

BASIC PRINCIPLES OF PELVIC ORGAN PROLAPSE AND STRESS URINARY INCONTINENCE REPAIR WITH TRANSOBTURATOR VAGINAL MESH: 4-YEAR AND 1118 PATIENTS - SINGLE CENTER EXPERIENCE

Hypothesis / aims of study

Mesh surgery of the pelvic floor holds a special place in the surgical treatment of pelvic organ prolapse (POP) and stress urinary incontinence (SUI). The complication rate varies widely between studies, which also indicate on the presence of "surgeon associated complications". Based on our experience, we present the basic principles of POP and SUI repair using synthetic mesh to avoid complications.

Study design, materials and methods

1118 women (average age 61,12±5.47 years, range 31-94) underwent POP and SUI surgery using Ultralight ≤30 g/m polypropylene non-absorbable meshes from 2011 to 2015. The duration of follow-up exam was from 1 month to 4 years after surgery. In our practice we used synthetic non-absorbable mesh implants by Lintex, LCC (Russian Federation): transobturator suburethral sling for SUI (536 procedures), transobturator four-arm mesh kit (Pelvis Anterior) for the anterior (and apical) compartment (423 procedures), Posterior Intra-Vaginal Sling (Urosling-PIVS) - for apical compartment (72 procedures), simultaneous implantation of more than one mesh was performed in 87 cases.

Results

The effectiveness of the surgical treatment varied from 88 to 96,2%. Total late complication rate (pain, urgency, de novo SUI, urinary retention) was 8,4% and erosion rate was 0,45%. All operation was performed according to International Urogynecological Association's (IUGA), recent joint committee opinion. Vaginal mesh use in POP is possible if there are definite indications. Minimization of mesh using and its combination with native tissue repair. Access should begin after deep hydrodissection of vaginal wall with normal saline solution. Mesh implantation should be performed strictly in subfascial place, thus not disturbing blood supply and innervation of vaginal wall. In case of sacrospinous fixation the trocar should be passed between the rectum and the vagina and is secured bilaterally by one arm passing through sacrospinous ligament 1.5-2cm from ischial spine. For transobturator midurethral sling skin incision should be located 1 cm below the adductor longus tendon. Excision "excessive" tissue of the vaginal wall is contraindicated; after installing, the mesh must be completely smooth and there is no tension.

Interpretation of results

High efficacy and safety of the procedures were reached by following the basic principles of POP and SUI repair.

Concluding message

Experience of more than 1,000 operations using vaginal synthetic mesh for surgical treatment of POP and SUI showed that proper selection of patients and compliance with the basic principles of prosthetic surgery makes this technique highly safe and effective.

Disclosures

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