Section III: Oncology

Moderator:	陳啟豪 Chi-Hau Chen 臺大醫院
	劉錦成 Kim-Seng Law 童綜合醫院

時間 Time	題目 Topic	演講者 Speaker
14:00-14:25 Obgyn-S07	Ultrasound Differentiation of Benign Uterine Leiomyoma and Uterine Sarcoma	陳威君 Wei-Chun Chen 林口長庚醫院
14:25-14:50 Obgyn-S08	Refining Diagnosis of Myometrial Lesions with Ultrasound	沈鴻 Hung Shen 新竹臺大分院
14:50-15:15 Obgyn-09	Ultrasound in Gynecological Oncology of Ovary	陳嘉維 Chia-Wei Chen 雙和醫院
15:15-15:25	General Discussion	
15:25-15:35	Coffee Break	

Section IV: Urology

Moderator:	張廷禎 Ting-Chen Chang 臺大醫院
	黃文助 Wen-Chu Huang 臺北馬偕醫院

時間 Time	題目 Topic	演講者 Speaker
15:35-16:00 Obgyn-S10	Clinical Application of Transperineal Ultrasound in Urogynecology	陳怡婷 Yi-Ting Chen 臺大醫院
16:00-16:25 Obgyn-S11	Dynamic 4D Transperineal Ultrasound to Predict Outcomes and Complications After Single-Incision Mid-Urethral Sling with a Tension-Releasing Suture: A Narrative Review	謝梓翔 Tzu-Hsiang Hsieh 林口長庚醫院
16:25-16:50 Obgyn-S12	Ultrasound for Obstetric Anal Sphincter Injury (OASI): Foundations, Techniques, Diagnostic Accuracy, and Clinical Pathways	周怡君 Yi-Chun Chou 林口長庚醫院
16:50-17:00	General Discussion	

ePoster

Obgyn-P01	Sonography Pattern and Treatment of Cesarean Section Scar Endometriosis – Case Report	蔡牧青 Mu-Ching Tsai 亞東紀念醫院
Obgyn-P02	Prenatal Ultrasound Diagnosis of a Fetal Cervical Teratoma: A Case Report	陳立珣 Li-Hsun Chen 秀傳亞洲遠距微創手術中心

OBGYN-S07

Ultrasound Differentiation of Benign Uterine Leiomyoma and Uterine Sarcoma

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Uterine leiomyomas are highly prevalent, whereas uterine sarcomas—though uncommon—remain a critical diagnostic consideration when assessing myometrial masses. Ultrasonography is the most immediate and widely accessible imaging tool for gynecologists. This lecture adopts the pathology spectrum of uterine smooth-muscle tumors as an organizing framework and correlates it with the sonographic appearances of common degenerative patterns. We synthesize practical discriminators between benign and malignant lesions — such as contour regularity, internal architecture, shadowing, and the distribution of vascularity—and clarify the role of Doppler and other ancillary indices as quantitative markers of lesion activity and longitudinal trends rather than stand-alone classifiers. Escalation criteria and key interpretive points for MRI are outlined to strengthen diagnostic confidence. The session culminates in a tiered US-to-MRI clinical pathway for the evaluation and management of suspected fibroids versus sarcoma, emphasizing patient safety and the avoidance of morcellation when malignancy cannot be excluded.

OBGYN-S08

Refining Diagnosis of Myometrial Lesions with Ultrasound

Hung Shen
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Differentiating benign from malignant uterine smooth muscle tumors is challenging. We share a recent study on testing a clinical and ultrasound-based algorithm to classify women with myometrial lesions into risk groups. The approach highlighted specific ultrasound features that help predict malignancy and showed good accuracy, suggesting it may guide more personalized patient management.

OBGYN-S09

Ultrasound in Gynecological Oncology of Ovary

Chia Wei Chen
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Ultrasound examination is the primary imaging modality for evaluating a wide range of female pelvic symptomatology, and is often the first imaging test to detect a gynecologic malignancy. Ultrasound imaging is particularly useful for evaluating the neoplasms of ovary and characterizing ovarian lesions. Surveillance using serial ultrasonography is a reasonable alternative that can be used to discover if changes in the ovarian abnormality will occur that favor either a malignant or benign interpretation. Several ovarian cancer screening trials have had extensive experiences with changes in subclinical ovarian abnormalities in normal women that can define growth, stability or resolution and give some idea of the time frame over which changes occur. The present report examines these experiences and relates them to the current understanding of ovarian cancer ontology, presenting arguments related to the benefits of surveillance.

OBGYN-S10

Clinical Application of Transperineal Ultrasound in Urogynecology

Yi-Ting Chen
National Taiwan university hospital, Yunlin branch

Transperineal ultrasound has emerged as a reliable and reproducible imaging modality for the comprehensive evaluation of pelvic floor disorders. It provides two-dimensional sagittal views of the bladder neck, urethra, and pelvic floor, as well as coronal views of the anal canal. In addition, three- and four-dimensional imaging allow detailed visualization of the genital hiatus and anal canal, enabling dynamic assessment of urethral morphology, detrusor wall thickness, and post-void residual volumes. This modality plays a crucial role in the postpartum evaluation of maternal birth trauma, including the detection of levator ani avulsion and obstetric anal sphincter injuries. Furthermore, transperineal ultrasound facilitates the identification and assessment of previously implanted vaginal mesh and midurethral slings, providing valuable information for clinical decision-making and patient counseling.

OBGYN-S11

Dynamic 4D Transperineal Ultrasound to Predict Outcomes and Complications after Single Incision Mid Urethral Sling with a Tension Releasing Suture: A Narrative Review

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Single incision mini slings (SIS) are widely used for female stress urinary incontinence (SUI). High quality randomized data demonstrate noninferiority of SIS vs standard mid urethral slings (MUS) for patient reported success at 15 months with durable similarity at 36 months, and a 2024 multicenter randomized trial in women undergoing native tissue vaginal prolapse repair shows noninferiority of concomitant SIS vs retropubic slings with comparable adverse events. Dynamic 4D transperineal ultrasound (TPUS) depicts tape position, depth, deformation, and motion during maneuvers. Across studies, mid urethral placement (≈50–75% of urethral length) and a tape to urethra distance (TUD) around 3–5 mm align with continence, whereas TUD <2–3 mm, persistent C shape morphology (Group III), or discordant tape–urethra motion are associated with obstruction/voiding dysfunction or persistent SUI. In SIS specific cohorts, tape–urethra movement concordance and stability of axial/sagittal angles distinguish asymptomatic from symptomatic patients, underscoring the value of dynamic biomarkers beyond static distances. Because SIS anchors typically cannot be re connected to the inserter once released, a tension releasing suture (TRS/"long loop") offers an office based, reversible means to alleviate early over tension without impairing continence in most series. We synthesize sonographic parameters, propose threshold guided interpretations, and present a TPUS first postoperative triage algorithm integrating TRS for timely de tensioning when indicated. Finally, we provide a checklist and an anonymized data template to help programs embed 4D TPUS and TRS into routine pathways while enabling local quality improvement and research.

Key words:

Stress urinary incontinence, Single incision sling, Transperineal ultrasound, 4D ultrasound, Tension releasing suture, Postoperative voiding dysfunction

OBGYN-S12

Ultrasound for Obstetric Anal Sphincter Injury (OASI): Foundations, Techniques, Diagnostic Accuracy, and Clinical Pathways

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Introduction and hypothesis:

Obstetric anal sphincter injury (OASI) remains a leading cause of postpartum anal

incontinence. Ultrasound is central to diagnosis, characterization, and follow up: endoanal ultrasound (EAUS) provides definitive structural assessment of the internal (IAS) and external anal sphincters (EAS), while transperineal/translabial ultrasound (TPUS/TLUS) offers accessible screening and longitudinal monitoring. We summarize (1) the physics and protocols of EAUS and TPUS/TLUS, (2) diagnostic performance and reporting standards, (3) optimal timing of imaging within OASI care pathways, and (4) how imaging informs decision making—including early re intervention and counselling for subsequent births. Recommendations are aligned with AIUM/IUGA practice parameters and major guidelines.

Methods:

Narrative synthesis of PubMed/EMBASE and guideline sites (2000–Aug 2025) using terms related to OASI, EAUS, TPUS/TLUS, postpartum care, and anorectal function. Priority was given to consensus/guidelines, systematic reviews/meta analyses, randomized/controlled studies, and large cohorts.

Results:

EAUS remains the reference standard for mapping EAS/IAS defects; 3D acquisition improves reproducibility. TPUS/TLUS shows high negative predictive value (NPV) to exclude significant defects but lower PPV for confirming defects, so abnormal exoanal findings should be verified by EAUS. Postnatal review at 6–12 weeks in specialized perineal/OASI clinics enables standardized assessment (symptoms, manometry, EAUS ± TPUS), targeted pelvic floor therapy, and individualized counselling for future deliveries. TUI criteria (e.g., ≥30° defect in ≥4/6 slices) standardize TPUS interpretation. EAUS/manometry findings correlate with symptoms and help stratify risk before subsequent pregnancies. MRI complements EAUS in complex scarring/atrophy.

Conclusions:

A practical, tiered pathway—TPUS/TLUS to screen and follow; EAUS for definitive mapping; selective MRI for complex cases—delivers evidence based, patient centred care. Standardized acquisition/reporting (AIUM/IUGA) and audit in dedicated OASI clinics improve quality and research comparability.

Key words:

Obstetric anal sphincter injury, Endoanal ultrasound, Transperineal ultrasound, Tomographic ultrasound imaging, Postpartum, Anal incontinence

OBGYN-P01

Sonography Pattern and Treatment of Cesarean Section Scar Endometriosis – Case Report

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Background:

Caesarean-section scar endometriosis (CSSE) occurred through endometrial cell implantation along the route of a previous caesarean section (CS) surgery, with an incidence ranging from 0.2% to 0.95% of all caesarean delivery. Ultrasound imaging was frequently used as the first imaging technique as it is cheap and accessible. Histopathology from ultrasound-guided biopsy or excisional biopsy provides the definitive diagnosis. Surgical excision remained the mainstay of treatment, while minimally invasive, percutaneous therapies have also been applied successfully. This review aims to remind physicians with the seemingly uncommon condition of CSSE.

Materials and Methods:

We presented case reports of 2 women with caesarean-section scar endometriosis. Clinical courses, ultrasound imaging, and histopathology findings were reviewed.

Results:

The first case was a 32-year-old woman with previous CS 5 years ago. After uneventful postoperative and postpartum periods, she developed abdominal wall pain over CS scar. The ultrasonography revealed an irregular, hypoechoic mass with internal vascularity under color Doppler, approximately 1.5 cm in diameter at the border of the caesarean scar.

The second case was a 41-year-old woman who experienced CS twice. CS scar pain presented after a gap of over 3 years from last course, cyclically reoccurring with menstruation. The ultrasonography findings were similar to the first case, with a lesion sized 2.1 cm in diameter.

Both ultrasound findings were compatible with the impression of CSSE, which were further confirmed by surgical excision and histopathology.

CSSE was a speculated underestimated condition along with escalating prevalence of caesarean surgeries. Although upfront surgical excision serves as definite treatment, physicians should also get acquainted with the clinical features and ultrasonography findings.

Key words:

Caesarean-section scar endometriosis

OBGYN-P02

Prenatal Ultrasound Diagnosis of a Fetal Cervical Teratoma: A Case Report

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Objectives:

Cervical teratomas are rare tumors arising from pluripotent cells in the neck region, with an incidence of approximately 1 in 35,000 to 1 in 40,000 live births.

Upon improving computer science, ultrasound has become a non-invasive tool for detection of fetal malformations. We report a case of fetal cervical teratoma detected by 3D ultrasound.

Materials and methods:

A 27 year-old woman was suggested for an ultrasound exam for an intracardiac echogenic foci at 31 weeks gestation detected on routine prenatal ultrasound. The patient's medical history was unremarkable. But we mention the suspected fetal neck mass, in addition to the standard views, we apply three-dimensional surface rendering ultrasonography.

Results:

In the case, a large predominantly cystic mass was identified arising from the anterior aspect of the fetal neck. The mass measured approximately 58*50mm. The mass exhibited heterogeneous echotexture, well-defined borders with cystic components. The addition of 3D ultrasound could provide additional information and improve diagnostic performance.

Conclusion:

Following the ultrasound diagnosis, the patient was counseled regarding the nature of fetal cervical teratomas, and referred to a medical center to get management options. A multidisciplinary team, including maternal-fetal medicine specialists, neonatologists, pediatric surgeons, and anesthesiologists, was consulted. Accurate 3D ultrasound of the fetal tumor structure is paramount for optimizing prenatal counseling and postnatal care.