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RELEASE OF TENSION-FREE VAGINAL TAPE (TVT) FOR THE TREATMENT OF PROTRACTED URINARY RETENTION

Aims of Study

To examine the outcome of TVT tape transection.

Methods

The initial 756 women who underwent TVT placement for treatment of stress or mixed incontinence over 4-year period at one University Hospital and over 2.5-year period at one City Hospital were included in the present study. Fifty four of them (7.1%) had prolonged urinary retention postoperatively. TVT was performed under local (94%) or spinal anesthesia. Decompression of the bladder with intermittent or suprapubic catheterization was unsuccessful among 17(31.5%) patients. These patients underwent a vaginal TVT release procedure, which was carried out by midline tape transection. In one patient the tape was cut a second time at both sides.

Results

The mean age of the 54 women with protracted urinary retention was 62 years (range 37-87years) and that of the 17 patients undergoing TVT release 66 years (range 38-87 years). The average interval between TVT placement and release was 36 weeks (range 3-153 weeks). Eight of 17 (47%) were completely cured of their retention and incontinence. Four patients (24%) had recurrent incontinence, some of these patients had concomitantly urinary retention. There were two patients, 84 and 55 years old, who became incontinent and underwent repeated TVT. The older patient remained incontinent, while the younger patient was cured. There was a 76-year old woman, who did not have leakage during the TVT procedure and she had complete postoperative retention and underwent tape release twice. After three months she was markedly improved. A woman aged 71 underwent TVT cutting and repeated TVT operation at the same time and she was completely cured. The tape was transected in 65% of the patients after six weeks and of 35% prior to this postoperatively. If the interval between TVT placement and release was over six weeks the cure rate was 45% (5/11 patients) and if shorter, 50% (3/6 patients). Fifteen patients (81%) were over 50 years old and in this group the tape was cut in 34%. There were 49% stress and 51% mixed incontinent patients. The tape had to be cut more often in the group of patients with mixed incontinence: 41% versus 23%.

Conclusions

Severe urinary retention following appropriately performed TVT is uncommon and the management of this condition is problematic. This retrospective study emphasizes the importance of proper patient selection for TVT. It is important that the tape is placed without any tension in order to avoid postoperative voiding problems and the need for tape transection.