

WHERE ARE THE EXTREMITIES OF THE TVT SECUR®?

Delmas V.¹, Villet R.², Debodinance P.³, Fernandez H.⁴, Jacquetin B.⁵, Haab F.⁶

¹Hospital Bichat, Dept. of Urology, Paris, France, ²Hospital des Diaconesses, Dept. of Gynaecology, Paris, France, ³Hôtel Dieu, Dept. of Gynaecology, Dunkerque, France, ⁴Hospital Bécélère, Dept. of Gynaecology, Clamart, France, ⁵Hôtel Dieu, Dept. of Gynaecology, Clermont Ferrand, France, ⁶Hospital Tenon, Dept. of Urology, Paris, France

Introduction & Objectives: A new sub urethral tape, the TVT Secur®, has been offered for the treatment of stress urinary incontinence in female patients. The advantages are less material and not a long route with the uncertainty on the anatomical structures involved. But the results are variable from a surgeon to another, asking the question of individual techniques. The aim of this anatomical study is to understand where the extremities of the tapes are.

Material & Methods: 6 uro gynaecologists, 5 clinically experienced with the TVT Secur® and 1 using the sub urethral route and with the help of tape positioning manual. On female cadavers (Body donation, Dept. of anatomy, Université Paris Descartes), 7 procedures were realised as in operating room, in 6 cases with the intention of doing a transobturator position and in 1 case a retro pubic position. Each experienced surgeon realised the procedure as in his clinical practice. Then an anatomical dissection by abdominal and crural ways was carried to see where the extremities of the tape stood.

Results: For two surgeons, the extremities of the tape were fixed in the obturator internus, parallel and medially to the obturator membrane, far of all vessels and nerves. And in the case of a retropubic direction, the extremities were under the fascia pelvis close to the posterior aspect of the pubic symphysis. For three surgeons (whose the unexperienced using the manual) the extremities perforated the fascia pelvis close to the ATFP (inside or outside it) and were free in the laterovesical space. For one surgeon, the extremities were in the bladder wall on one side, inside the bladder on the other side.

Conclusions: This new tape is appealing because less invasive, less material; but with free extremities it suppress the landmark of the exit point. So it appears that even in experienced hands the tape was not in the ideal theoretical position. This can explain some of the conflicting results. There is a need for perfect positioning of the patient, perfect introducing of the tape and orientation of the extremities of the tape. With this new tape (and perhaps all of this kind with free extremities in the pelvis) the procedure is not so easy and needs a training and a learning curve greater than for the usual sub urethral tapes.

TVT VS. TVT-O: DOES SURGICAL APPROACH AFFECT CURE RATE?

Pushkar D.Y., Kasyan G.R.

MSMSU, Dept. of Urology, Moscow, Russia

Introduction & Objectives: An objective of the study was comparison of efficacy and safety of tension-free vaginal tape (TVT) applied via retro pubic or transobturator approaches in females suffering stress urinary incontinence (SUI). In order to gain this objective other factors influencing cure rate shall be minimized, such as surgeons' experience, tape characteristics or recurrent incontinence SUI.

Material & Methods: Since 1999 to 2005, 460 patients with SUI underwent surgical treatment in Urology Dept. of MSMSU. Patients with detrusor over activity, recurrent incontinence and those cases when the tape other than macro pore polypropylene was used were ruled out from the study. Same experienced urologists did the surgery in both groups. Only 310 patients from 460 met these inclusion criteria. In accordance with that 202 patients formed Group 1 when retro pubic TVT was utilized. Group 2 included 108 females treated with TVT via transobturator approach. Mean age in group 1 was 54,7 ± 11,9 yrs. (29 - 76), and 53,6 ± 12,5 yrs. (35 - 79) for group 2 (p = 0,446). There were no significant difference between the group 1 and 2 in matter of menopause (66,6 % vs. 59,3 %; p = 0,54), BMI (24 ± 3,2 vs. 25,2 ± 4,3; p = 0,058) and parity (2,3 ± 0,9 vs. 2,0 ± 1,9; p = 0,6) accordingly. Mean postoperative follow-up ranged 4 ± 4,3 yrs for group 1 and 3,1 ± 3,14 yrs for group 2 patients (p = 0,061).

Results: According to our results, the cure rate in group 1 (retro pubic TVT - 93,53 %) and group 2 (transobturator TVT - 92,95 %) has no significant difference (p = 0,58). Comparison of complication rate showed no statistical significance as well. Four patients in each group failed treatment (1,98 % in TVT group and 3,70 % after TVT-O; p = 0,36). One patient in group 1 developed bladder perforation (0,49 %). No bladder injury was found in group 2. De novo urgency appeared in 4,46 % and 3,70 % cases in group 1 and 2 (p = 0,73). Hematomas requiring intervention were noticed in 2,97 % cases in group 1 and 0,93 % cases in group 2 (p = 0,24).

Conclusions: We have ruled out additional affecting factors like tape bio-physical characteristics, surgeons' experience and cases with recurrent SUI for adequate comparison of retro pubic and transobturator TVT. The study results revealed no difference in efficacy and safety when comparing retro pubic and transobturator approaches of TVT placement. There is no significant difference in complication rate for both methods. Retro pubic and transobturator TVT procedures are equally effective and safe in treatment of female SUI. Surgical approach of TVT application does not affect cure rate.

THE FACTORS AFFECTING THE SUCCESS AND QUALITY OF LIFE AFTER TVT IN THE PATIENTS WITH STRESS URINARY INCONTINENCE

Kim H., Kim S.Y., Yang D.Y.

Kangdong Sacred Heart Hospital, Hallym University, Dept. of Urology, Seoul, South Korea

Introduction & Objectives: ICS recommended that not only symptomatic improvement but also its impact on quality of life must be evaluated for the efficacy of treatment in the patients with stress urinary incontinence(SUI). However, there are a few papers regarding symptomatic improvement and its impact on quality of life after a tension-free vaginal tape(TVT) procedure in the patients with SUI. Therefore, we evaluated the factors affecting the success and quality of life following a TVT procedure were investigated in the patients with SUI.

Material & Methods: We included 79 women with SUI that underwent the TVT procedure and were followed for at least 3 years. Preoperatively, the patients were evaluated by history, physical examination, a 1-hour pad test and video urodynamics to determine abdominal leak point pressure(ALLP). In addition, pre and postoperative quality of life was evaluated by the incontinence quality of life questionnaire(I-QoL). We analyzed factors including patient characteristics, history, 1-hour pad test and ALLP with respect to the success and quality of life after the TVT. A success after the TVT was defined as absence of any subjective complaint of leakage. The results were analysed using T-test and Chi-squared test. We considered p < 0.05 as statistically significant.

Results: The overall 3-year success rate of the TVT was 90%. There was a statistically significant increase in the I-QoL scores postoperatively. There was no factor affecting the success rate and postoperative I-QoL score. However, when the postoperative I-QoL scores were compared with the preoperative I-QoL scores, the increase in I-QoL scores was significantly higher in the stress urinary incontinence patients with urge incontinence, low ALLP, and high grade incontinence symptoms.

Conclusions: The results of this study suggest that the TVT procedure is effective for treating female SUI and improving the quality of life without any independent risk factor. However, for improving the quality of life, the TVT was more effective in SUI patient with urge incontinence, low ALPP and high grade incontinence symptoms.

P19 UROLITHIASIS: DIAGNOSIS AND MEDICAL THERAPY Thursday, 27 March, 09.15-10.45, Red Hall 2

NON-ENHANCED SPIRAL CT VERSUS EXCRETORY UROGRAPHY FOR THE DIAGNOSIS OF URETERAL CALCULI: ANALYSIS BASED ON THE DATA FROM PLAIN X-RAY OF THE KIDNEYS, URETERS AND BLADDER AND URINE ANALYSIS

Lee S.H., Ko D.S., Kim J.B., Lee S.K.

School of Medicine, Hallym University, Dept. of Urology, Chuncheon, South Korea

Introduction & Objectives: Recently the diagnosis of ureter calculi by nonenhanced spiral CT (NESCT) is gaining acceptance over that by excretory urography (EU), the former gold standard, due to its high diagnostic accuracy, and detail. But there is no report for comparing the diagnostic accuracy of NESCT and EU according to the basic clinical data from plain x-ray of the kidneys, ureters and bladder (KUB) and urine analysis of patients with suspected ureteral calculi. So we compare the accuracy of NESCT and EU in diagnosing ureteral calculi according to the basic clinical data from KUB and urine analysis to help determine which is more useful modality for diagnosing ureteral calculi case by case.

Material & Methods: We evaluated 864 patients with suspected ureteral calculi. Among 864 patients, 428 underwent EU and 436 underwent NESCT. All films were assessed by 2 urologist and 1 radiologist with no knowledge of the clinical histories. The accuracy for diagnosing ureteral calculi in each group according to the findings on KUB (presence or absence of suspicious ureteral calculi, size and location of suspicious calculi) and urine analysis (presence or absence of hematuria) were compared.

Results: There were no significant differences in the accuracy for diagnosing ureteral calculi between the two modalities according to the size of suspicious ureteral calculi on KUB and the finding on urine analysis (presence or absence of hematuria). The diagnostic accuracy of NESCT was significantly higher in patients with absence of suspicious calculi on KUB and that of EU was significantly higher in patients with suspicious ureteral calculi located in the pelvic cavity on KUB (p < 0.05, Chi-square test, Table). Table : Accuracy for diagnosing ureteral calculi in patients with / without suspicious ureteral calculi on KUB (Chi-square test)

EU		NESCT		Total	p-value'		
Dx.(-)	Dx.(+)	Dx.(-)	Dx.(+)				
Suspicious calculi(-) on KUB		71	45	6	134	256	<0.05
Suspicious calculi(+) on KUB	upper	8	138	2	123	271	0.1721
	mid	1	20	1	23	45	0.5298
	lower	3	142	15	132	292	<0.05
total		12	300	18	278	608	0.2782
Total		83	345	24	412	864	

Conclusions: Our results indicate that NESCT is a more useful modality for diagnosing ureteral calculi in patients with absence of suspicious calculi on KUB and EU is a more useful modality in patients with suspicious calculi located in the pelvic cavity on KUB.