

TAPE EROSIONS FOLLOWING 50 TOT PROCEDURES

Hypothesis / aims of study

The tension-free vaginal tape (TVT) has become the most common surgical procedure for stress urinary incontinence. The trans obturator tape (TOT) procedure was described in 2001 as a new minimally invasive procedure for urinary stress incontinence, with the proposed advantage over TVT of preventing serious complications by avoiding the retropubic approach [1].

Our objective was to undertake 50 TOT procedures before introducing TOT into general use in our urogynaecology practice.

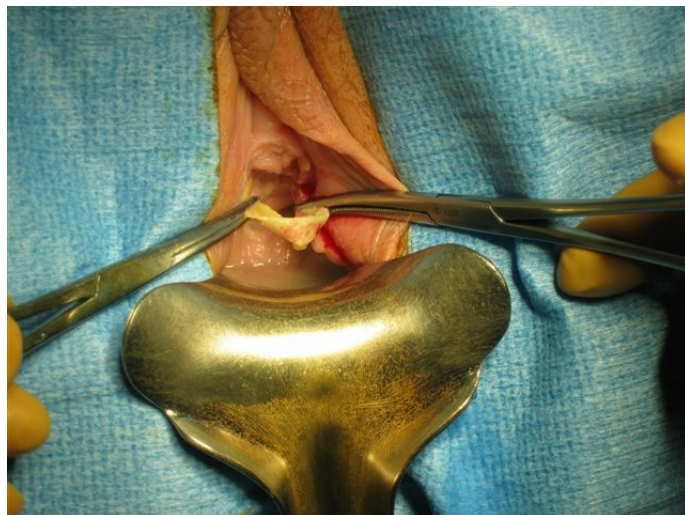
Study design, materials and methods

The 50 TOT procedures were undertaken by four surgeons, with an 'outside-in' approach, using non woven polypropylene mesh with average pore size of 50 μ m. Follow-up was scheduled for six weeks, and six and 12 months postoperatively. Written consent was obtained from all women with complications, to present the details of their cases.

Results

Of the 50 procedures undertaken, five cases of vaginal erosions have been identified (10%), one complicated by a groin abscess (2%). The erosions occurred between 6 weeks and 13 months postoperatively. All five women required further procedures to trim (n=3), resect (n=1) or remove (n=1) the tape. One woman has had a TVT procedure. To date, three women remain incontinent of urine.

Figure: Tape exposed in one patient



Interpretation of results

To date, despite the gaining popularity of TOT, there have been no North American reports of vaginal erosion or abscess. Four published reports (6 cases) of erosions and one inguinal abscess following TOT procedures have been published by European authors.

Our high rate of erosions was therefore unexpected. Possible reasons include (a) surgical inexperience (unlikely given that we have undertaken >2000 TVTs without similar complication rates); (b) inherent susceptibility of the 'hammock' position of the TOT tape, for example this positioning may be more susceptible to disruption during sexual activity; (c) the

non-woven polypropylene tape with mesh size of 50µm itself may predispose it to erosion or abscess. The literature and our clinical findings support the latter explanation [2].

Concluding message

We believe that other incontinence surgeons should be aware of these potential complications following TOT. Our concern about our high rate of erosions has led us to begin reviewing our series of 50 TOT cases at 12 months to establish the true rate of complications.

References

1. La bandelette transobturatrice: un procédé mini-invasif pour traiter l'incontinence urinaire chez la femme. *Prog Urol* 2001; **11**: 1306-13.
2. Mechanical properties of synthetic implants used in the repair of prolapse and urinary incontinence in women: which is the ideal material? *Int Urogynecol J Pelvic Floor Dysfunct* 2003; **14**(3): 169-78.