

LONG-TERM TERM OUTCOMES ANALYSIS OF ABDOMINOVAGINAL VERSUS BONE-ANCHORED SLINGS FOR THE TREATMENT OF GENUINE STRESS INCONTINENCE

Aims of Study

To compare the long-term subjective and objective outcomes of abdominovaginal slings with pubic bone anchored slings.

Methods

This was a cohort analysis of 211 women who underwent sling operations between October 1991 and March 1999. 138 underwent an abdominovaginal sling procedure (AV) and 73 underwent a bone-anchored sling procedure (BA). Patients were called back for follow-up, which included standardized survey instruments to assess their subjective stress and urge incontinence symptoms. In addition to pre- and post-operative (at 14 weeks) urodynamic testing, objective outcomes were analyzed from a standing stress test at 250 ml and a standardized 20-minute pad test at least at 52 weeks. Low-pressure urethra was defined as mean urethral closure pressure ≥ 20 cm of H₂O.

Statistical analyses were performed using appropriate tests for continuous and categorical short-term outcome measures. Kaplan-Meier cumulative continence rates were calculated for the objective outcome measure in each surgical group.

Results

The two cohorts had a mean age of 69 and a median parity of 3. Mean length of follow-up was 153 ± 7.6 weeks. 130/138 (94%) and 71/73 (97%) were postmenopausal and 107/138 (76%) and 54/73 (74%) were on HRT in the AV and BA groups, respectively. Twenty-five percent of each group had undergone a prior reconstructive surgery and approximately 17% had undergone a previous incontinence procedure. 102/138 (74%) and 54/73 (74%) patients had symptoms of urge incontinence preoperatively in the AV and BA groups, respectively. 75% of women in both groups had symptoms of stress incontinence, and the mean closure pressure was 13 and 14.5 in the AV and BA groups with almost 90% in each group having low-pressure urethra. While only 50% and 58% of women followed-up at 1 year, seventy and sixty-six percent followed-up long-term in the AV and BA groups, respectively. 72/97 (74%) and 35/48 (73%) were without subjective stress incontinence and 37/97 (38%) and 23/48 (48%) were without subjective urge incontinence at their long-term follow-up visit in the AV and BA groups, respectively. Median return to normal voiding was 17 and 19 days in the AV and BA groups. There were no differences in demographic characteristics and 14 week objective and subjective outcomes between those women who followed-up at 1 year and those that did not.

7/124 women in the AV group and 1/71 in the BA group tested positive for objective stress incontinence by their latest follow-up visit (either 1 year or long-term). 30/122 women in the AV group and 23/70 in the BA group experienced symptoms of subjective stress incontinence by their latest follow-up visit. 80/123 women in the AV group and 39/70 in the BA group experienced symptoms of subjective urge incontinence by their latest follow-up visit.

Conclusions

Both pubovaginal slings and bone-anchored slings are reasonable options for the treatment of genuine stress incontinence. Both procedures result in similarly high long term cure rates for objective stress incontinence. Patients who have undergone AV sling procedures seem to have consistently higher long term cure rates than BA slings for both subjective stress incontinence and subjective urge incontinence.