

TILOOP-TOTAL6-TRIAL: 1 YEAR FOLLOW UP OF A PROSPECTIVE STUDY DESCRIBING THE INCIDENCE AND RISK FACTORS ON MESH EXPOSURE RATES WITH A LIGHTWEIGHT TITANIUM COATED POLYPROPYLENE MESH FOR VAGINAL PROLAPSE REPAIR

Hypothesis / aims of study

In a prospective randomized multicenter study we analysed the mesh exposure rates and risk factors for erosions of an ultra lightweight titanium coated polypropylene mesh in prolapse surgery. In surgery for pelvic organ prolapse (POP) the use of alloplastic meshes has become common. Mesh exposure is the most frequent complication, but its risk factors have not been completely identified (1). The most commonly cited potential risk factors was concomitant hysterectomy, but other potential risk factors included patient age, surgeon experience, the use of inverted "T" colpotomy incisions, smoking, and diabetes mellitus (2). Therefore, we conducted a prospective multicenter trial observing a lightweight titanium coated polypropylene mesh for cystocele treatment. Risk factors for mesh exposure were gathered; with a follow up of 1 years.

Study design, materials and methods

A total of 276 women with anterior compartment and/or apical prolapse \geq stage II underwent repair with the Tiloop-total6-System. The technique utilizes a lightweight titanium coated (24 g/ m²) type I mesh. The mesh was inserted transobturatorially with four arms and two additional arms were implanted transischioanal for sacrospinuous fixation. The apical portion of the graft is adjustable to vaginal length. Concomitant repair of nonstudy posterior compartment with mesh was allowed.

Exposure rates were observed after 3, 12, and 36 months and correlated to mesh material, patient characteristics, intraoperative data, and treatment centers.

Follow up was completed in 2013, with follow up available from 276 patients after 1 year.

QoL data were collected using a validated questionnaire covering bladder/ bowel function, vaginal bulge symptoms and sexual function (3).

Results

Over the course of 12 month, mesh exposure was observed in 25 (9%) patients (pts). In this group 14 (56%) pts underwent a concomitant hysterectomy. An additional posterior mesh craft repair was performed in 4 (16%) pts. 16 pts with mesh exposure were asymptomatic. Vaginal discharge, vaginal pain and dyspareunia were reported in 9 cases. In 7 pts wound granulation caused mesh exposure, no reason was found in 18 cases. Surgical intervention was necessary in only 11 patients.

Interpretation of results

Mesh exposure is a common risk, but manageable. Similar erosion rates occurred after use of synthetic grafts in the literature (10.3%). The risk of mesh exposure with a concomitant hysterectomy of 15.2 % is high and indicates to avoid hysterectomy if possible.

Concluding message

Be sure that patients are aware of the risks of erosions of transvaginal POP repair with mesh, and try to minimize mesh complications by avoiding concomitant surgery.

References

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Disclosures

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