Boileau L¹, Letouzey V¹, Costa P¹, Triopon G¹, Marès P¹, de Tayrac R¹

1. Caremeau University Hospital, Nîmes, France

TOPIC: SURGERY FOR PELVIC ORGAN PROLAPSE

TITLE: TRANSOBTURATOR MESH ASSOCIATED WITH UNILATERAL POSTERIOR SACROSPINOUS LIGAMENT SUSPENSION VERSUS ARCUS-ANCHORED MESH ASSOCIATED WITH BILATERAL ANTERIOR SACROSPINOUS LIGAMENT SUSPENSION: ANATOMICAL AND FUNCTIONAL RESULTS OF TWO DIFFERENT STRATEGIES IN THE MANAGEMENT OF COMPLEX POP

Hypothesis / Aims of Study

To compare anatomical and functional results of two different surgical strategies in the combined treatment of anterior vaginal wall and vault prolapse by either a transobturator (TO) mesh (Ugytex® Sofradim-Covidien) associated with a posterior sacrospinous ligament suspension (pSLS) compared with an arcus-anchored (AA) mesh (Polyform® or Pinnacle®, Boston Scientific) associated with a bilateral anterior sacrospinous ligament suspension (aSLS) using the Capio® needle driver. Our hypothesis was that the second strategy (AA mesh + aSLS) could be more efficient for anterior wall reconstruction, restoring a more physiological vaginal axis than the posterior approach.

Study Design, Materials and Methods

Eighty-five women operated for a complex POP were included between March 2005 and March 2009 in a monocentric retrospective and comparative study (group TO/pSLS n=41; group AA/aSLS n=44). All patients had at least a POP-Q stage 2 anterior vaginal wall prolapse with Ba point ≥+1 and a stage 2 vault prolapse with C point ≥-1. Associated procedures were: site-specific rectocele repair (18 (40%) in the AA/aSLS group vs 32 (78%) in the TO/pSLS group (p=.005)). In the post-operative period, anatomical and functional results were evaluated and compared between groups. Post-operative anatomical success was defined by a stage 0 or 1 cystocele for the anterior compartment and by a post-operative vault prolapse stage inferior to the pre-operative one for the medium compartment.

Results

The baseline patient characteristics were similar in both groups, except for the history of prolapse surgery (17 patients (38%) in the AA/aSLS group vs 4 patients (10%) in the TO/pSLS group (p=.002)). The average follow-up was 11.5 \pm 8.1 months in the AA/aSLS group and 22.7 \pm 16.1 months in the the TO/pSLS group (p=.011). Anatomical success rate on the anterior compartment was 40/44 (90.1%) in the AA/aSLS group vs 32/41 (78%) in the TO/pSLS group (p=.1). Anatomical success rate on the vaginal vault was 43/44 (98%) in the AA/aSLS group vs 37/41 (90%) in the TO/pSLS group (p=.19). De novo prolapse rate on the untreated posterior compartment was 7/26 (27%) in the AA/aSLS group vs 1/9 (11%) in the TO/pSLS group (p=.65). Operative complications occurred in 12/44 patients (28%) in the AA/aSLS group vs 2/41 patients (4.8%) in the TO/pSLS group (p=.05): haematomas (2 (4.6%) vs 1 (2.4%)); vaginal erosions (3 (7%) vs 1 (2.4%)); ureteral kinking (4 (9%) vs 0); severe mesh infection with vesico-vaginal fistula (1 (2.3%) vs 0). De novo dyspareunia rate similar in both groups (4 (9%) vs 4 (10%)). In total, 8 patients (18.2%) were reoperated in the AA/aSLS group vs 3 (7.3%) in the TO/pSLS group.

Concluding message

Anatomical results of the combined treatment of associated anterior vaginal wall and vault prolapse seem to be improved by the arcus-anchored mesh and bilateral anterior sacrospinous ligament suspension strategy. The higher morbidity rate, which may be explained by the learning curve, requires good surgical training, rigorous technique and selection of good indications.

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	Retrospective study
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No