

**TOPIC: SURGERY FOR PELVIC ORGAN PROLAPSE****TITLE: IS VAGINAL SURGERY USING MESH A VALID OPTION IN WOMEN WITH RECURRENT ANTERIOR VAGINAL WALL PROLAPSE AFTER ABDOMINAL SACROCOLPOPEXY?**Hypothesis / Aims of Study

The aims of this study were to evaluate efficacy and safety of vaginal surgery using mesh in women with recurrent anterior vaginal wall prolapse after abdominal sacrocolpopexy, in comparison with primary repair.

Study Design, Materials and Methods

Patients operated for recurrent anterior vaginal wall prolapse after abdominal sacrocolpopexy (study group) were retrospectively analyzed and compared with patients operated for anterior vaginal wall prolapse as primary repair (control group). All patients have been operated with an anterior type 1 polypropylene mesh.

Pre-operative evaluation included history, POP-Q classification and symptoms and quality of life questionnaires. Intra and post-operative complications were recorded. Associated procedures, such as vaginal hysterectomy, sacrospinous fixation, posterior repair and sub-urethral sling, were also reported. After surgery, patients were seen at 6 weeks, 6 months, one and two years, using POP-Q classification, satisfaction index and symptoms and quality of life questionnaires. To complete follow-up, patients who were not seen recently had phone interviews on POP symptoms, satisfaction and late complications. Objective success was defined by the absence of anatomical recurrence of anterior vaginal wall prolapse (Ba<-1) at last follow-up.

Results

The study included 65 patients implanted (32 in the study group and 33 in the control group). In the study group, one patient died from a cancer and two were lost to follow-up, leaving 29/32 patients available for analysis. In the control group, four patients have been previously operated by vaginal surgery and one was lost to follow-up, leaving 29/33 patients available as well.

In the study group, 17/29 patients were operated by a four arms transobturator mesh (Ugytex®, Sofradim-Covidien), and 12/29 by another type 1 polypropylene mesh (Polyform®, Boston Scientific) fixed bilaterally to the arcus tendineus fascia pelvis and to the sacrospinous ligament using the Capio® (Boston Scientific). In the control group, 20/29 patients were operated by the four arms transobturator mesh, and 9/29 by the mesh fixed bilaterally to the arcus tendineus fascia pelvis and to the sacrospinous ligament.

Demographic and clinical characteristics at baseline were similar in both groups, except for previous POP surgery, previous hysterectomy and previous SUI surgery, more frequent in the study group. Associated procedures (sacrospinous fixation, posterior repair and sub-urethral sling) were more frequent in the control group.

With a mean follow-up time of 22±12 months in the study group and 23±14 months in the control group, objective success on the anterior compartment were 25/29 (86.2%) and 28/29 (93.1%), respectively (p>.05).

Although all patients were satisfied with results of surgery, one patients in each group has a recurrence of apical defect (p>.05), no patient in the control group has a recurrence of posterior compartment prolapse (p>.05), and 7/20 (35%) patients in the study group had de novo posterior compartment prolapse (p<.05).

Post-operative symptoms and quality of life evaluation were similar in both groups. De novo dyspareunia occurred in 1/29 (12.5%) and 2/29 (15.4%) patients, in the study and the control group, respectively (p>.05).

Overall rates of complications were 6/29 (20.7%) and 5/29 (17.2%), in the study and the control group ( $p>.05$ ), respectively, including one ureteral kinking (3.4%) in the study group and 1/29 (3.4%) rate of vaginal erosion which has necessitated re-operation in each group.

#### Interpretation of results

If vaginal surgery using mesh is particularly indicated for recurrent anterior vaginal wall prolapse, few studies have investigated the use of mesh in that indication. Furthermore, all available RCT in vaginal mesh surgery for anterior repair have been performed in primary repair.

Results of the present study have shown that vaginal surgery using mesh could be as efficient and safe in women previously operated by abdominal sacrocolpopexy than in primary repair. These results support our theory that in case of recurrent prolapse after one abdominal technique of suspension, the strategy of vaginal support using mesh seems valid.

#### Concluding message

Vaginal surgery using mesh is a valid option in women with recurrent anterior vaginal wall prolapse after abdominal sacrocolpopexy.

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<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>Is this a Randomised Controlled Trial (RCT)?</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>it is a retrospective study</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>No</b>