

## **CYSTOCELE REPAIR WITH MESH IMPLANT BY ANATOMIC TRANSOBTURATOR APPROACH USING THE PERIGEETM SYSTEM**

### Hypothesis

Anterior vaginal wall defect (cystocele) may be present in up to 50% of multiparous women, and its incidence increases with age [1]. The traditional vaginal technique for the correction of cystocele has a high recurrence rate, up to 40% in some series [2]. Placement of a synthetic subvesical mesh secured through the obturator foramen has been described previously (3), and showed reduction of recurrence rate in a short term follow up. This technique corrects both the apical, midline, and lateral defects by bringing the vaginal walls in contact with the pelvic sidewalls.

### Aims of Study

To evaluate follow up results in patients who underwent correction of cystocele using AMS (American Medical System) Perigee™ system

### Study design, materials and methods

20 patients with symptomatic anterior vaginal wall prolapse grade IV (mean age of 62.4 years) underwent repair using the transobturator implanted Perigee system, composed of polypropylene mesh. The mesh is implanted by insertion of 4 needles through the obturator membrane to anchor the mesh to the arcus tendineus fascia pelvis, in order to support central and lateral defects. Intraoperative cystoscopy was performed after intravenous injection of 5ml indigo carmine in order to exclude bladder and ureteral injury. Concomitant colporrhaphy, vaginal enterocele repair and vaginal hysterectomy were performed in 9, 8 and 6 women, respectively. Transobturator midurethral sling was performed in 5 patients who had urodynamic stress urinary incontinence. Pre-operative evaluation consisted of detailed medical history and coded pelvic floor symptoms questionnaires, physical examination and urodynamics. The degree of pelvic organ prolapse was graded according to the Baden-Walker halfway vaginal profile. Patients were invited to follow up 1, 3, 6, 12 and 18 months postoperatively. Each visit, detailed medical history, physical examination and satisfaction evaluation using visual analogue scale were taken.

### Results

After a mean follow-up of 10.4±4.1 months (median 9 months; range 6-21), 17 patients had no recurrence and 3 had asymptomatic grade I cystoceles. Intraoperative blood loss was minimal and none of the patients required blood transfusion. No bladder or ureteral injury occurred. The mean admission period was 3.3 days (range 2-5). None of the patients had new onset of urinary incontinence, irritative or obstructive urinary symptoms. One patient suffered from urinary retention, which had resolved 4 days postoperatively. One patient suffered from unremitting local pain and dyspareunia. Three months later mesh erosion was observed in the same patient and was primarily trimmed surgically. The five patients who underwent concomitant midurethral sling procedure for stress urinary incontinence were dry. None of the patients had de-novo over-active symptoms after the operation. In fact, from 17 patients (85%) who had urgency-frequency symptoms, 5 patients reported significant improvement after the operation. All patients felt cured or improved, and were satisfied with the outcome (mean score of 8.9 on 0–10 visual analogue scale).

### Interpretation of results

The transobturator mesh placement for correction of anterior vaginal wall defects is a safe procedure with minimal morbidity. The initial short-term promising outcome should be evaluated with cautious as long-term complications of mesh may occur.

### Concluding message

The safety of Perigee placement and the good initial outcome strengthens the need to increase the number of patients to be followed. Further long term follow-up is needed to study the potential complications of synthetic meshes. .

### References

1. Curr Opin Obstet Gynecol 2001; 13: 499-505.
2. Am J Obstet Gynecol 1994; 171: 1518-1526.
3. Eur J Obstet Gynecol Reprod Biol 2004; 115: 90-94.

**FUNDING:** none

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study was approved by the Human Research Ethics Committee, Chaim Sheba Medical Center and followed the Declaration of Helsinki Informed consent was not obtained from the patients.