

CHARACTERIZATION AND MANAGEMENT OF SEVERE COMPLICATIONS FOLLOWING TENSION FREE SLING PROCEDURES FOR FEMALE URINARY STRESS INCONTINENCE

Aims of Study

Tension free sling procedures (TFSP) like TVT, IVS and SPARC have proven to be a safe and effective option for the treatment of female stress incontinence. 5-year cure rates of over 80% have been published together with low complication rates. Tape transection seems to be a feasible therapy for de novo urgency or urinary retention following TFSP. We present our 3-year experience with TFSP complications in attempt to characterize distinct complication subtypes and to evaluate management outcome.

Methods

From 1999 to 2002, 31% of all surgical procedures for urinary incontinence (n=148) in our department were TFSP. All patients underwent preoperative and postoperative urodynamic evaluation. 25 additional patients from other hospitals presented with severe complications after TFSP. Since not every complication from those clinics was referred to us, no valid conclusion could be drawn regarding incidence and prevalence of TFSP complications. Patient history and informations concerning preoperative diagnostics were obtained. Urodynamic studies were performed prior to therapy. Treatment outcome was evaluated 3 months after intervention.

Results

The complication rate in patients operated in our institution was 10%. Only minor complications (de novo urge, urinary tract infections, post void residual (PVR)) occurred. In the patients referred from other hospitals, complications were subclassified into minor (16% pelvic pain/dyspareunia, 16% de novo urge, 20% recurrent urinary tract infections, 24% persistent urge incontinence, 24% de novo urge incontinence, 36% urinary retention with high PVR) and major forms (4% wound infection/gangrene, 8% revision requiring hematoma, 20% tape arrosion). No patient undergoing tape transection for de novo urge improved afterwards, 50% of overcorrected patients remained having high PVR after tape transection. Attempts to completely remove the tape failed or resulted in the total loss of the urethra requiring urinary diversion. Urodynamics prior to TFSP were performed in 30% of all patients presenting with complications. 78% of all overcorrected patients and 66% of the overcorrected women with detrusor hypocontractility did not have preoperative urodynamics.

Conclusions

The rate of tape arrosions is surprizingly high and may reflect the negative selection of patients in a tertiary reference centre. Tape transection may reduce PVR in overcorrected patients but should be performed within 3 months after TFSP. However, it did not help our patients with de novo urgency. Total removal of the tape after completion of scar formation is not only unlikely to solve the patients problems but practically impossible without damaging the bladder outlet. Preoperative urodynamics could help identifying patients with detrusor hypocontractility, which are at risk for urinary retention after TFSP. Postoperative urodynamics are recommended for outcome follow-up and classification of postoperative complications.