Uterine preservation surgery has shown in recent years an effectiveness very similar to that involving hysterectomy, although with better operating time and less rate of associated complications. There is no clear evidence of advantages between sacrospinous approach routes in terms of outcomes, complications and safety. The objective of this study is to compare the intraoperative and post-operative complications associated with the correction of pelvic organ prolapse apical defects through vaginal hysteropexy with fixation to the sacrospinous ligament by an anterior and posterior approach.

Retrospective relational analytical study including patients who had undergone pelvic organ prolapse surgery during December 2015 and December 2018 with a diagnosis of symptomatic genital prolapse and a desire for reconstructive surgery with uterine conservation. Demographic data, clinical and surgical history were obtained from the hospital electronic medical record. The inclusion criteria were stage III and IV pelvic organ prolapse quantification (POPU) with apical involvement. The patients were evaluated by the surgical team and it has been decided to perform anterior approach when the anterior defect was predominant or posterior when the involvement of the posterior compartment was greater than or equal to a POPQ stage II and according to the availability of equipment in the hospital. Anchoring devices were used for anterior sacrospinous ligament fixation, and posterior approach was performed under direct vision of the ligament with prolene sutures. Unilateral or bilateral fixations were performed depending on the opportunity of access to the sacrospinous ligament. Two groups were established for comparison, anterior sacrospinous (n=56) and posterior sacrospinous (n=61). Sociodemographic characteristics, POPQ, operating time, concomitance of repairs of other compartments and anti-incontinence surgery (retropubic/Transobturator), significant bleeding over 100 cc, viscera lesions and complications related to instruments and surgical supplies were evaluated. Postoperative complications were evaluated in the first ambulatory control performed between 7 and 15 post-operative days. Data was analyzed with descriptive statistics, qualitative variables with Chi-square or Fisher test according to expected frequencies, and Mann Whitey test to compare medians and anova.

The patient cohort in this study does not differ significantly in age, parity and diagnosis. It is also demonstrated that there are no differences in surgical time, bleeding and other intraoperative complications. There is also no difference between the presence of buttock pain and urinary tract infection. It was demonstrated that there is a difference in the presence of urinary retention between both groups, being greater in the anterior approach of sacrospinous. We infer that this is due to the dissection of the perivesical space, the consequent inflammation and possible hematoma formation that might influence the appearance of urinary retention symptoms. It is necessary to extend the follow-up time as well as to improve the registration of the patients.

The anterior sacrospinous approach during hysterospexy surgery is associated with greater presence of urinary retention symptoms in the immediate postoperative period.