

TRANSOBTURATOR SUB-URETHRAL SUSPENSION : EXPERIENCE OF THE FIRST 62 PATIENTS

Aims of study

Prospective analysis of the outcome of women who underwent the Transobturator sub-urethral suspension (MONARC, AMS Minnetonka) procedure in the North Queensland, Australia.

Study design, materials and methods

One hundred and five patients, who had Urodynamic stress incontinence (USI) on Urodynamic study (UDS), were recruited into this study. It was a prospective observational study on the clinical effectiveness and complications of transobturator approach for the treatment of USI. Study duration was between early March 2003 till end of March 2004. Clinical effectiveness was assessed based on subjective assessment (clinical dryness, substantially continent, some leak which requires some protection and substantially or totally incontinent) and objective assessment which included urodynamics and no demonstration of a leak at 350 mls of bladder filling on supine as well as on standing position. The complications analysed were immediate intraoperative as well as postoperative complications. Patients were reviewed at 8 to 10 weeks after the procedure for clinical assessment as well as for repeat urodynamics. We could analyse 62 of these patients, ranging between 2 months to 10 months so far.

Results

Patients demographics: Mean age 56.7 years (Range: 35-81years). Sixty-five percent (40/62) of the patients were postmenopausal women, the rest were premenopausal. All the subjects were multiparous women. Eighty-two percent (51/62) of patients underwent Monarc sling as primary incontinence surgery. Eighteen percent (11/62) of these were as secondary incontinence surgery. All the procedures were carried out under General Anaesthesia. The mean operative time for the Monarc sling alone was 17.7 minutes (range 10 to 30 minutes). The estimated mean blood loss was 70 mls (10 to 400mls). The concomitant surgeries carried out with Monarc sling includes urethrotomy (1.6%), anterior vaginal wall repair (33.3%), Hysterectomy (6.5%), enterocele repair (1.6%), posterior intravaginal slingplasty (6.5%), transvaginal sacrospinous fixation (3.2%), posterior vaginal wall repair (33.3%) and others 8.1%.

Intraoperative complications are vaginal fornical puncture, in 3 cases (4.8%), urethral puncture in 1 case (1.6%). There were no bladder or bowel injuries. Four cases had haemorrhage more than 200mls (6.5%). These cases had concomitant surgeries. None of these patients required a blood transfusion. All the patients were day cases. In terms of postoperative complications, six patients (9.7%) had a urinary tract infection. Five (8.1%) patients had indwelling catheter for more than 2 days. Tape adjustment/division was carried in 2 patients (3.2%). Mesh protrusion rate/delayed healing was noted in 8 patients (12.9%).

Subjective cure rate was assessed based on patient's symptoms. Thirty-two patients out of sixty two (51.5%) were completely dry, 22/62 (35.5%) were substantially continent, some leak/additional protection were needed in 7/62 (11.3%) of the patients and substantial/total incontinent was noted in one patient (1.6%).

Objective Cure rate, assessed on urodynamics (No leak at 350 mls) were noted in 51/62 patients (87.9%). Urodynamic stress incontinence were noted in 11/62 (12.1%) of patients. Voiding dysfunction were noted in 1 patient (1.6%). There were no cases of overactive bladder in this study.

Interpretation of results

The transobturator suburethral sling operation had shown good short-term subjective cure/improvement rate of 87% and objective cure rate of 87.9%. The operative time was on average about 18 minutes and had minimal blood loss. There were no complications to the bladder, bowels or major vessels. The mesh protrusion rate/ delayed healing was noted to be around 12.9%. The mesh protrusion was noted mostly on the left fornix. The high

protrusion/delayed healing could be as a result of our learning curve and missed fornicial punctures. The mesh protrusion/ delayed healing was easily managed by trimming the mesh and applying topical oestrogen cream in an outpatient setting.

Conclusion

The (MONARC, AMS Minnetonka) transobturator sub-urethral sling operation is a novel and easy way to insert a polypropylene implant. It appears to be an effective and safe alternative to retropubic slings. It had shown good short-term subjective cure/improvement rate of 87%. It also had a good short-term objective cure rate of 87.9%. Long term follow up studies are continuing to ensure prolonged success.