

PELVIC ORGAN PROLAPSE AFTER SURGICAL CORRECTION. RECURRENCE RISK.

Hypothesis / aims of study

About 30% to 50% of women will, in the course of their lives, present pelvic organ prolapses (POP) and 11% will undergo surgical correction.

Over the past few years the interest in the use of alternative materials to the traditional corrective surgery has increased, aiming at lowering the high recurrence rates (30%). On the other hand, the occurrence of prolapse in an anatomically different compartment to the one corrected can reach 8,6% (Mörlin et al) (1). It is a consensus that the correction of a compartment can lead to the occurrence of a prolapse in an anatomically different compartment, a reflex from the progressive loss of support in the pelvic pavement. The difficulty lies in the distinction between a new prolapse or failure to identify all the anatomical defects previous to surgery.

The aim of this study was to determine the risk of *de novo* occurrence of prolapse in compartments that had not been corrected, or where corrected through conventional surgery, and to evaluate whether conventional surgery can have an important role in its prevention/prophylaxis.

Study design, materials and methods

Retrospective observational monocentric study with review of clinical data which included 139 women with anterior and/or posterior POP who underwent mesh implant from March 2005 to October 2008. The prolapse diagnosis was based on the Baden-Walker classification. The sample included 22 women diagnosed with SUI before intervention, from which 50% underwent simultaneous transobturador sling correction. The patients were observed at 1, 6 and 12 months after surgery and, subsequently, once a year. The recurrence diagnosis was based on subjective and objective data.

Results

Fifty-two percent of the women presented anterior POP; 22,3% posterior POP and 25,9% both. Synthetic and animal-based meshes were used in 126 women (90,6%) and a combination of anterior mesh with traditional corrective surgery in the posterior compartment in 13 (9,4%).

After mesh insertion in the 72 cases of anterior POP, there were 5 cases of *de novo* posterior POP (6,9%); in 31 posterior POP cases there were 2 *de novo* anterior POP cases (6,4%) and none recurrent POP diagnosed after combination of anterior mesh with traditional corrective surgery in the posterior compartment.

Interpretation of results

There was 6,9% occurrence of *de novo* posterior POP in patients who underwent anterior POP correction; after posterior POP correction, *de novo* anterior POP occurred in 6,4%. Upon combination of mesh for anterior POP correction with traditional corrective surgery in the posterior compartment, there was no posterior POP recurrence.

The risk of the occurrence of *de novo* prolapse in a compartment that had not been corrected was similar between compartments and not significant ($p=0,19$). The posterior POP recurrence risk was non-existent in the cases where anterior mesh was combined with posterior traditional corrective surgery.

Concluding message

The prophylactic introduction of mesh in a compartment without self-evident pathology or small degree prolapse was deemed unnecessary in the subject group of this study.

The use of traditional corrective surgery with the intent of pelvic diaphragm strengthening has proved effective and may be a response to prevention of *de novo* POP in a compartment that has not been corrected. It is, however, important to have a higher rate of cases that allows better support of conclusions.

References

1. A 5-year prospective follow-up study of vaginal surgery for pelvic organ prolapse. *Int Urogynecol J* (2008) 19:1593-1601

Specify source of funding or grant	None
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	Its a retrospective study
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No