple refused for blastocyst culture and PGT A as they were afraid there may not be any embryos left for transfer. Thus, both embryos were frozen on day 3. Subsequently, a frozen embryo was done with single embryo transfer. She was pregnant, and her antenatal period was uneventful. Her non-invasive prenatal test and anomaly scan were normal. However, she developed pregnancy-induced hypertension with gestational diabetes in the 3rd trimester. Both conditions were well controlled with medications until 36 weeks, where she developed preeclampsia and the baby (3.8 kg) was delivered via emergency caesarean section. The blood pressure was well controlled, and the mother was discharged well with the baby. Two years later, she conceived naturally and delivered another baby. **Discussion:** Ovarian reserve may begin to decrease in a woman as age increases, and it decreases rapidly after age 40. Ovarian gynaecological conditions or prior ovarian surgery also decreases reserve. Although increasing age is a risk factor for diminished ovarian reserve, age and diminished ovarian reserve are each independent predictors of infertility and thus of a poorer response to fertility treatment. However, diminished ovarian reserve does not mean that pregnancy is impossible. With proper counselling, guidance and treatment patients with very low ovarian reserve also can achieve their dreams.

# Impact of maternal age on pregnancy outcome & embryo chromosomal status in ART cycles

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## ABSTRACT

**Objective:** To evaluate the chromosomal status of embryos through preimplantation genetic testing (PGT-A) and assess pregnancy outcomes following frozen embryo transfer (FET) across different maternal age groups after IVF and PGT(A) at Ram Fertility & Women's Specialist Clinic and Genesis IVF and Women's Specialist Centre Penang, in the year 2024. **Materials and Methods:** A retrospective analysis was conducted on 3,381 embryos biopsied for PGT-A in 2024, stratified by maternal age groups: <30, 30-34, 35-39, and ≥40 years. Embryos were categorised as euploid, aneuploid, or mosaic. Additionally, pregnancy outcomes were analysed for 1,061 embryo transfers, assessing beta-positive rates, clinical pregnancy rates, and miscarriage rates. **Results:** The overall euploid rate was 43.1%, declining with maternal age (55.2% in <30 vs. 14.1% in ≥40). Aneuploidy increased with age, from 16.2% in <30 to 73.3% in ≥40. Mosaic rates were highest in the youngest group (28.6%) and lowest in the oldest (12.6%). From 1,061 FETs, the overall beta-positive rate was 73.4%, and the clinical pregnancy rate was 69.6%. Pregnancy rates remained consistently high across age groups: 67.9%–72.2%. The overall miscarriage rate was 7.9%, with the highest in women aged ≥40 (14.6%). **Conclusion:** Embryo chromosomal integrity is significantly influenced by maternal age, with increasing aneuploidy and decreasing euploid rates in older women. Despite this, consistently increased clinical pregnancy outcomes across age groups demonstrate the effectiveness of PGT-A and targeted embryo selection in optimising IVF success rates. These findings reinforce the importance of genetic screening and individualised treatment strategies to improve outcomes across all age groups.

# Clinical review of Pergoveris use in an advanced age woman

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## ABSTRACT

**Introduction:** This is a case review analysing the use of Pergoveris (Follitropin alfa / Lutropin alfa Ratio 2:1) in seven ovarian stimulation cycles for a 41-year-old patient over a year duration. Her BMI was 21, AMH 4.7 pmol/L. Her husband was a 45-year-old with borderline semen analysis (17 million/ml, 25 motile, 2 % normal morphology). **Objectives:** The objective of this review is to 1. compare the difference between the antagonist protocol and PPOS (Progesterone Primed Ovarian Stimulation) protocol, 2. The final outcome in aspect of fertilisation, blastocyst grading and aneuploidy status. **Materials and Methods:** This is a retrospective review of the patient's records, andrology and embryology records. Two cycles were PPOS, and 5 cycles were antagonist using the fixed start (SC Cetrotide 0.25 mg daily). Total Pergoveris used in each cycle was 3000 IU over 10 10-day duration. Double trigger was used in all cycles (SC Ovidrel 250 ug and Decapeptyl 0.1 mg). The PPOS cycle resulted in 10 oocytes, while the antagonist cycle resulted in 8 oocytes. The fertilisation rates were 50% or less. Each cycle only resulted in 1 blastocyst at day 6 or day 7. The first 4 cycles were all aneuploid. We are currently waiting for the final PGTA report of the last 3 cycles. **Results:** There was no difference in between the PPOS and antagonist cycle outcome. Overall fertilisation rate was low, with only 1 blastocyst. Till to date no euploid embryo. **Conclusion:** Even though the oocyte yield had improved with the use of LH but there was no significant effect on fertilisation rate or final blastocyst outcome. There seems to be no effect on ploidy status. PPOS protocol seems to be equally effective as antagonist protocol. Further local studies would be needed in future to analyse the role of LH in advanced age women.

# Undiagnosed transient anaemia polycythaemia sequence in small for gestational age monochorionic twin pregnancy: The importance of MCA PSV monitoring

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## ABSTRACT

**Introduction:** Twin Anaemia Polycythemia Sequence (TAPS) is a rare complication of monochorionic twin pregnancies caused by slow intertwin transfusion through minuscule vascular anastomoses. **Case Description:** We report a case of a 29-year-old woman with a monochorionic diamniotic twin pregnancy. Routine monitoring showed no significant discordance in amniotic fluid or umbilical artery Doppler, though Twin A was small for gestational age. MCA peak systolic velocity (MCA PSV) was not assessed. At 36+6 weeks, an emergency caesarean was performed due to CTG abnormalities. Twin A was pale with haemoglobin 5 g/dL and cardiomegaly, while Twin B was plethoric with haemoglobin 27.5 g/dL, which the findings were consistent with TAPS. **Discussion:** This case illustrates the diagnostic limitations when MCA PSV is not routinely performed and highlights the need to include MCA PSV monitoring in surveillance of monochorionic twins, particularly when one or both of the fetuses is growth restricted. Early detection is crucial to reduce morbidity and guide timely intervention.

# Preoperative urodynamic study patterns and their correlation with lower urinary tract symptoms: A 13-year retrospective analysis from a tertiary urogynaecology centre

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## ABSTRACT

**Introduction:** Lower urinary tract symptoms (LUTS) are commonly reported among women presenting to the urogynaecology clinic. Pre-operative urodynamic studies (UDS) play a key role in evaluating bladder function and tailoring appropriate surgical management, yet their clinical utility remains debated. **Objective:** This study aimed to describe the distribution of urodynamic diagnoses and assess the correlation between pre-operative UDS findings and reported symptoms among women undergoing evaluation for pelvic floor disorders at MHKL **Materials and Methods:** We conducted a retrospective review of secondary data from the urogynaecology registry at MHKL, covering cases from 1st September 2006 to 31st August 2019. A total of 1,571 women underwent UDS as part of their pre-operative work-up. Demographic data, LUTS and UDS parameters were analysed descriptively. **Results:** The median age of participants was 58 years (21 to 83). UDS revealed urodynamic stress incontinence (USI) in 613 patients (39.0%), detrusor overactivity in 13 (0.82%), mixed detrusor overactivity and urodynamic stress incontinence in 30 (1.9%), and normal or stable bladder findings in 915 (58.2%). Additionally, 558 patients demonstrated a urinary flow rate more or equal 15 ml/s, while 437 had a maximum cystometric capacity more or equal (MCC) of 350ml. Symptomatically, nocturia (76%) and stress urinary incontinence (53%) were most prevalent. There was a strong correlation between clinically reported SUI and urodynamic USI ($p < 0.05$), and there was a statistically significant association between poor flow and reduced Qmax < 15 mls/ sec ($p<0.05$). The rate of occult SUI is 28.4%. **Conclusion:** Pre-operative urodynamic assessment demonstrates good correlation with reported LUTS, particularly poor flow and stress urinary incontinence, supporting their role in refining diagnosis and surgical planning. In addition, the high rate of occult SUI highlights the importance of UDS in detecting hidden bladder dysfunction.