

## ORIGINAL HYBRID TECHNIQUE OF POST-HYSTERECTOMY VAGINAL VAULT PROLAPSE REPAIR

### Introduction

Vaginal vault prolapse (VVP) occurs in 6-11.6% of patients underwent a hysterectomy. Sacrocolpopexy, the gold standard procedure for VVP correction, is associated with long operation time, pneumoperitoneum and Trendelenburg position. The latter could limit using this method for somatically burdened women. The aim of this study was to evaluate objective and subjective cure rates of the hybrid technique: bilateral sacrospinous fixation by monofilament polypropylene apical sling (UroSling-1, Lintex) combined with "neocervix" formation (purse-string suture on the internal surface of the cervical fascia fixed to the tape) in surgical treatment of post – hysterectomy vaginal vault prolapse.

### Design

This prospective study involved 75 women suffering from post-hysterectomy vaginal vault prolapse. Patients underwent hybrid reconstruction of the pelvic floor in accordance with the proposed method. To evaluate the results of surgical treatment, data of a vaginal examination (POP-Q), uroflowmetry, ultrasound measurement of post-voiding residual volume were used, determined before the surgery and at control examinations after treatment. Changes in quality of life were evaluated by comparing the scores according to PFDI-20, PFIQ-7, PISQ-12 questionnaires.

### Results

Mean operation time was  $33 \pm 12$  minutes. There were no cases of intraoperative damage to the bladder or rectum, as well as clinically significant bleeding. Twelve patients complained of the buttock pain after surgery, and these symptoms were completely resolved with nonsteroidal anti-inflammatory drugs during 2 weeks postoperatively. Urinary retention occurred in 3 (4,9%) patients, and was resolved with indwelling transurethral Foley catheter in 3 days. Median follow-up time was 18 (min-12, max-24) months. There was noted statistically significant improvement in POP-Q points, especially, "Ba" and "C" ( $p < 0,001$ ) in all patients. Statistically significant improvement was found in peak and average flow rate according to uroflowmetry ( $p < 0,05$ ). At 12-month follow-up anatomical cure rate ( $\leq$ stage I, POP-Q) was 100%, 94,7% and 100% for vaginal apex, anterior and posterior vaginal walls, respectively. Recurrent prolapse was noted in anterior compartment in 4 (5.3%) patients: stage II – in 3 cases, stage III – in 1 case. Only the latter was symptomatic. Stress urinary incontinence de novo and urgency de novo were noted in 8.0% (6/75) and 5,3% (4/75), respectively. Most of the patients reported a significant improvement in the quality of life after treatment according to questionnaires.

### Conclusion

The hybrid technique: combination of the apical sling and purse-string "neocervix" formation appears to be effective and safe method for treatment patients with post-hysterectomy prolapse. The technique improves voiding function and quality of life.

### Disclosures

**Funding:** NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Saint-Petersburg State University Clinic Ethical Committee **Helsinki:** Yes **Informed Consent:** Yes