

## A COMPARISON OF TRADITIONAL ANTERIOR COLPORRHAPHY AND CYSTOCELE REPAIR WITH MONOFILAMENT POLYPROPYLENE MESH (GYNEMESH PSTM)

### Hypothesis / aims of study

Traditional anterior colporrhaphy can have a high recurrence rate. Therefore, the use of synthetic mesh to reinforce anterior vaginal wall support was proposed. The objective of our study is to compare the anatomic recurrence rates of patients who underwent either traditional anterior colporrhaphy or monofilament polypropylene mesh (Gynemesh PS<sup>TM</sup>, Gynecare, Ethicon) as a part of surgery for central cystocele.

### Study design, materials and methods

We reviewed charts of patients who underwent transvaginal prolapse repair to correct the central cystocele between January 2003 and June 2006. All patients had a physical examination, staging of prolapse; the International Continence Society system (ICS) was used. Mid urethral sling operations were performed when stress urinary incontinences were associated. Anatomic recurrence was defined as ICS stage 2 or greater anterior prolapse on the last recorded physical examination. Subjective satisfactions were also investigated. The patient was considered subjectively cured if she did not feel the vaginal bulge any more.

### Results

A total of 74 patients underwent cystocele repair. 71 of them were followed up for a period of 12 to 37 months. The mean follow-up time was 18.4 months. 38 patients underwent traditional anterior colporrhaphy, while 33 patients underwent cystocele repair using monofilament polypropylene mesh (Gynemesh PS<sup>TM</sup>). There were no differences between the two groups with respect to demographic and clinical characteristics. Of the 71 patients, 9 (12.7%) had cystocele recurrences. Based on the type of repairs, 21.1% (8/38) of the patients with traditional repair had recurrences as compared to 3.0% (1/33) of the patients with monofilament polypropylene mesh (Gynemesh PS<sup>TM</sup>) ( $p=0.031$ ). The mean time of cystocele recurrences was 15.9 months (range 3-30 months). 76.3% (29/38) of the patients with anterior colporrhaphy and 97.0% (32/33) of patients with polypropylene mesh expressed satisfaction with the outcome of the surgery ( $p=0.016$ ). There were no major postoperative complications. One patient had erosion of mesh on the midline in front of the vaginal scar at 12 months.

### Interpretation of results

Anterior colporrhaphy has been the standard surgical treatment for anterior vaginal prolapse (1). But variations on anterior colporrhaphy without mesh have been reported, with poor success rates (20-30%)(2). Vaginal repair of cystocele with monofilament polypropylene mesh showed a success rate of 97.0% with a 3.0% rate of vaginal erosion without sequale.

### Concluding message

Monofilament polypropylene mesh (Gynemesh PS<sup>TM</sup>) was found to be more useful than anterior colporrhaphy in the prevention of recurrent cystocele.

### References

- (1) Am J Obstet Gynecol 2001;185:1299-306.  
 (2) J Reprod Med 2005;50:75-80

<b><i>Specify source of funding or grant</i></b>	<b>None</b>
<b><i>Is this a clinical trial?</i></b>	<b>Yes</b>
<b><i>Is this study registered in a public clinical trials registry?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>retrospective study but followed the Declaration of Helsinki Informed consent was obtained from the patients.</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>