

ICS-EUS 2025 W7: A Multidisciplinary Approach to Obstetric Anal Sphincter Injury (OASI)

Workshop Chair: Linda Ferrari, United Kingdom 17 September 2025 13:00 - 14:30

Start	End	Topic	Speakers
13:00	13:15	Introduction to the workshop	Linda Ferrari
13:15	13:30	Epidemiology and definition of OASI	Linda Ferrari
13:30	13:50	Conservative treatment of multi-compartmental symptoms post OASI	Paula Igualada Martinez
13:50	14:00	Role of sphincteroplasty and other surgical procedures, including SNM, in managing OASI patients	Carlo Ratto
14:00	14:20	Endo anal scans and case discussions	Alexis Schizas
14:20	14:30	Questions	All

Description

Third- or fourth-degree tears, also known as an obstetric anal sphincter injury (OASI), can occur in 6 out of 100 births (6%) for first time mothers and less than 2 in 100 births (2%) of births for women who have had a vaginal birth before (1,2).

Presentations will include

- . Pathophysiology of Obstetric Anal Sphincter Injury
- Definition of Obstetric Anal Sphincter Injury (OASI)
- Definition of 1st, 2nd, 3rd, and 4th degree perineal tears (1)
- Significance of anal sphincter injuries in obstetrics
- Short and long-term implications for maternal health
- Incidence and Prevalence
- Epidemiology of OASI, statistics on OASI rates (varying by geography, maternal age, parity, etc.)
- Impact on Maternal Health
- Short-term morbidity: pain, incontinence
- Long-term morbidity: fecal and urinary incontinence, sexual dysfunction, mental health impact
- Anatomy of the Anal Sphincter Complex
- External anal sphincter (EAS) and internal anal sphincter (IAS)
- Pelvic floor muscle function and anatomy
- Mechanisms of Injury during Delivery
- Mechanisms of sphincter disruption during forceps or vacuum delivery
- Factors Contributing to Injury (3)
- Maternal factors (e.g., age, obesity, previous perineal trauma)
- Fetal factors (e.g., size, presentation)
- Obstetric interventions (e.g., episiotomy, instrumental delivery)

Ano-Rectal Physiology and Function (4,5)

- Normal Function of the Anal Sphincter and Diagnostic Tools for OASI
- Role of EAS, IAS, and pelvic floor muscles in continence
- Voluntary and involuntary control mechanism
- **Endoanal Ultrasound (EAUS)**
- Principles of endoanal ultrasound for assessing sphincter integrity
- Diagnostic accuracy and limitations in detecting anal sphincter defects
- Use of EAUS in routine postnatal care for identifying occult injuries
- Clinical Examination and Manometry
- Perineal and anal examination in the postpartum period
- Anorectal manometry for functional assessment

Management and treatment

- Importance of multidisciplinary involvement (e.g., obstetricians, surgeons, physiotherapists)
- Conservative management of multi-compartmental pelvic floor symptoms post OASI
- Role of neuromodulation and sphincteroplasty

- Pelvic floor rehabilitation post-injury: exercises, biofeedback therapy
- Importance of early physiotherapy in preventing long-term incontinence
- Role of continence support devices if required
- Psychological support for affected women
- Sexual Health and Recovery
- Addressing sexual dysfunction following OASI
- Role of pelvic floor therapy and counseling
- Role of multidisciplinary meeting to decide future mode of parturition (6)

Key Learning Points

- Multi-disciplinary approach to assess and manage patients with OASI post child birth.
- Patient pathways to manage multi-compartmental pelvic floor symptoms (7,8)
- Investigations for diagnosis of OASI and sphincter function
- Role of physiotherapists and conservative treatment
- Role of surgical options if conservative management fails including neuromodulation and sphincter repair
- Role of multidisciplinary team discussion regarding future mode of parturition.

Take Home Message

- Tailored investigations to characterise the severity of injury and deterioration of anal sphincter function
- To assess for multi-comaprtmental symptoms
- To take a multi-disciplinary approach in diagnosing and management of patients with 3rd and 4th degree tears

References

1. 3rd and 4th Degree Tears OASI

https://www.rcog.org.uk/for-the-public/perineal-tears-and-episiotomies-in-childbirth/third-and-fourth-degree-tears-oasi/#:~:text=Third%2D%20or%20fourth%2Ddegree%20tears,had%20a%20vaginal%20birth%20before.

2. The OASI Care Bundle

https://www.rcog.org.uk/about-us/quality-improvement-clinical-audit-and-research-projects/the-oasi-care-bundle/the-oasi-care-bundle/

- 3. Risk factors for obstetric anal sphincter injury recurrence: A systematic review and meta-analysis. Int J Gynaecol Obstet . 2022 Jul;158(1):27-34. doi: 10.1002/ijgo.13950.
- $4.\ An orectal\ manometry-\ -\ How\ to\ perform\ and\ interpret\ manometry.\ Continence\ Volume\ 10,\ June\ 2024,\ 101214.\ https://doi.org/10.1016/j.cont.2024.101214$
- 5. Pelvic floor investigations for anal incontinence: Are they useful to predict outcomes from conservative treatment? https://doi.org/10.1002/nau.25182
- 6. Multidisciplinary team (MDT) approach to pelvic floor disorders. June 2023Continence 7(4):100716. DOI:10.1016/j.cont.2023.100716
- 7. Obstetric anal sphincter injury and anal incontinence following vaginal birth: a systematic review and meta-analysis. J Midwifery Womens Health . 2015 Jan-Feb;60(1):37-47. doi: 10.1111/jmwh.12283.
- 8. Evaluation of long-term pelvic floor symptoms after an obstetric anal sphincter injury (OASI) at least one year after delivery: A retrospective cohort study of 159 cases. Gynecol Obstet Fertil
- . 2016 Jul-Aug;44(7-8):385-90. doi: 10.1016/j.gyobfe.2016.05.007. Epub 2016 Jul 19.

Aims of Workshop

Obstetric anal sphincter injuries (OASIs) refer to injuries to the anal sphincter muscles and surrounding tissues that can occur during childbirth. These injuries, particularly third- and fourth-degree perineal tears, are significant because they can lead to long-term complications such as bowel and bladder incontinence, sexual dysfunction, and chronic pelvic pain. Early diagnosis and treatment are crucial to prevent long-term problems.

The aim of this workshop is to emphasize on the importance of a multidisciplinary approach (assess, diagnose and treat) in managing women with OASI sustained during childbirth, addressing both the immediate management of the injury and long-term management of any complications or recovery challenges.

Educational Objectives

The National Institute for Health and Clinical Excellence (NICE) in 2021 recommended a collaborative multidisciplinary team (MDT) management of pelvic floor dysfunction with the aim to improve women's outcomes and standardise assessment and treatment.

This workshop will provide an overview of the published literature with strong focus on level I evidence, on the prevention, identification, and management of OASI sustained during child birth. It will also discuss the pathways involved in the multidisciplinary clinical service. The speakers will share their knowledge and experience gained in setting up this service to other health care professionals who may be looking to introduce these initiatives in their area.

This workshop will also provide the opportunity for participants to learn basics of interpreting an endo-anal ultrasound and anorectal physiology in relation to OASI.

Lectures will be followed by case discussions where participants will have the opportunity to share their experience from their clinical practice. This will be followed by a panel discussion regarding patient case management.

Learning Objectives

- 1. Understanding Obstetric Anal Sphincter Injury (OASI)
- Definition and Classification: Understand the different degrees of obstetric anal sphincter injuries (OASI), including 3rd-degree (involving the anal sphincter) and 4th-degree (involving the anal sphincter and rectal mucosa) tears.
- Etiology: Learn about the risk factors and causes of OASI, including instrumental delivery, prolonged second stage of labor, large fetal size, and perineal trauma.
- Diagnosis: Understand the clinical signs and diagnostic methods for OASI, including examination, perineal ultrasound, and anorectal manometry.

Management of Anal Incontinence

- Assessment of Anal Function: Learn to assess anal sphincter function using clinical evaluation, anorectal manometry, endoanal ultrasound, and other diagnostic tools.
- Treatment Options: Understand the treatment modalities for anal incontinence, including conservative management (e.g., pelvic floor exercises, dietary changes), medical treatments
- 2. Perioperative Care and Surgical Management
- Surgical Repair: Learn the principles and techniques for repairing third- and fourth-degree perineal tears, including the importance of proper alignment and anatomical restoration.
- Postoperative Care: Gain knowledge about post-repair care, such as analgesia, wound care, prevention of infection, and early mobilization.
- Complication Management: Be able to recognize and manage potential complications like wound breakdown, infection, and failure of repair (e.g., anal incontinence or recurrent sphincter damage).
- Long-Term Follow-Up: Recognize the need for long-term follow-up to monitor recovery and the potential for ongoing or worsening symptoms of anal incontinence.

Psychosocial Impact

- Psychological Support: Be able to address the psychological impact of OASI, which may include anxiety, depression, sexual dysfunction, and reduced quality of life.
- Patient Education and Communication: Develop skills in discussing sensitive topics with patients, including the physical and emotional effects of OASI, treatment options, and prognosis.
- Supportive Care: Provide referrals to mental health professionals, pelvic floor physiotherapists, and other support services to help women cope with the long-term impacts of OASI.
- 3. Multidisciplinary Teamwork
- Collaboration with Specialists: Understand the roles of different healthcare providers in the management of OASI, including obstetricians, colorectal surgeons, physiotherapists, Clinical Scientists and psychologists.
- Coordinating Care: Learn how to coordinate care between different specialists for comprehensive management, including follow-up care after childbirth and ongoing treatment for anal incontinence.

Target Audience

Urology, Urogynaecology and Female & Functional Urology, Bowel Dysfunction, Pure and Applied Science, Conservative Management

Advanced/Basic

Intermediate

- 1. Royal College of Obstetricians and Gynaecologists (RCOG) Guidelines:
- "Obstetric Anal Sphincter Injuries (OASI): Prevention and Management" (RCOG Green-top Guideline No. 29)
- 2. Anal Sphincter Injury during Vaginal Delivery: A Review of the Literature" by P. Sultan et al.
- This review article examines the various aspects of anal sphincter injuries, including their incidence, risk factors, prevention, and treatment. It's a great starting point for understanding the broader implications of OASI.
- 3. Doumouchtsis SK, de Tayrac R, Lee J, Daly O, Melendez-Munoz J, Lindo FM, Cross A, White A, Cichowski S, Falconi G, Haylen B. An International Continence Society (ICS)/ International Urogynecological Association (IUGA) joint report on the terminology for the assessment and management of obstetric pelvic floor disorders. Int Urogynecol J. 2022 Nov 28. doi: 10.1007/s00192-022-05397-x. Epub ahead of print. PMID: 36443462.
- 4. Cardozo, L, Rovner, E, Wagg, A, Wein, A, Abrams, P. (Eds) Incontinence 7th Edition (2023). ICI-ICS. International Continence Society, Bristol UK, ISBN: 978-0-9569607-4-0
- 5. D'Ancona C, Haylen B, Oelke M, Abranches-Monteiro L, Arnold E, Goldman H,
- Hamid R, Homma Y, Marcelissen T, Rademakers K, Schizas A, Singla A, Soto I, Tse V, de Wachter S, Herschorn S; Standardisation Steering Committee ICS and the ICS Working Group on Terminology for Male Lower Urinary Tract & Pelvic Floor Symptoms and Dysfunction. The International Continence Society (ICS) report on the terminology for adult male lower urinary tract and pelvic floor symptoms and dysfunction. Neurourol Urodyn. 2019 Feb;38(2):433-477. doi: 10.1002/nau.23897. Epub 2019 Jan 25. PMID: 30681183
- 6. Pelvic floor symptoms following obstetric anal sphincter injury (OASIS) An 8 year analysis of a dedicated clinic in a tertiary referral centre.

 $https://www.academia.edu/108533194/Pelvic_floor_symptoms_following_obstetric_anal_sphincter_injury_OASIS_an_8_year_analysis_of_a_dedicated_clinic_in_a_tertiary_referral_centre?uc-sb-sw=33199400$