

VOIDING PROBLEMS AFTER TVT-IMPLANTATION: THE ROLE OF THE FUNCTIONALITY OF THE PELVIC FLOOR.

Aims of Study

A prolapse of the bladder neck is a limiting factor for a TVT-implantation. Yet it is not clear at what size of descent a kolposuspension should be preferred instead of a TVT-procedure.

Objective: How does the prolapse of the bladder neck influence the postoperative voiding of the bladder after TVT-procedure.

Methods

In a retrospective study we examined the postoperative voiding problems of 72 women who had undergone a TVT-procedure due to pure GSI. All women had pre- and postoperative a full urodynamic investigation (urethrocystometry, Introitus-EMG, perineal sonography). The position of the bladder neck was preoperatively measured by perineal sonography in correlation to the lower symphyseal line in rest and during valsalva manoeuvre. All women with preoperative detrusor instability, reduced bladder capacity or voiding difficulties were excluded as well as those who had the TVT-implantation combined with another surgical procedure. The post void residual was measured in all women the day after operation either by sonography or catheterisation. When the post void residual was >100 ml we continued intermittent catheterisation. Voiding parameters were the day of the 1st spontaneous micturition, the day when the post void residual was the first time < 100ml and the postoperative hospitalisation.

Results

The position of the bladder neck (Fig.1) in rest showed a linear but not sign. correlation to the time when the patient could empty the bladder the 1st time < 100 ml. (1.48 days at bladder neck > 12mm over the lower symphyseal line versus 2.24 days at <9 mm). During the valsalva manoeuvre there was no sign. correlation but there was a tendency that those with a lower position of the bladder neck were even earlier able to empty their bladder. Comparing the difference between the bladder neck in rest and during straining there was a reciprocal correlation to the post operative voiding: women with the largest difference between the position of the bladder neck in rest and during straining could empty their bladder earlier. The sum potential of the Introitus-EMG showed sign. correlation ($p=0.025$) to the ability of emptying the bladder .

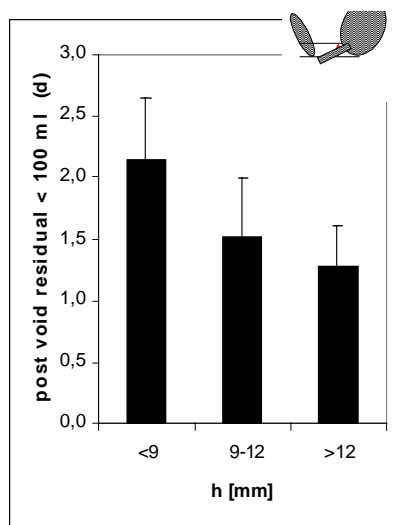
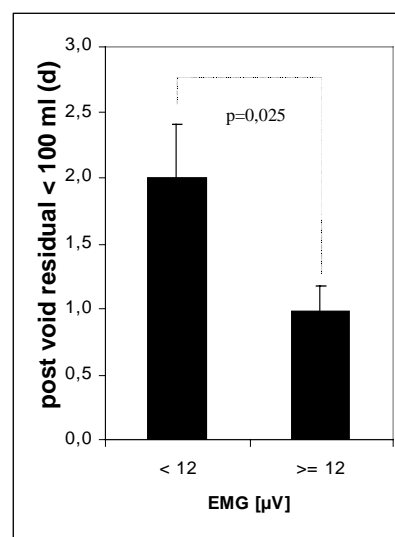


Fig 1 Correlation between the position of the bladder neck and post void residual

Fig 2. Correlation between Introitus EMG (sum potential) and pot void residual



Conclusion

Difficulties in emptying the bladder after TVT-procedure correlate to the functionality of the pelvic floor. It is not only the descent of the bladder neck but also the functionality of the pelvic floor muscles that influence the ability of voiding the bladder post operative.