

VAGINAL SURGERY OF URO-GENITAL PROLAPSE: DOES PROSTHETIC REPAIR WITH AN UNFIXED TENSION FREE PROLENE® MESH IMPROVES THE RESULTS OF CYSTOCOELE REPAIR? COMPARATIVE STUDY WITH ANTERIOR COLPORRAPHY AND PARA-VAGINAL REPAIR.

Hypothesis / aims of study

Uro-genital prolapse occur in patients having poor connective tissues. Traditional vaginal surgery using fascial plication for anterior colporrhaphy with these poor tissues gives high recurrence rate, up to 20-30% in literature. Prosthetic mesh is currently used in laparotomic or laparoscopic surgery for primary cases with very good anatomic results and low complication rate. The use of prosthetic material by vaginal route for cystocoele repair can be justified because of the high rate of recurrence in traditional colporrhaphy and the excellent vaginal tolerance of polypropylene proved by the great number of TVT put all around the world. Retraction of prosthetic material with scarring usually gives pain at the points of fixation and subsequently dyspareunia. The use of a prosthetic mesh, using polypropylene without fixation seems to us an alternative to treat prolapsus by vaginal route to try to obtain the same good results as in laparotomy or laparoscopy.

To evaluate the tolerance and efficacy of an unfixed tension free Prolene® mesh in cystocoele repair by comparing the results with a control group without mesh.

Study design, materials and methods

Fifty patients with cystocoele Ba =0 and Ba >0, operated between Jan 2002 and July 2003 with Prolene Mesh, Mesh Group (M.G) are paired for this study with 50 patients with cystocoele Ba =0 and Ba >0 operated between Dec 99 and Dec 2001 by fascial repair without mesh, Fascial Group (F.G).

The two populations are similar concerning age, parity, and severity of incontinence and grade of prolapsus.

In the Prolene® mesh group MG, the mesh is tailored with a V-neck shape under the bladder-neck, two lateral wings which are left free in the para-vesical fossi and a posterior tail which is left free in the vesico-uterine dissection space. The mesh is only attached to the retro-pubic insertion of pubo-coccygeus muscles. The vagina is closed loose under the mesh and the utero-sacral ligaments are attached together between the mesh and the vaginal vault.

In the F.G., the cystocoele repair is made by fascial plication and para-vaginal repair if para-vaginal defect is present.

Stress incontinence, if associated, is treated either with TVT or Trans-obturator tape (TOT) procedure. Medial and posterior prolapsus are treated with specific technique (vaginal hysterectomy, Mac Call culdoplasty, sacrospinous ligament colpopexy, posterior repair)

Patients with mesh are controlled regularly in clinic at 1 and 6 months and then every year. To obtain a comparative group, patients with fascial repair have been controlled at clinic especially for this study.

Failure of cystocoele repair is considered for patients having cystocoele Ba=0 or Ba>0.

Results and Interpretation of results

Mean age is 65.1 years (35-84) in the M.G and 65.6 (39-92) in the F.G. The mean follow-up is 11.9 (6-22) months for the M.G and 28 (6-46) months for the F.G.

9 patients in F.G had recurrent cystocoele Ba=0 (18%) and only one in the M.G, Ba=0 (2%). This difference is statistically significant (p=0.016).

The presence of Prolene® mesh does not increase the incidence of irritative bladder symptoms: de novo urge incontinence appears in 5 patients in both groups (p=1).

21 patients in each group are sexually active post-operatively (42%). No patient in M.G had deep dyspareunia. One patient in F.G complained of dyspareunia (p=1).

None of the patients with mesh complained of pain in the vagina due to prosthetic material.

We found in only one patient a very limited mesh exposition (<5mm) at vaginal vault completely asymptomatic. The patient did not want excision and vaginal suture proposed to her.

Concluding message

Cystocele repair with unfixed tension free Prolene® mesh seems to give very good anatomic correction and good synthetic material tolerance. This preliminary result in limited number of patients needs to be interpreted with caution as other studies describe vaginal erosion in about 10-17% of patients. We are continuing this study.