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# INTRAVAGINAL SLINGPLASTY – A SURVEY OF TAPE RELATED COMPLICATIONS IN CURRENT PRACTICE

### Aims of Study

A retrospective survey was performed of surgeons who belong to the Association of Ambulatory Vaginal and Incontinence Surgeons(AAVIS) in Australia to determine the incidence of short term and medium term complications thought to be associated with the type of prosthesis used in current practice with the IVS tunneller instrument. Anecdotal reports from some authors claimed that multifilament polypropylene tapes were associated with a high incidence of tape infection, rejection and erosion. This study attempts to determine the true incidence of these problems pending the results of prospective studies.

#### **Methods**

43 Australian surgeons known to perform the Intravaginal Slingplasty procedure(IVS) were surveyed using a Faxback Questionnaire. Respondents were asked to outline tape related complications seen during calendar year 2002. In addition to the number of cases performed of midline, paraurethral and posterior IVS procedures surgeons were asked to report the incidence of infection, tape erosion, rejection and removal.

#### Results

22 surgeons responded to the survey within 1 week. A total of 1004 anterior IVS procedures and 888 posterior IVS procedures were reviewed.

Of the 1004 anterior IVS procedures reviewed 733 were simple midline IVS procedures and 271 were paraurethral procedures. Five patients were diagnosed with infection of the tape. In four cases the infection was secondary to an infected retropubic haematoma. One case of infection was in association with an erosion. Four infections were present in patients who had undergone a paraurethral IVS procedure. There was one infection in a patient who had undergone a midline IVS procedure. There was one tape erosion in an anterior IVS without evidence of infection. One complete tape rejection occurred.

888 Posterior IVS procedures were reviewed. Infection was diagnosed in 1 case. Tape erosion occurred in 22 cases (2.48%). The higher incidence of tape erosion in the Posterior IVS is thought to be due to the need to attach the PIVS tape to the vaginal vault. Four cases were diagnosed as complete tape rejection. A total of 6 tapes (0.68%) had to be removed either for rejection or pain.

## **Conclusions**

This study confirms that tape complications are relatively rare in surgery using the IVS tunneller when current practice guidelines are followed. These guidelines emphasise the importance of aseptic technique, careful introduction of the suburethral tape without twisting, folding or damage to the tape, avoidance of damage to the overlying skin or urethra, and in particular avoidance of sutures passing between the epithelium and the tape. This suture fixation of the tape is thought to be more likely in the paraurethral IVS procedure. In the Posterior IVS techniques that avoid any suture attachment to the vaginal epithelium have now been developed and should further reduce the incidence of tape erosion in this procedure.

Prospective studies have been commenced to further investigate clinical outcomes in patients who undergo surgery for incontinence and prolapse using prosthetic materials. Occasional reports of tape related complications with IVS, TVT, SPARC or other prostheses suggest that surgical technique is the most important factor in reducing these problems.