Posterior vaginal meshes and dyspareunia

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HYPOTHESIS / AIMS OF STUDY

Pelvic organ prolapse (POP) is a common condition in women with history of vaginal delivery; its prevalence varies depending on the studies, reaching 50-60% in some of them. Prolapse of the posterior compartment is not the common, but it is usually associated with obstructive defecation, vaginal bulging symptoms and sexual dysfunction (1). The objective of surgical treatment is to restore the anatomy and intestinal and sexual functionality. There are two approaches, vaginal or abdominal, with the classical technique, use of graft or prosthesis. Traditionally, the posterior compartment prolapse has corrected by posterior colporrhaphy, in some cases associated with the plication of the levator ani muscles, but this technique has abandoned due to its relation with postoperative pain and dyspareunia (2). After that, posterior vaginal meshes began used, but their use has recently questioned because of a suspected association with high rates of dyspareunia (3).

However, there are few studies on the effect of prosthetic defect repair on the sexual function of patients.

The aim of this study is to retrospective analyze the effect of posterior meshes on sexual function in patients who underwent surgery in our center in the late years.

STUDY DESIGN, MATERIALS AND METHODS

Different types of polypropylene posterior meshes have used over the years in our center: MIPS®, Surelift®, Elevate® and Prolift®.

The surgical technique used for its placement is based on a tension-free system with an anterior anchorage to the obturator muscle and a posterior anchorage to the sacrospinous ligament, in some cases there is a third middle anchorage to the tendinous arch.

A retrospective observational case-control study conducted in which 131 women were included. The "case" group consisted of 25 women who had undergone second or third degree rectocele surgery with the placement of a posterior mesh between January 2007 and December 2017 in our center. The "control" group included 106 women who correlatively attended in the pelvic floor consulting room because of different pathologies between January and March 2014, who had not

undergone surgery, and that filled the EPIQ questionnaire. Within this group, 13 patients who consulted for rectocele identified and whose data used for a more specific sub analysis of the posterior compartment pathology becoming a “rectocele control” group. The patients in the study group contacted by telephone between 1 and 9 years after the surgery and asked if they had sexual intercourse and if they presented dyspareunia.

The percentage of women who had sexual relations in the "case" and the "control" group compared. Later, in those women who had coitus, the percentage of women who reported dyspareunia compared. The data was analyzed using the Chi-squared test and the Fisher’s exact test, considering the statistical significance a p-value <0.05.

RESULTS

The average age of the women included in the "case" group, women with a vaginal mesh, was 59.6 years and 57.9 years in the "control" group, not being the difference statistically significant (p-value 0,537).

Seventy-two percent of the women with a posterior mesh had sexual intercourse. On the other hand, in the “control” group 57.5% maintained relations. This difference was not statistically significant evaluated by the Chi-squared test (p-value 0,184).

Analyzing the results of pain, in sexual relations it observed that 22.22% of the women with a vaginal prosthesis had dyspareunia. In the "control" group, 40.0% of the women presented pain with sexual intercourse. No statistical significance found by the Fisher's exact test (p-value 0,174).

A sub analysis, carried out, comparing the "case" group with the women of the "rectocele control" group who only had rectocele and had not undergone surgery. The mean age in the "rectocele" group was 59.7 years, being the difference with the 59.6 years of the "case" group not statistically significant (p-value 0,989).

In the "rectocele" group, 53.8% had sexual relations, compared with 72% of the women with a posterior mesh; the differences were not significant (p-value 0,263). A 71.4% of women with not operated rectocele presented dyspareunia and only 22.22% of women with posterior mesh presented it, the differences were not statistically significant (p-value 0,058).

INTERPRETATION OF RESULTS

Rectocele correction with the placement of a vaginal prosthesis stopped because some studies related it to an increase of complications such as dyspareunia.

Our results have not shown a decrease in the sexual activity or an increase in dyspareunia in patients undergoing surgery, when compared to patients with pelvic floor pathology in general and to patients with rectocele for which they consult the specialist who had not undergone surgery. On the contrary, it seems that patients with not corrected rectocele have a higher prevalence of dyspareunia, though it has not demonstrated.

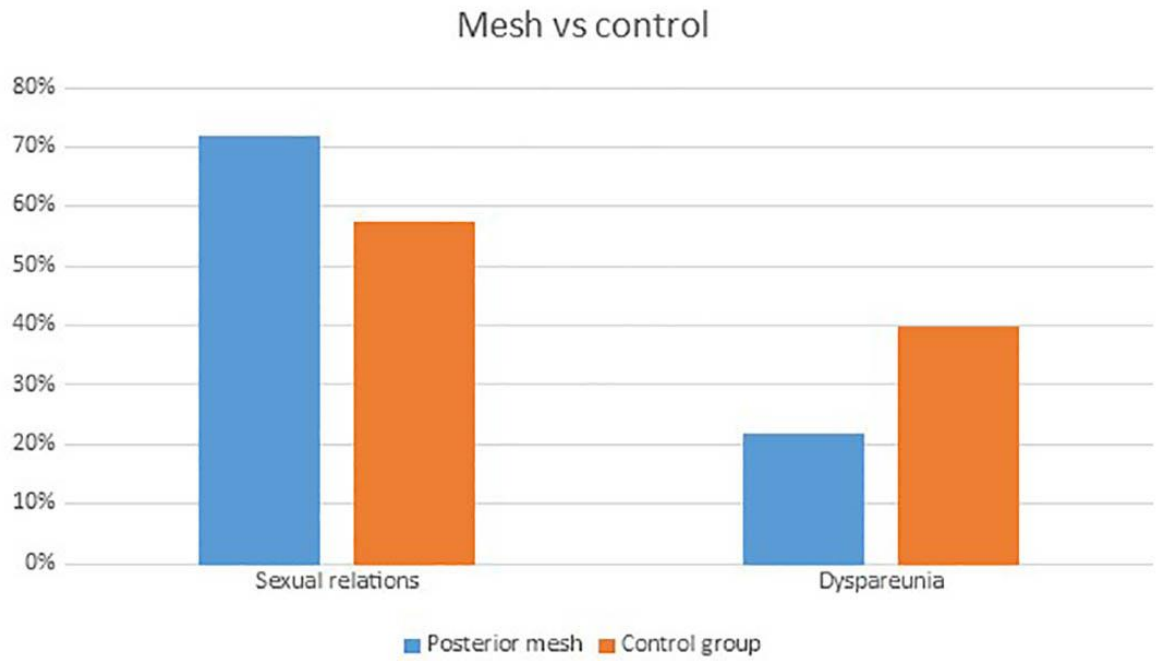
One limitation of our study is the heterogeneity of the meshes studied secondary to the extension in time of the study due to the scarce need of this surgical technique. On the other hand, we do not have data on the sexual function of the patients prior to the placement of the posterior mesh. It would be interesting to consider the realization of a prospective study including the previous assessment of the sexual function of the patients, taking into account the relevant ethical limitations.

It would be necessary to carry out a study with more statistical power to corroborate the results.

CONCLUDING MESSAGE

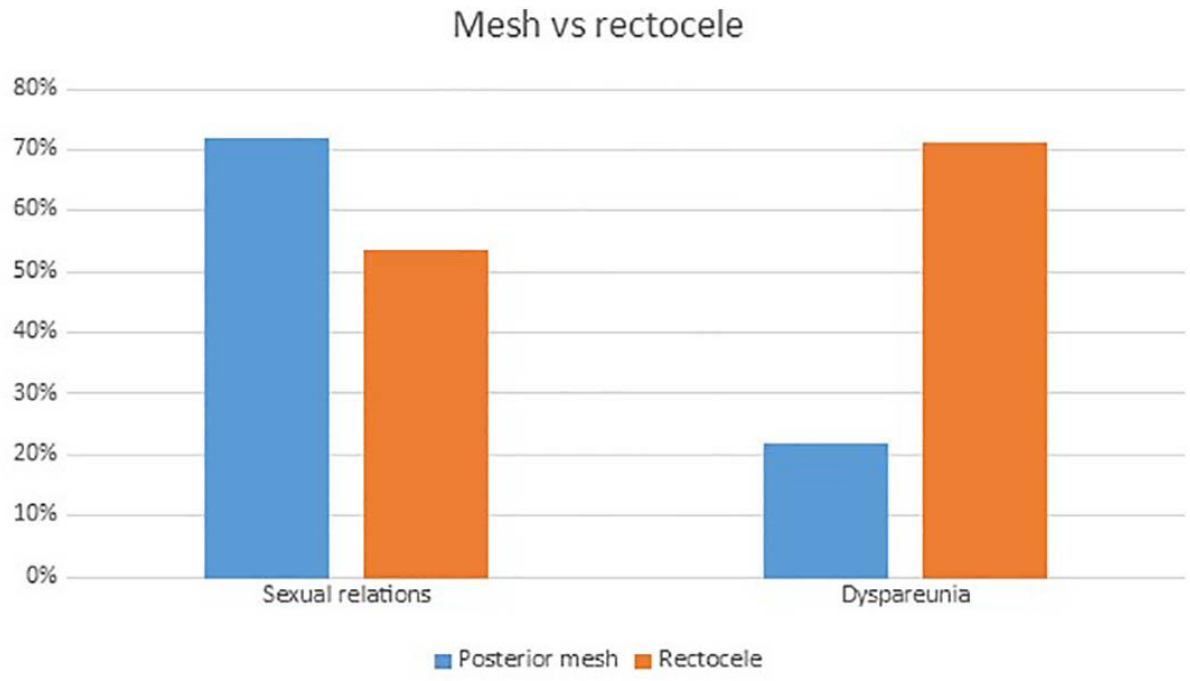
In this study, we have observed that in women who underwent rectocele correction at our center through the placement of a posterior mesh, sexual activity maintained with less pain in the sexual intercourse.

FIGURE 1



Mesh vs control

FIGURE 2



Mesh vs rectocele

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