

NO DIFFERENCE IN URINARY CONTINENCE AFTER SURGERY BETWEEN RETROPUBIC AND TRANSOBTURATORIC TRANSVAGINAL SLING OPERATIONS WHEN CORRECTING FOR PREDISPOSING FACTORS.

Hypothesis / aims of study

During the last two years there have been several reports on slightly, but significantly impaired treatment results after transobturatoric sling procedures when compared to TVT. This difference might be due to a superiority of the retropubic technique or to a selection bias in the previous studies. The aims of this study were to compare the results after classical retropubic TVT with those of the two transobturatoric challengers TVT-O and TOT and identify possible confounding factors.

Study design, materials and methods

In this register study data on 4024 operations performed between jan 06 – oct 09 and registered in The Swedish National Register On Incontinence Surgery were analysed. The outcome measure was patient-reported postoperative continence. The same questions on urinary leakage were asked in questionnaires sent preoperatively and after 2 and 12 months. Patient-reported data on history of previous gynaecological procedures, BMI and urge incontinence were also recorded. Chi2 test was used for statistical evaluation and significance level was $p < 0.05$.

Results

When analysing treatment outcome without correcting for predisposing factors such as preoperative urge incontinence, BMI > 30 and age >75. TVT was significantly superior to the two transobturatoric methods (TO) after 2 months ($p = 0.002$) as well after 12 months ($p < 0.0001$) follow-up. The continence rate was only reduced by 5,6% at one year follow-up. No differences were demonstrated between the three methods in a low-risk group without any predisposing factors mentioned below with postoperative continence rate of 87,8% two months after surgery. Moreover, in the remaining group with one or more predisposing factors no significant difference could be demonstrated between TO and TVT. However, in the TO group preoperative urge incontinence, BMI > 30 and elderly patients were overrepresented. Presence of urge incontinence significantly ($p < 0.0001$) impaired postoperative continence rate to 65,9%, as did age > 75 yy (to 70.4%). BMI > 30 (to 62,5%) and history of pelvic floor surgery (to 63,1%). Whereas previous hysterectomy had no influence. Only 51,6% of the over-weighted patients with a history of pelvic floor surgery and daily urge incontinence were continent after transvaginal sling procedure.

Interpretation of results

Preoperative urge incontinence, increasing BMI, and age as well as previous pelvic floor surgery significantly impaired outcome, but hysterectomy did not. Considering these predisposing factors no differences between TVT, TVT-O and TOT in the main treatment outcome postoperative continence were demonstrated in short-term follow-up.

Concluding message

Correction for confounding factors such as concomitant urge incontinence, BMI > 30, age > 75 yy and previous pelvic floor surgery is mandatory when comparing transvaginal sling methods. When doing so, no evidence of inferiority of transobturatoric methods to the classical retropubic TVT was found.

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| Specify source of funding or grant | NONE |
| Is this a clinical trial? | No |
| What were the subjects in the study? | HUMAN |
| Was this study approved by an ethics committee? | No |
| This study did not require ethics committee approval because | Register study using unidentified data |
| Was the Declaration of Helsinki followed? | Yes |
| Was informed consent obtained from the patients? | Yes |