

## A RETROSPECTIVE COMPARISON OF TENSION FREE VAGINAL TAPE/TRANSOBTURATOR TAPE (TVT/TOT) PROCEDURES DONE IN CONJUNCTION WITH AND WITHOUT PROLAPSE REPAIR

### Hypothesis / aims of study

The tension-free vaginal tape (TVT) and transobturator tape (TOT) procedures are two minimally invasive techniques for the treatment of female stress urinary incontinence (SUI) and are commonly performed in conjunction with prolapse repair. The objective of our study was to compare the outcomes of TVT/TOT procedures with or without concomitant prolapse repair and determine whether the patient is more likely to benefit either from the procedures performed concomitantly or separately. Our hypothesis was that patients having concomitant prolapse repair may have more complications and higher risk of voiding dysfunction.

### Study design, materials and methods

We performed a retrospective chart review and compiled a list of data points from patient charts. Patients that had a TVT/TOT procedure with or without prolapse repair between January 1, 2005 and December 31, 2006 were included. The outcomes investigated included: the need for reoperation (defined as surgical release or loosening of the tape), the rate of post-operative voiding dysfunction, and the prevalence of persistent SUI. Group 1 includes the patients having midurethral sling alone and Group 2 is those who had midurethral sling with prolapse repair.

### Results

Two patient populations were compared and 93 of 108 charts had complete data for analysis. There was no significant difference in pre-operative voiding dysfunction between the 2 groups (defined by patient complaint of voiding dysfunction, uroflow pattern, max flow rate, and post-void residual). Patients having concomitant prolapse repair had a longer OR time and longer length of hospital stay. They also had a longer time to normal voiding in the immediate post-operative period. At the 6 week post-op follow-up, there was no difference between the groups in rate of voiding dysfunction, or prevalence of SUI and/or UUI. There was also no difference between groups concerning the need for tape release or reoperation.

#### Immediate post-op period

Variable	Group 1	Group 2	P value
Estimated blood loss >100 mL (%)	8.9	51.4	<0.001
Need for blood transfusion (%)	0	0	
Had a complication during surgery (%)	1.8	0	1.00
OR time (min)	38.8	85.1	<0.001
Length of stay (days)	0.4	2.8	<0.0001
Time to normal voiding (days)	3.0	8.5	<0.0001

#### 6 Week Follow-up Visit

Variable	Group 1	Group 2	P value
Infection (UTI/wound, %)	24.5	25.0	1.00
Positive cough test (%)	2.3	6.1	0.58
Recurrent prolapse (%)	7.5	11.1	0.71
Patient complaint of:			
Persistent SUI (%)	3.8	0	0.71
New onset UUI (%)	3.8	8.3	0.71
Persistent UUI (%)	24.5	19.4	0.62
Voiding dysfunction (%)	17.0	20.0	0.46
PVR (mL)	60.8	46.6	0.13
Need for surgical release/revision of tape (%)	1.9	10.8	0.16

### Interpretation of results

Our hypothesis was not supported by our results. There was no difference in voiding dysfunction at 6 weeks post-operatively, or need for reoperation, between the two groups.

### Concluding message

Although TVT/TOT procedures with concomitant prolapse repair have a higher incidence of voiding dysfunction in the immediate post-operative period, we found that this delay did not persist to the 6 week follow-up visit and that there was no greater risk of lasting voiding dysfunction or need for reoperation after concomitant procedures.

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<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	University of Alberta Health Research Ethics Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No