

SUBURETHRAL SLING REMOVAL – OUTCOME AND FEASIBILITY

Hypothesis / aims of study

Suburethral slings are routinely used for the surgical treatment of female urodynamic stress incontinence. Usually complication rate is low (1) and may include de novo hyperactive bladder, tape erosion and recurrent stress incontinence. Success rates are commonly comparable to Burch colposuspension.

Occasionally these slings cause severe complications and need to be removed. Aim of the study was to evaluate the clinical outcome, intraoperative complications and urodynamic findings including perineal sonografie after the removal of suburethral slings.

Study design, materials and methods

Between December 2002 and January 2005 we removed suburethral slings in 29 patients whereof 25 were conventional tension free vaginal tapes (TVT) and four transobturator tapes of various brands and materials. Patients were referred from local district hospitals to our urogynaecological department.

Reasons for removal were dyspareunia (n=11), recurrent tape erosion into the vagina (n=5), urinary retention (n=8), transvesical tape causing recurrent urinary tract infection (n=1), dyspareunia (n=8) and osteitis of the pubic bone (n=3). In one patient the tape was placed transvaginally producing a midvaginal obstacle, which caused major bleeding of the male partner during first postoperative intercourse. Some patients had more than one of the above-mentioned complaints.

In patients with suburethral sling erosion the tape was twice covered surgically by mobilisation of the surrounding tissue before the decision for suburethral removal was made.

Pre- and postoperatively multichannel urodynamics including pressure flow studies, urethra pressure profile, cough and pad test, perineal ultrasound and residual urine were performed.

In patients with dyspareunia, local erosion and urinary retention the tape was removed suburethrally only (n=25), in patients with osteitis and transvesical placement the Tape was removed completely using suburethral and Cherney incision (n=4). Intraoperative blood loss, intra- and postoperative complication and duration of hospital stay were noted.

Spinal or general anaesthetic was used.

Results

Median follow up was 11.5 months (6-21months). All operations were performed by one surgeon (AK). Median age was 57 years (40-79 years), median parity 2,6 (0-5 children), median BMI 29 (22-40). Bladder capacity in median was 390 ml (130-880 ml), median residual volume preoperative was 125 ml (0-440 ml), postoperative 26 ml (0-150 ml), maximal urethral pressure was 49 cmH₂O (20-113 cmH₂O). Six patients suffered from urodynamic stress incontinence preoperatively. Median time between insertion and removal was 12.6 months (1-34 months). Median operation time to remove the TVT was 74 minutes (30-210 minutes), no intra or postoperative complications are reported, blood loss was in median 50 ml (0-100 ml). 19 slings were removed suburethrally only, 10 were removed totally. 13 had a recurrence of urodynamic stress incontinence; nine of them had another incontinence operation since. One had TVT reinsertion, four had a bladder neck injection, three a colposuspension and one will have an ileal bladder substitute. 17 patients overall remained continent despite sling removal. Two patients still suffer from dyspareunia, one still has voiding problems and one suffers from de novo recurrent bladder infections.

Interpretation of results

Occasionally severe complications after insertion of suburethral slings occurs, which can be treated by sling removal. About half of the patients remain continent after suburethral sling

removal, which is feasible with few perioperative complications. Preoperative problems including osteitis and dyspareunia dissolved in most of the cases.

Concluding message

Suburethral slings rarely cause severe complications, which can be treated by sling removal. Sling removal for voiding disorders, dyspareunia or de novo hyperactive bladder is successfully feasible.

1) KC Nessensohn, E. Dreher, A. Kuhn
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