

Start	End	Topic	Speakers
		Setting up a multidisciplinary pelvic mesh service	Malcolm Frazer
		The role of allied health in the management of pelvic mesh complications	Bridget Weeks
		Mesh excision surgery a. Techniques with Tapes b. Transvaginal mesh excision techniques c. Management of mesh in a viscus	Judith Goh
		4D Translabial ultrasound - Role in management of pelvic mesh complications	Vivien Wong
		Q&A	All

### Aims of Workshop

The aim of this workshop is to provide education and strategies with regards to the establishment of a tertiary multidisciplinary service for the management of pelvic mesh complications, using the established service currently running in Queensland as an illustrative example. The workshop will:

- detail the establishment of a multidisciplinary service and the role of different disciplines in the care of these complex patients
- provide education and practical strategies with regards to mesh removal surgery
- the use of 4D translabial ultrasound in the imaging of mesh implants in women who have had complications from pelvic mesh.

### Learning Objectives

To provide details regarding the set-up and establishment of a multidisciplinary service for the management of women who have had pelvic mesh complications

### Target Audience

Urology, Urogynaecology and Female & Functional Urology

### Advanced/Basic

Advanced

### Suggested Learning before Workshop Attendance

- 1) Australian Senate Enquiry - Number of women in Australia who have had transvaginal mesh implants and related matters. March 2018
- 2) Cundiff GW, Quinlan DJ, van Rensburg JA, Slack M. Foundation for an evidence-informed algorithm for treating pelvic floor mesh complications: a review. BJOG 2018;125:1026-1037.

## **ESTABLISHING A MULTIDISCIPLINARY PELVIC MESH SERVICE : THE QUEENSLAND EXPERIENCE**

Assoc Prof Malcolm Frazer MBChB MD FRANZCOG CU

Urogynaecologist and Clinical Lead QPMS

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Transvaginal mesh (TVM) has been used for the treatment of pelvic organ prolapse (POP) and stress urinary incontinence (SUI). Mesh-related complications are reported in up to 3% of women who have mid-urethral sling (MUS) surgery for SUI and in up to 20% of women who receive TVM for POP. A retrospective cohort study<sup>1</sup> found that the rate of MUS removal for any complication at 9 years was estimated at 3.3%. The Australian Senate Enquiry report in March 2018 recommended that each Australian state establish specialist multidisciplinary units for the management of pelvic mesh-related complications.

This workshop reports on the setting up of the Queensland Pelvic Mesh Service (QPMS) and summarises the experience of its first 24 months. Our hope is that this provides a potential framework for the establishment of similar service models within Australia and internationally.

Providing a comprehensive multidisciplinary service for the management of transvaginal mesh issues requires careful planning even before the first patient is seen. Trying to manage these patients as an addition to an existing urogynaecological service may not work successfully.

The planning and implementation of QPMS was a complex two-stage co-design process involving clinicians and consumers representing women with TVM complications.

### **Consumer Involvement**

QPMS is one of the first consumer-led healthcare services in Australia. Given the history of dysfunctional communication between the medical profession and women suffering from transvaginal mesh complications, it was felt essential to give consumers a voice in all aspects of the planning phase. After all, this was the service they would be using, and it had to work for them and not just for the convenience of the health practitioners.

QPMS commenced in April 2019. As of 24 months post commencement, 484 women have been seen by the medical team; 257 women have undergone preliminary cystoscopy and examination under anaesthesia. 91 patients have undergone mesh revision surgery – 65 complete mesh excision, 25 partial excision and one patient having sling division. 180 women have been discharged from QPMS as of April 2021.

1. Gurol-Urganci I, Geary RS, Manza JB, et al. Long-term Rate of Mesh Sling Removal Following Midurethral Mesh Sling Insertion Among Women With Stress Urinary Incontinence. *JAMA*. 2018;320(16):1659-1669. doi:10.1001/jama.2018.14997

### **MESH EXCISION SURGERY**

Prof Judith Goh AO, MBBS PhD FRANZCOG CU.

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Australia

A multidisciplinary team approach to the management of pelvic floor mesh complications is recommended. It is important to obtain all relevant past history in particular the implanted mesh product/device codes and labels. Often, in the operation notes, “TVT” is used as a generic name for mid-urethral slings which it obviously is not. The operation notes may state that a “TVT” was performed but the product label confirms a transobturator sling was inserted.

A detailed history of the presenting complaint is vital. This includes vaginal discharge, bleeding, dyspareunia (including partner), urinary tract infections and pain (site, exacerbating factors etc). Targeted examination includes site of pain (relationship to location of mesh – including vaginal, inner thigh, anorectum), any mesh exposure in the vaginal, any anorectal mesh exposure (previous posterior mesh surgery including abdominal placement) and pelvic floor muscles hypertonicity. Where indicated, pathology requires exclusion. For women who have had insertion of urethral slings and/or anterior vaginal meshes (including abdominal placement), a cystoscopy is required to exclude mesh extrusion into the urethra/bladder. Imaging may also be required.

It is important for the treating practitioners to be familiar with the mesh procedures and the location of the mesh that was inserted. The AUGS-IUGA Joint Position Statement on the management of mesh-related complications provides algorithms to guide clinicians with recommendation categories (1). A trial of conservative management is suggested unless there are significant complications including voiding difficulty, mesh in viscus and mesh related fistulas.

There appears to be a high risk (up to 75%) of further surgical intervention with office-based vaginal mesh exposure trimming. The risk of recurrence of stress urinary incontinence following mesh surgery for mid-urethral slings correlates with the amount of mesh removed, with a higher risk with more mesh removed (1).

With mesh exposure in the urethra, the transvaginal approach has the least risk of further procedures for persistent mesh exposures, but a very high risk of post-operative urinary incontinence compared to endoscopic procedures or the use of laser. A labial fat-flap may be inserted during transvaginal removal of urethral mesh exposure and repair of urethrotomy. This will provide a buffer of tissue between the urethra and vagina with the aim of reducing urethral injury in subsequent procedures to manage the recurrence of stress urinary incontinence.

## References:

1. Joint position statement on the management of mesh-related complications for FPMRS specialists. 2020  
[doi.org/10.1007/s00192-020-04248-x](https://doi.org/10.1007/s00192-020-04248-x).

## **THE ROLE OF ALLIED HEALTH IN THE MANAGEMENT OF PELVIC MESH COMPLICATIONS**

Bridget Weeks, Senior Physiotherapist and Allied Health Lead  
Queensland Pelvic Mesh Service

The Queensland Pelvic Mesh Service (QPMS) serves to assess and manage women with pelvic mesh complications. Such complications include mesh erosion, mesh infection, dyspareunia, and pelvic pain along with associated bladder and bowel dysfunction. Some of these women have a complex presentation, involving both physical and mental health concerns. Unfortunately, many of these women are experiencing significantly reduced quality of life due to their gynaecological complications. The QPMS includes a multidisciplinary Allied Health (AH) service, including psychology, pharmacy, social work, and physiotherapy. The aim of this multidisciplinary team is to assist patients to manage their condition and improve their coping strategies. Persistent pain is managed through the biopsychosocial model of health. Psychologists provide emotional support to the women, who are often angry, confused or scared about what they are experiencing, and help them adjust to certain diagnoses and prepare for medical procedures. As often occurs with people experiencing chronic conditions, anxiety and depression are common issues addressed by the Psychologists. Educational and physical interventions are offered by the physiotherapist to promote better movement and exercise, serving to improve the function of these women struggling with daily pain. Commonly, the Women's Health Physiotherapist works to manage dyspareunia. The Pharmacist works with the women and their GP's to offer advice on medication use for their persistent pain, to ensure an appropriate medication management plan is achieved.

The Women's Health Physiotherapist also works with the women to develop a program of education and strategies for management of their pelvic floor dysfunction. This is achieved through use of pelvic floor relaxation techniques, manual therapy of pelvic floor tissues, management of constipation, promotion of good bladder and bowel habits, and strategies to manage pelvic organ prolapse.

Since the QPMS is a state-wide service, the Social Worker has a key role in case management of women attending the clinic. The Social Worker provides support to women by assisting with travel arrangements, helping the women seek community services to improve daily activities, and assist with finance-related and housing-related matters.

Over the first two years of the clinic's operation, over 400 women have been managed by members of the AH team. Feedback received from the women highlight a positive effect of the MDT team on improving their coping strategies as they progress through their MESH journey.

## **4D TRANSLABIAL ULTRASOUND - ROLE IN THE MANAGEMENT OF PELVIC MESH COMPLICATIONS**

**Dr Vivien Wong MB ChB PhD FRANZCOG CU**

In this presentation, the objective is to demonstrate to the participants the role of transperineal ultrasound (TPUS) in the evaluation of patients who present with pelvic mesh complications. Imaging of meshes or slings can be challenging, however, transperineal ultrasound is by far the most economical imaging modality to the health system and most acceptable as well as accessible by patients. As such, it should be utilized as the methodology of choice when evaluating synthetic implants.

The talk will cover the methods of image acquisition and demonstrate the abilities of transperineal ultrasound in defining pelvic mesh and slings - their absence or presence, location, type and potential complications. The presentation will also demonstrate methods of evaluating the efficacy of implants and in the evaluation of functional anatomy. The participants will be able to appreciate sonographic appearances of mesh or sling implants in patients who present with implant-associated complications and be able to understand how imaging can assist when assessing these patients. It is, therefore, crucial to ensure that a tertiary mesh service has access to transperineal ultrasound imaging

