

EFFICACY AND COMPLICATION RATE OF PELVIC ORGAN PROLAPSE SURGERY USING SYNTHETIC VAGINAL MESH WITHOUT CONCOMITANT INCONTINENCE SURGERY

Hypothesis / aims of study

Synthetic vaginal meshes have been commonly used in the last 15 years to repair pelvic organ prolapse. In recent years reports emerged about serious complications with meshes. Additionally, there is no consensus whether concomitant incontinence surgery should be performed in patients with stress urinary incontinence (SUI).

The aim of this study is to evaluate the efficacy and complication rate of pelvic organ prolapse surgery using synthetic vaginal mesh by a specialized team in a single center. We also aimed to assess the need for additional incontinence surgery in patients with preoperative SUI.

Study design, materials and methods

Women suffering from genital prolapse were assessed using the Pelvic Organ Prolapse-Quantification System (POP-Q), and urodynamic testing for evaluation of urinary incontinence. Patients with POP-Q stage ≥ 2 in at least one compartment underwent surgery using a synthetic vaginal mesh (anterior, posterior or combined) from October 2010 to February 2014. No concomitant incontinence surgery was performed in patients with anterior or combined mesh. Anatomical cure was defined as POP-Q stage < 2 in the operated compartment(s), subjective cure as a relief of symptoms. Both were determined at last follow-up visit, minimally 3 months after surgery. Follow-up occurred every 3 months during the first year and yearly thereafter.

Results

One hundred and three patients underwent vaginal mesh surgery, of which 10 were lost to follow-up. Median follow-up was 11 months (range 3-43). Anatomical prolapse cure was reached in 85 of 93 patients (91.4%), subjective cure was obtained in 96.8% (90/93 patients), two patients (2.1%) were operated for recurrent prolapse. De novo prolapse in a different compartment was noted in 7 patients (7.5%), of whom 6 were operated. Postoperative hematoma with pain occurred in one patient (1.1%).

Partial mesh exposure was the most frequent complication (13 patients, 14%), with only 2 patients (2.2%) needing general anesthesia for repair of large exposure. Forty six percent of exposures were minimal (< 1 cm) and could be cured in ambulatory setting under local anesthesia. The other cases were operated under general anesthesia for other indications and had concomitant cure of exposure. Five patients (5.4%) suffered from pain, of which only one had dyspareunia.

Respectively 77% (17/22) of patients who preoperatively suffered from masked SUI and 55% (11/20) patients who preoperatively suffered from symptomatic SUI did not need any incontinence treatment after mesh surgery alone. De novo SUI was reported in 10 out of 46 patients (21.3%), all of which were cured using tension-free vaginal tape (TVT-O).

Interpretation of results

Mesh surgery resulted in great anatomical and functional efficacy; however 2.2% of patients underwent an intervention under general anesthesia for large mesh exposure. Furthermore, 18% minor complications were reported, mostly small exposures, cured under local anesthesia.

No specific incontinence treatment was needed in 55% for existing SUI and in 77-79% for asymptomatic patients.

Concluding message

Synthetic vaginal mesh surgery proved to be an effective treatment for genital prolapse. Due to a substantial minor complication rate, it can however not be recommended for primary prolapse repair. Prolapse repair by mesh could still be considered for failed primary surgery or specific cases, after discussion with the patient, and extended information about specific risks of mesh surgery is given.

Despite absence of concomitant incontinence surgery, up to 77% of patients with preoperative SUI did not need any specific incontinence treatment.

References

1. Int Urogynecol J. 2013 Oct;24(10):1679-86
2. BJOG. 2014 Apr;121(5):537-47

Disclosures

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