Post operative diagnosis	*N. patients*	*Mean opening det. Press (cm/H20)*	*Mean closure det. Press. (cm/H20)*
Cured	69	23.7	28.7
Failed continence sugery (GSI)	8	15	20.7
P value		<0.05	<0.05

Table 2. Preoperative opening and closure detrusor pressure and postoperative urodynamic diagnosis (excluding de-novo detrusor instability).

Post operative diagnosis	*N. patients*	*Mean preMUCP (cm/H20)*	*Mean preFUL (mm)*
Cured	28	37.7	3.9
Failed continence surgery (GSI)	5	39.8	2.9
P value		>0.1	>0.2

Table 3. Preoperative maximum urethral closure pressure and postoperative incontinence (excluding de-novo detrusor instability).

CONCLUSIONS

Our data suggest that women with postoperative detrusor instability have a significantly higher acceleration of the flow rate. This simple and non invasive parameter, although not diagnostic, could predict de-novo detrusor instability after continence surgery. The opening and closure detrusor pressures do appear to be useful preoperative urodynamic parameters to predict the outcome of the surgery and may be more discriminating than urethral pressure profiles.

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Author(s): J. Corcos, D.M. Rabah, P. Speiss, L. Begin, A. Zahran

Institution, city: Dept. of Urology and Pathology, Lady Davis Research Institute, McGill University, Montreal, Quebec

Title (type in CAPITAL LETTERS, leave one blank line before the text):

TISSUE REACTION COMPARISON BETWEEN CADAVERIC HUMAN FASCIA LATA AND TWO TYPES OF POLYPROPYLENE MESH ON RABBIT URINARY BLADDER

Aims of Study: The commercial availability of cadaveric human fascia lata allografts (CFA) and artificial mesh has considerably simplified sling procedures for the treatment of female stress urinary incontinence. We aim to evaluate the histological tissue reaction of rabbit urinary bladders to the tissue when applied in close contact as in the sling procedure.

Methods: 45 female New Zealand rabbits were randomized in 4 groups; Group A (n=12) multifilament-Surgipro *Mesh, Group B (n=12) prolene mesh as delivered in a Tension Free Vaginal Tape (T.V.T.) kit, Group C (n=12) CFX and Group D (n=9) surgical control. With anesthesia and using an aseptic technique, a laparotomy was performed. The bladder was approached at its dome where a piece of CFx or one of the two mesh was fixed in direct contact with the dome. The control group only had manipulation of the bladder. At 6 week intervals half the number of animals in each group were sacrificed, the other half were sacrificed at 12 weeks. The urinary bladder was collected and examined histologically by a uropathologist.

Results: At the time of the writing of this abstract the results of the T.V.T. mesh

and 3 controls were not available but will be presented at the meeting. The multifilament polypropylene mesh group at 6 weeks revealed a foreign body type granulomatous inflammatory reaction with moderate cellular fibrous plates at the serosal surface. In 2 specimens there was a much more pronounces fibrous reaction including focal involvement of the muscularis propria. A 3rd specimen shows a severe diffuse injury involving the lamina propria and urothelium in addition to perivesical abscess. The same group at 12 weeks had a similar pattern of response. Moderate mixed cell inflammation was seen in the CFX group at both collection intervals. The graft was loosely adherent to the bladder wall with a thin layer of fibrous tissue and absence of any inflammation or fibrosis in the underlying muscularis propria or lamina propria. The urothelium was also normal. A specimen revealed focal fibrosis with transmural penetration of muscularis propria sharply demarcated from the adjacent lamina propria. No significant changes were recognized in the control group.

Conclusions: There is a significant bladder tissue inflammatory response to the synthetic mesh in comparison to the CFX, which revealed minimal fibrosis and no inflammation. This is consistent over the 2 tested time intervals. We think this would explain the lack of reported adverse outcomes in the cadaveric fascia lata slings with regards to graft erosion or infection.

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Author(s):
Tatsuru Hashimoto, Osamu Yamaguchi
Institution, city, country:
Fukushima Medical University, School of Medicine, Department of Urology
Fukushima,, Japan

Title (type in CAPITAL LETTERS, leave one blank line before the text):

URODYNAMIC EVIDENCE OF BLADDER OUTLET OBSTRUCTION AFTER SUBURETHRAL SLING SURGERY

AIMS OF STUDY: Since suburethral sling procedure has been considered to be reliable and maintain long term surgical result, it is one of the current surgical options for treating female stress urinary incontinence. However, voiding dysfunction is well-recognized complication of this procedure. Long-standing poor voiding due to outlet obstruction is sometimes encountered after sling surgery.

Although recent sling surgery has been improved technically to prevent excessive sling tension, an exact status of voiding after this operation remains ambiguous.

Thus, using pressure/flow studies, the present study evaluated urodynamic aspects of women who underwent suburethral sling operation. The changes in urodynamic parameters were further studied to determine whether these patients are urodynamically obstructed after operation.

PATIENTS AND METHODS: In ten patients (mean age 63 years, range 50 to 78) with stress urinary incontinence, pressure/flow studies were performed before and three months after suburethral sling operation. In pressure/flow study, vesical pressure was measured by a transurethral catheter (8Fr), and rectal pressure was measured by an 8Fr-balloon catheter. Vesical pressure, rectal pressure and flow rate were simultaneously recorded during micturition using a DUET® version 8.0 (DANTEC, Medtronic, Denmark).

The urodynamic parameters studied were maximum flow rate (Qmax), detrusor pressure at Qmax (Pdet.max), closing pressure (Pdet.clos) and linearized passive urethral resistance relation (linPURR). The changes in these parameters were investigated by comparing the preoperative values to the postoperative values (paired-t test). In order to evaluate whether these changes were clinically significant, sensitivity (SENS), specificity (SP), positive (PPV) and negative predictive values (NPV) were calculated for different cutoff values of the changes of urodynamic parameters. The above values were correlated with symptoms resulting from outlet obstruction (Fisher's test). Descriptive statistics were presented as mean plus or minus standard deviation (SD).