

## SHORT TERM RESULTS PELVIC ORGAN PROLAPSE REPAIR USING NEW SINGLE-INCISION TROCAR-LESS SYSTEM

### Hypothesis / aims of study

In the last 10 years prosthetic surgery of pelvic organ prolapse (POP) has been actively developing. One of the key moments is secure apical support that provides modern anchor fixation system. "The Suture Anchor Set" (Lintex, LLC, Russian Federation) is a minimally invasive system which employs a technology for reconstruction of the vaginal wall using soft-tissue fastener (anchor) it is used in combination with a polypropylene monofilaments mesh. The aim of the study was to evaluate short term outcomes and the efficacy of mesh repair of the POP using original fixation system the Suture Anchor Set by "Lintex, LLC".

### Study design, materials and methods

We conducted a prospective study, including 110 women between September 2014 to March 2015 with cystocele and apical prolapse  $\geq 3$  stage pelvic organ prolapse quantification (POP-Q) treated with the "Suture Anchor Set". We used the Suture Anchor Set and synthetic non-absorbable polypropylene mesh. 82 patients went through anterior repair, 10 had apical repair and 18 had simultaneous anterior and apical repair. Pre-operative and post-operative evaluation including POP-Q examination and the Pelvic Floor Distress Inventory (PFDI-20) questionnaire. Patients were assessed 1 months, 3 months and 6 months after the procedure.

### Results

The mean operative time was  $40,28 \pm 21,27$  min (from 18 to 84 min), respectively. Intraoperative complications were bladder perforation 1 (0.9%), bleeding 1(0.9%). Average length of hospital stay was  $3,03 \pm 1,7$  (from 2 to 6) days. There have been no cases of mesh erosion. Before surgery POP-Q - Aa  $+2,7 \pm 0,8$ ; Ba  $+4,4 \pm 1,6$ ; C  $+3,9 \pm 2,4$ ; PFDI-20 scores -  $126,25 \pm 46,39$  (29,17-236). After surgery POP-Q - Aa  $-2,9 \pm 0,5$ ; Ba  $-2,8 \pm 0,8$ ; C  $-7,1 \pm 1,7$  and PFDI-20 scores -  $28,21 \pm 34,25$  (0-156).

### Interpretation of results

Considering low complication rate and considerable improvement of quality of life the "Suture Anchor Set" can be successfully applied to patients suffering from POP.

### Concluding message

Pelvic reconstruction surgery using the "Suture Anchor Set" is safe, easy to learn and to perform with satisfactory functional and anatomical results.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Local Ethics Committee of The Saint-Petersburg State University clinic **Helsinki:** Yes **Informed Consent:** Yes