

TENSION-FREE VAGINAL TAPE (TVT) SLING INSERTION ALONGSIDE OTHER GYNAECOLOGICAL OPERATIONS

Hypothesis / aims of study

There are limited reports about the insertion of the tension-free vaginal tape (TVT) sling alongside other gynaecological procedures. Most published work involves prolapse surgery. This limitation was highlighted by the National Institute of Clinical Excellence in its guidance on the use of tension-free vaginal tape (TVT) for stress incontinence (1).

This study tests the hypothesis that tension-free vaginal tape (TVT) sling insertion is as safe and effective when carried out alongside other gynaecological procedures as when carried out as the only procedure.

Study design, materials and methods

The study was a retrospective non randomised, non comparative one. It included 85 patients who had tension-free vaginal tape (TVT) sling insertion alongside other gynaecological procedures since the introduction of the technique in 1999 till 2005 at 4 district general hospitals. Data were obtained from the patient notes.

Results

The concomitant procedures was carried out is shown in table 1.

Type of surgery	Number	%
Minor surgery	24	28.2%
Hysteroscopy	4	4.7%
Mirena insertion/change	8	9.4%
Laparoscopic sterilisation	2	2.4%
Bladder biopsy	3	3.5%
Vulval procedure	4	4.7%
Major surgery	61	71.8%
Vaginal		
Repair	54	63.5%
Anterior	19	22.4%
Posterior	26	30.6%
Anterior and posterior	9	10.6%
Hysterectomy	11	12.9%
Abdominal		
Hysterectomy	2	2.4%
Salpingo-oophorectomy	3	3.5%
Sacral colpopexy	1	1.2%

Table 1. The type of concomitant surgery.

Operative and post-operative complications are shown in table 2.

Complication	Number	%
Bleeding \geq 500ml	1	1.2%
Blood transfusion	1	1.2%
Urinary tract infection	3	3.5%
Groin infection (site of needle passing)	1	1.2 %
Vaginal infection	1	1.2%
Vaginal haematoma	1	1.2%
Vaginal bleeding	2	2.4%
Catheter >7 days	17	20%
Home with catheter	9	10.6%
Stretch under general anaesthesia	6	7.1%
Intermittent self catheterisation for months	2	2.4%

Table 2. Complications of tension-free vaginal tape (TVT) sling insertion alongside other gynaecological procedures.

The outcome at 6 weeks follow up is shown in table 3.

Outcome	Number	%
Cure	80	94.1%
Improved	3	3.5%

Failure, repeat TVT	2	2.4%
De novo overactive bladder symptoms	7	8.2%

Table 3: The outcome at 6 weeks follow up.

Regional and general anaesthesia were used in almost half the patients. Two cases had a combination of general and regional anaesthetic, one had spinal till the insertion of the tension-free vaginal tape (TVT) sling and one was waken up after vaginal hysterectomy and posterior repair for sling insertion. The order in which surgery was performed is shown in table 4.

Type of concomitant surgery	Number	Before TVT	After TVT
Laparoscopic surgery	6	4 (66.7%)	2 (33.3%)
Major abdominal surgery	4	4 (100%)	0 (0%)
Vaginal hysterectomy	11	11 (100%)	0 (0%)
Anterior repair	28	21 (75%)	7 (25%)
Posterior repair	35	13 (37.1%)	22 (62.9%)
Minor vaginal surgery	22	9 (40.9%)	13 (59.1%)

Table 4. The order of performing concomitant surgery.

Interpretation of results

A wide range of gynaecological procedures is being carried out alongside tension-free vaginal tape sling insertion. Complications and effectiveness at 6 weeks follow up were not different from the randomised trial that compared the tension-free vaginal tape sling insertion to the Burch colposuspension (2). There is a considerable variation in technique.

Concluding message

There is a need for randomised controlled studies to establish the safety, effectiveness and best technique for insertions alongside other gynaecological surgery.

References:

1. National Institute for Clinical Excellence (2003): Guidance of the use of tension-free vaginal tape (Gynecare TVT) for stress incontinence, Technology Appraisal Guidance No. 56, National Institute for Clinical Excellence, London, United Kingdom.
2. Ward K and Hilton P (2002): Prospective multicentre randomised trial of tension-free vaginal tape and colposuspension as primary treatment for stress incontinence, British Medical Journal 325: 67-73.

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HUMAN SUBJECTS: This study did not need ethical approval because Retrospective study based on data from patient notes but followed the Declaration of Helsinki Informed consent was not obtained from the patients.