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# SAFETY OF THE TOT PROCEDURE (MONARC TM AMS): A REVIEW OF 114 PATIENTS FROM ONE INSTITUTION.

### Hypothesis / aims of study

The aim of this study was to evaluate the safety and to report the complication rate of the transobturator tape procedure (TOT), using a braidded monofilament polypropylene tape (Monarc <sup>TM</sup> AMS), as this new surgery is becoming a promising first-line treatment for female stress urinary incontinence.

### Study design, materials and methods

This was a case series study. Between october 2002 and november 2004, 114 patients underwent the TOT procedure with the AMS material in our institution. Placement of the tape was carried out by a single urogynecologic surgeon (S.O.), according to the technique described by E. Delorme but modified by G. Mellier (1). The two ends of the sling were passed through the obturating membrane and the muscles which cover it, by circumventing the ischiopubic bone with an helical needle introduced from outside to inside. The Monarc tape, manufactured by AMS (2), is the only monofilament polypropylene tape used for the TOT procedure. This tape has the advantage of beeing very flexible and extensible. A suture is running along the tape that permits to adjust the tension and to keep the tape's integrity during the installation. Complications were retrospectively collected from chart review. As secondary end point, the subjective success rate was also recorded.

### Results

Ninety-nine (86,8%) patients out of 114 were available for follow-up. Mean follow-up was 4 months (1 - 23 months). Mean age was 54 years old (31 - 81years old). Forty-five patients out of 114 underwent TOT combined with other gynecologic surgery (39,5%) and 69 patients underwent a TOT procedure exclusively (60,5%). A total of 39 patients presented complications (34,2%) including 15 urinary retentions (13%), 14 bleedings over 200cc (12,5%), 5 urinary tract infections (5%), 5 de novo urge symptoms (5%), 4 pain syndromes (4%), 1 de novo urge urinary incontinence (1%), 1 need for a second surgery (1%) and 1 vaginal perforation (0,01%). Among women presenting significant bleedings (over 200cc), 11 patients out of 14 (79%) were having a combined surgery. Only 3 patients (4,3%) among the 69 exclusive TOT procedures presented significant bleedings. No patient presented wound problems. There has been no wound erosion, hematoma or infection. Vesical, uretral or intestinal trauma were not reported either. At 6 weeks, 96 patients out of 99 reported a subjective complete urinary continence (97%).

## Interpretation of results

This was the first case series presenting the experience of the TOT procedure using the Monarc tape. The complications founded were minor and not frequent. Urinary retention rate was comparable to what was reported from previous studies using the Uratape® (3). Bleedings has been rarely reported by previous studies on TOT procedure so valid comparison is difficult. The incidence of other complications were also comparable or even less frequent than rates previously reported by TOT litterature. Of particular interest is the absence of uretral and vaginal erosions in our case series. It seems that the composition and structure of the Monarc tape could present advantages over those wound complications.

#### Concluding message

The TOT is a safe, reliable and effective method to treat female stress urinary incontinence and can be combined with other gynecologic surgery. Monarc tape could be avantageous to reduce wound complications. Follow-up is ongoing to evaluate the long-term efficacy of the technique.

#### References:

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