

COMPLICATIONS OF VAGINAL MESHES AND TAPES: FACTORS PREDICTING THE OUTCOMES OF SURGERY

Hypothesis / aims of study

To evaluate the outcomes of surgery in patients with complications following surgery for incontinence and pelvic organ prolapse (POP) using synthetic meshes and tapes.

Study design, materials and methods

Our pelvic floor service is the tertiary referral centre for complications following surgery for incontinence and pelvic organ prolapse using synthetic meshes and tapes.

Patients presented to our department or referred from the other regions over 2.5 year period (2010-2013) and managed through a multidisciplinary setting, which include specialists from urogynaecology, urology, coloproctology, physiotherapy, specialist nurses and radiology.

Total excision of POP meshes was the standard surgical approach, with many women having had multiple local area excisions prior to referral. The extent of tape excision was mostly determined by the exposure and site of pain, with complete excision in many.

Patients were identified from our departmental database and retrospective case review was performed

Table 1. Patient's cohort

No of Women	68 (100%)
Meshes	25 (37%)
Tapes	33 (48%)
Both	10 (15%)

Results

Patients usually presented with a variety of complaints (table 2). For analysis the cohort was divided into tapes and meshes. The 10 women with both types of prostheses have been included in the mesh group, as it was felt clinically to be the POP prosthesis that was the main cause of symptoms in all of these women. Pain was the most common presenting symptom in patients with mesh-related complications, whereas the patients with tapes were mostly complaining of overactive bladder (OAB) (table 2).

Table 2. Common presenting symptoms

Symptoms	Meshes (35)	Tapes (33)
Pain	23 (66%)	14 (42%)
POP symptoms	10 (29%)	2 (6%)
Mesh infection	3 (9%)	0
Dyspareunia	13 (37%)	8 (24%)
Incontinence	13 (37%)	14 (42%)
OAB	12 (34%)	22 (67%)

In our patients cohort the exposure or perforation by the prosthesis was the best factor predicting the chance of improvement after surgery. In patients with no exposure (10 patients with tapes, 3 with meshes) the main symptom requiring surgery was pain. None of these patients demonstrated any improvement in their pain symptoms following surgery and 1 patient (tape excision) was worse. In contrast, 80% (12/15) of women with exposed tapes underwent tape excision resulting in improvement their symptoms, including pain.

Table 3. Exposure/perforation of prosthetic material

Organ of exposure	Meshes (35)	Tapes (33)
Vagina	20 (57%)	16 (48%)
Bladder	10 (29%)	3 (9%)
Ureter	4 (11%)	0
Urethra	1 (3%)	6 (18%)

Patients who were operated for exposed / perforated meshes, 20(67%) improved after mesh excision, in 8(26%) there was no change in the symptom of pain and 1(3%) reported worsening pain symptoms.

Interpretation of results

Patients experiencing complications following the surgery for POP and incontinence present with various combinations of symptoms. In order to address their problems it is necessary to involve specialists from multiple disciplines. In our cohort pain was the most difficult symptom to alleviate. Where exposure or perforation present, the chance of improvement was higher than in patients who presented with pain and whose examination is normal.

Concluding message

Exposure or perforation of synthetic meshes and tapes used to treat incontinence and POP are the best predicting factors of improvement after surgery. Patients with no exposure requesting the removal of their prostheses (for pain) should be counselled regarding the lack of efficacy of surgery and the possibility of their symptoms getting worse.

Disclosures

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