PE83 A novel robotic approach to Transvaginal Tape (TVT) mesh excision

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Introduction & Objectives: Transvaginal mesh insertion for Stress Urinary Incontinence (SUI) had been common practice for many years, with great success in most patients. Unfortunately, over the past decade 6.5% of patients have experienced complications with synthetic meshes affecting quality of life necessitating removal. Traditionally, a combined abdominal and vaginal approach has been utilised. Recently, we have introduced a novel robotic approach with promising initial results.

Materials & Methods: All patients were placed in a steep Trendelenburg position. A standard 6 port placement was utilised. Two 12mm (camera port and AirSeal), three 8 mm robotic ports and 5 mm assistant port. The basic surgical steps; 1) Anterior bladder take down to open Retzius space 2) Identification and freeing of the mesh ends 3) Freeing the mesh from the urethral-vaginal space 4) Repair of the endopelvic fascia. The EuroQoL group Visual analogue scale (EQ-VAS) was used as a health-related quality of life measure scored by the patient's own judgement. The International Consultation on Incontinence Questionnaire-Urinary Incontinence (ICIQ-UI) Short form was used to assess continence. The Brief Pain Inventory (Short Form) was used to assess pain. The pelvic organ prolapse/incontinence sexual questionnaire – IUGA revised (PISQ-IR) was used to evaluate sexual impact.

Results: Currently, four patients have undergone robotic TVT mesh excision in our centre following continence multidisciplinary team (MDT) discussion. Patients completed health questionnaire's pre and post-operatively assessing impact on health, continence, pain and sexual activity (Table 1). Total excision of mesh was achieved in all cases without the need for vaginal entry. Patient one reported complete continence and improvement in sexual satisfaction as seen in Table 1. Two patients required a suture to close a small opening in vagina. Patients 3 and 4 await post-operative follow up assessment and therefore were not included in table 1.

Table 1. Robotic Mesh excision patient follow up.

	Pre-operative score				Post-operative score			
Patient	Health	ICIQ-UI	Pain	Sexual	Health	ICIQ-UI	Pain	Sexual
1	42	15	2 – 8	Dissatisfied	90	0	0	Satisfied
2	40	12	4 - 10	-	55	14	2 – 8	-

Comparing the patients who have undergone robotic excision with four recent open excisions, we have found a shorter inpatient stay, earlier catheter removal and less blood loss (Table 2).

Table 2. Robotic vs Open Mesh Excision.

	Robotic excision				Open excision			
Patient	Operative time (minutes)	Blood loss (ml)	Inpatient stay (hours)	Catheter removal (days)	Operative time (minutes)	Blood loss (ml)	Inpatient stay (hours)	Catheter removal (days)
1	80	<100	24	5	170	1500	144	14
2	90	<100	24	5	60	750	48	7
3	100	<100	48	1	75	150	48	10
4	105	<100	24	7	80	100	24	10

Conclusions: Robotic excision of TVT mesh is a safe, effective technique and offers the possibility of complete mesh removal without requiring a vaginal incision.