

## STEP-BY-STEP DESCRIPTION OF THE TURC (TOTAL UTILIZATION OF RETROPERITONEUM FOR COLPOPEXY) TECHNIQUE FOR ADVANCED APICAL PROLAPSE

### Hypothesis / aims of study

Abdominal Sacrocolpo/hystero-PEXY is considered as the gold-standard in the management of advanced apical prolapse. We introduced TURC (Total Utilization of Retroperitoneum for Colpopexy) as an entirely retroperitoneal technique for restoring advanced apical descent. In this video, we describe the TURC technique and report the outcomes of this procedure.

### Study design, materials and methods

108 patients (age: 29 to 78 years) with POP-Q stage III–IV uterovaginal and post-hysterectomy cuff prolapse underwent TURC between July 2007 and December 2013. Preoperative and postoperative evaluation included subjective assessment of prolapse-related symptoms by using PFDI-SF20 and PFIQ-7 questionnaires. Operative steps were: 1. Exposure of the retroperitoneum through Pfannenstiel incision, 2. Visualization of the urachus and dissection of the parietal peritoneum from the bladder apex, 3. Definition of the cervix/cuff from this cleavage with the tip of a reverdin retractor placed in the anterior vaginal fornix, 4. Blunt dissection of the bladder from the anterior vaginal wall until the bladder neck, 5. Fixation of a 10x4 cm. polypropylene mesh to the anterior vaginal wall and cervix/cuff, 6. Cranio-medial retraction and dissection of the parietal peritoneum along the right iliac fossa until the sacral promontorium, 7. Dissection and lateralization of the right ureter to avoid compression by the mesh, 8. Tension-free attachment of the proximal mesh to the anterior longitudinal ligament. Pre-operative quality of life scores and POP-Q measurements were compared with postoperative values at the last follow-up by using the *Wilcoxon sign* test.

### Results

Mean operation time was 82±36 minutes. Mean postoperative hospitalization was 1.8 days (range: 1-5). Urethral catheter was removed within 24 hours in all except 5 women whom inadvertent bladder perforation occurred during dissection. With a median follow up of 42 months (range: 3-78), anatomical cure rate (POP-Q <stage 2) was 94.4% (102/108) and subjective success rate was 92.5% (100/108). Quality of life scores and POP-Q measurements at the last follow-up were improved significantly as compared to preoperative values. Post-operative gastrointestinal complications or vaginal mesh erosion were not evident in any case.

### Interpretation of results

TURC provides a high rate of anatomical success and patient satisfaction in women with advanced pelvic organ prolapse.

### Concluding message

TURC represents as a viable alternative technique in the reconstruction of advanced pelvic organ prolapsed. It can eliminate the potential gastrointestinal complications associated with standart intraperitoneal sacrocolpopexy techniques.

### Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** The results presented in this study were obtained by reviewing our patient records and subjects had given full written consent prior to surgery regarding the procedure . **Helsinki:** Yes **Informed Consent:** Yes