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# CHANGE OF LOWER URINARY TRACT SYMPTOM AFTER TRANSVAGINAL MESH REPAIR FOR PELVIC ORGAN PROLAPSE

### Hypothesis / aims of study

Lower urinary tract symptom (LUTS) including voiding symptom and storage symptom (e.g. overactive bladder) are often seen in patients with Pelvic Organ Prolapse (POP). The pathophysiology of overactive bladder (OAB) in women with POP is unclear. OAB symptoms often seem to disappear after POP surgery, while post operative urinary retention is sometimes bothersome to the patient.

The aim of our study was to evaluate, objectively and subjectively, whether transvaginal mesh repair changes LUTS in women with symptomatic anterior vaginal wall prolapse.

### Study design, materials and methods

Between November, 2007 and October, 2009, 76 patients underwent transvaginal mesh repair for pelvic organ prolapsed. Anterior repair were performed in 53 patients, and anterior/posterior repair in 23 cases. All patients were studied using a 3-day bladder diary, uroflowmetry, postvoid residual (PVR), over active bladder symptom score (OABSS), International Prostate symptom score (IPSS), its QOL score, International Consultation on Incontinence Questionnaires Short Form (ICIQ-SF), and the Prolapse, Quality of Life (P-QOL) questionnaire, which they completed before their first appointment and 1, 4, 12 weeks after surgery to assess the severity of their urinary and prolapse symptoms and their impact on quality of life.

### Results

The mean age was  $68.0 \pm 7.1$ , and mean body mass index was  $23.8 \pm 3.0$ . Median follow up period after operation was  $7.7 \pm 5.9$  months (range 3-24). In bladder diary, daytime frequency preoperatively, 1, 4, 12 weeks after surgery were, respectively,  $7.9 \pm 2.2$ ,  $6.7 \pm 2.0$ ,  $7.0 \pm 1.4$ , and  $6.8 \pm 1.3$ . daytime average voiding volume were  $158.7 \pm 73.7$ ,  $182.4 \pm 81.5$ ,  $200.1 \pm 70.6$ , and  $190.5 \pm 69.1$  (ml). Max flow rate were  $20.0 \pm 12.0$ ,  $17.8 \pm 8.6$ ,  $22.3 \pm 13.7$ ,  $21.5 \pm 11.7$  (ml/s). Total score of OABSS were  $4.6 \pm 3.2$ ,  $3.5 \pm 2.7$ ,  $3.0 \pm 2.8$ , and  $2.9 \pm 2.6$ . Total score of IPSS were  $13.7 \pm 8.0$ ,  $9.5 \pm 8.9$ ,  $7.3 \pm 7.4$ , and  $6.9 \pm 6.6$ . QOL score were  $4.2 \pm 3.2$ ,  $2.3 \pm 2.1$ ,  $2.1 \pm 1.9$ , and  $2.0 \pm 1.6$ . ICIQ-SF were  $3.3 \pm 3.8$ ,  $1.8 \pm 4.0$ ,  $1.6 \pm 3.2$ , and  $3.2 \pm 5.4$ . All the domains of P-QOL except for personal relationships, improved postoperatively.

### Interpretation of results

Transvaginal mesh repair improved LUTS of woman with anterior POP subjectively and objectively. But some patients showed transient voiding disturbance at 1 week after surgery and de novo stress urinary incontinence at 12 weeks after surgery.

### Concluding message

In short-term follow up transvaginal mesh repair improved LUTS of woman with anterior POP. Further studies with longer follow-up should be needed.

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<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>audit and patient follow up questionnaire</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>