

Kocjancic E¹, Gherzi R², Carone R³, Zaramella S¹, Crivellaro S¹, Favro M¹, Ceratti G¹, Gontero P¹, Manassero P³, Frea B¹

1. Clinica Urologica, Ospedale Maggiore della Carità - Novara - Italy, 2. Dipartimento di Ginecologia, Ospedale Maggiore della Carità - Novara - Italy, 3. Dipartimento di Urologia - Ospedale Maria Adelaide - Torino - Italy

OUTCOMES AND COMPLICATIONS OF TRANS OBTURATOR TAPE (TOT): 1 YEAR FOLLOW UP

Hypothesis / aims of study

The Trans Obturator Tape (TOT) is a new technique, based on positioning of a tape under the middle urethra **through the obturator foramina**. The outcomes and complications of the TOT at 1 year follow up were evaluated.

Study design, materials and methods

56 patients underwent to TOT for stress urinary incontinence (SUI) have been prospectively evaluated. In the first 6 patients was used the Uratape, a polypropylene tape covered by silicon in the middle part. Eventually, because of 2 cases of extrusion due to the silicon part, it was created and used the Obtape, the same tape without the silicon part. The patient was positioned in lithotomy position and a Foley catheter was inserted. A **small (2 cm) incision** was performed 1 cm below the external meatus in order to allow the digital dissection of the paraurethral. Through the skin the obturator foramen was identified and a **small incision** was done in the medial part just above the level of the urethral meatus bilaterally. Eventually a hooked **tunneler was inserted** through the incision at the level of the obturator foramen and the obturator fascia is perforated anteroposteriorly. The tunneler is then directed medially in the paraurethral space previously prepared and under direct digital control. The **tape is inserted** into the eye of the tunneler to retract the tape through the obturator foramina. The procedure is repeated on the other side. Patients were evaluated preoperatively, at 1, 6, 12 months of follow up with a physical examination, validated questionnaire (**AUA score**) and reported **percentage of improvement**. And **uroflowmetry**,

Results

The mean age was 62.9 (range 42 – 79). 84% (29/31) of the patients had urodynamic stress incontinence, 16% (7/31) had stress incontinence associated with urgency. The median follow up was **12 months** (range 1-24 months).

- The average of the AUA score has been **decreased** of 13 points (from 16 to 3) and the average percentage of improvement was 81 % up to a maximum follow up of 18 months.
- **87%** (49/56) patients were dry one year after the surgery and 7% (4/56) were improved.
- **No significant changes** in uroflowmetry parameters.

Two cases of extrusion have been reported, using the Uratape, no cases of extrusion have been reported using the Obtape. In both cases of extrusion, the tape had been removed and the patients were continent after the procedure. Two patient had developed new urgency. One patient required the catheter for 15 days. The post residual volume, evaluated by ultrasound in each patient, was less than 50 cc.

Interpretation of results

The validated questionnaires and the percentage of improvement as perceived by the patient showed a good efficacy although the results are comparable with the other approaches for the tension free tapes. The uroflowmetry showed no change after the procedure and only one patient required the catheter for more than 15 days. We think that these results are due to the completely anatomical reconstruction of the urethral floor that this tape offers, without interfere in the dynamic of micturition. This is mainly due to the original trans obturator approach, that permit the angle between the urethra and the tape to be usually less than 15 °. The only significative complications were the vaginal erosions due to the silicon part of the tape that has been removed in the second version. Interestingly both patients were dry after the removal of the tape, probably due to the fibrous tissue that remained anyway as a support for the urethra.

Concluding message

The trans obturator tape is a *simple, direct and quick procedure*. It is associated with good outcomes and high patient satisfaction up to an average follow up of 12 months. Additionally the Obtape does not seem associate to erosion, extrusion or alteration of the normal voiding.