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## LESS URINARY INCONTINENCE AFTER PELVIC ORGAN PROLAPSE SURGERY WITHOUT OR WITH MESH IN THE ANTERIOR COMPARTMENT IN WOMEN FOLLOWED IN A NATIONAL SURGICAL QUALITY REGISTER

<u>Hypothesis / aims of study</u>: Surgery for prolapse of the anterior vaginal wall influences both LUTS and urinary incontinence. Our aim was to study the outcome after anterior compartment surgery and compare classic anterior colporaphy with troacarquided mesh surgery.

Study design, materials and methods Data from a national quality register on uterovaginal prolapse and incontinence surgery were analysed retrospectively. The study population consisted of 1591 patients with ASA < 2, who during the period 1 january 2006 – 30 November 2009 underwent surgery for prolapse of the anterior compartment without any concomitant procedure. The primary outcome measure was patient reported incontinence and satisfaction in questionnaires before and one year after surgery. Chi-test was used for comparison of groups

Results Primary surgery was performed in 1406 patients and only185 (11,6%) had recurrent surgery in same compartment. The use of troacar guided mesh was more common in recurrent surgery 95/185 (51.3%) compared to 3.6% in primary surgery. In women undergoing primary surgery preoperatively reported urinary continence was 62.7%. One year postoperatively the reported continence rate was improved to 73.9% (p< 0.00001) and 77.5% reported satisfaction with the outcome.

Ninety patients with recurrent prolapse of the anterior vaginal wall had anterior colphoraphia. Their preoperatively reported continence rate was 53.3% and increased to 60.0% after surgery. Similar results (50.5% before and 62.1% after operation) were seen in the 95 women with troacar guided mesh surgery. The satisfaction rate was significantly higher (p < 0.01) after primary surgery (78.9%) compared to recurrent surgery (67.6%).

Preserved continence was seen in 91% of preoperatively continent women after primary surgery and in 86% after recurrent surgery. De novo urinary incontinence was reported in 77 patients out of 853 (9%) after primary surgery. Similar rate was seen in recurrent surgery 5/45 (11%) after anterior colporaphia and in 8/47 (17%) after surgery with troacar guided mesh. Preserved incontinence was seen in 51 % after primary surgery and in 70% after recurrent surgery. De novo continence rate after primary surgery was 49%. In patients with recurrent surgery de novo continence rates were similar after anterior colporaphia (28%) and troacar guided mesh surgery (31%).

## Interpretation of results

Surgery for prolapse of the anterior vaginal wall improves continence in patients with primary and recurrent prolapse independent of usage of troacar guided mesh according to national quality register data. De novo incontinence rate is about 10% and well below the three times higher de novo continence. The use of troacar guided mesh in surgery for anterior vaginal wall prolapse is common in recurrent surgery and associated with a higher rate of satisfaction and no impairment of postoperative continence rate.

## Concluding message

Anterior colporaphia improves continence in women with pelvic organ prolapse of the anterior compartment. Similar improvement is seen after troacar guided mesh surgery with significantly higher satisfaction rate when used in recurrent prolapse surgery.

NONE
No
HUMAN
No
Register study
Yes
Yes