

SMALL INTESTINAL SUBMUCOSAL SLING FOR FEMALE STRESS URINARY INCONTINENCE

Aims of Study

Small intestinal submucosa (SIS) is a new acellular porcine graft that was recently approved by the Food and Drug Administration as a sling material. We report the early results using SIS in women with urinary incontinence.

Methods

60 patients underwent a sling procedure using the SIS. Mean patients' age is 63 years (range 32-79). All patients had stress urinary incontinence confirmed by the supine stress test and a urodynamic evaluation. 25 (41.6%) of the patients presented with complicated urinary incontinence defined as prior failed anti-incontinence procedure or mixed urinary incontinence unresponsive to anticholinergic medications. Procedures were performed with the patients under general anesthesia in the lithotomy position. An inverted "u" incision was made in the anterior vaginal wall with its base at the bladder neck. Sling material was suspended in a sling on strings manner. The strings were tied above the rectus abdominis fascia through a 1.5 cm long suprapubic incision. Patients were surveyed using a standard questionnaire, a voiding diary, and a 24-hour pad test. The strict criteria of the Groutz-Blaivas-Rosenthal score were applied to measure treatment success and failure.

Results

With a mean follow-up time of 13.6 months (range 7 to 21 months), 39 patients (65%) considered themselves to be completely cured or much improved. 13 patients (21.6%) reported some improvement. Eight patients (13.3%) reported no change or worsening in their symptoms. Of the 51 patients in whom sufficient data were available to determine treatment outcomes according to the Groutz-Blaivas-Rosenthal score, 43 patients (84.3%) were classified as totally cured or improved (cured 11, good response 23, fair response 9), 4 patients (7.8%) had poor response while 4 patients (7.8%) considered the operation to have failed. Prolonged postoperative catheterization (more than 3 weeks) was required in 2 patients. One of them required a urethrolisis. De-novo urge incontinence was recorded in 5 patients (8.3%).

Conclusions

SIS can serve as an alternative to the traditional rectus abdominis fascial sling: the results as measured by the strict criteria of the Groutz-Blaivas-Rosenthal score are comparable to traditional sling procedure outcomes with no need for autologous tissue harvesting.