

MANAGEMENT OF POST-HYSTERECTOMY VAGINAL VAULT PROLAPSE: SACROSPINOUS LIGAMENT FIXATION VS ILIOCOCYGEUS FASCIA FIXATION

Hypothesis / aims of study

Post-hysterectomy vaginal vault prolapse repair represents a surgical challenge. Available techniques involve native tissue repair or mesh augmentation by abdominal or vaginal route. Transvaginal prosthetics-free procedures offer some advantages including lower costs, shorter operative time and morbidity. These techniques comprehend sacrospinous ligament fixation (SLF), uterosacral ligaments suspension and iliococcygeus fascia fixation (IFF). SLF has become one of the preferred method to restore apical support. It involves the preparation of pararectal space and the positioning of suspending suture through the sacrospinous ligament – typically one fingerbreadth medial from ischial spine. IFF - described by Inmon in 1963 and revised by Shull in 1993 - it is not a common procedure and only few reports have been published. In this procedure, after pararectal space preparation, the vaginal apex is directly attached to the iliococcygeus fascia and muscle, just below the ischial spine. There is lack of comparative data between these techniques. The only available study did not show differences in outcomes and complications between IFF and SLF [1]. The aim of our study was to compare these techniques in terms of operative data, complications, objective and subjective cure rates, functional outcomes and reoperation rate.

Study design, materials and methods

Between 2010 and 2015 patients who underwent either IFF (group A) or SLF (group B) vaginal suspension, were retrospectively analyzed. Preoperative evaluation included a medical interview in order to assess the presence of urinary, sexual and bowel disorders. Complete urogenital examination was performed and POP staged according to Pelvic Organ Prolapse Quantification system (POP-Q). All patients underwent preoperative urodynamic evaluation according to ICS standards. Additional surgical procedures such as anterior repair, posterior repair or midurethral sling were performed when indicated. Patients were followed up annually. Clinical interview and complete urogenital examination were performed at each follow up visit. Anatomical recurrence was defined as descent of any compartment \geq II stage according to the POP-Q system. Subjective recurrence was defined as referral of symptoms of vaginal bulging/ discomfort at quality of life questionnaire evaluation (P-QOL Questionnaire Items 5-8). Differences were tested with the Student T-test for continuous parametric data, with the Wilcoxon test for continuous non-parametric data and with Fischer test for non continuous data A $p < 0.05$ was considered statistically significant.

Results

A total of 38 women underwent transvaginal native tissue vaginal vault repair either with IFF (25 pts; Group A) or SLF (13 pts; Group B). Patient characteristics were comparable in the two groups except for BMI, that resulted higher in group B. Preoperative vaginal profile according to POP-Q were equal in both group except for genital hiatus (longer in group B). Baseline symptoms (urinary incontinence, voiding dysfunction, constipation and dyspareunia) and intraoperative additional procedures rate were similar between groups. Operative data showed similar operating time, blood loss and complication rate between groups. Mean follow up was comparable in both groups (24.2 vs 28.5 months). Anatomical outcomes in terms of objective cure rate (72% vs 69%), subjective cure rate (88% vs 92%) and reoperation rate (0% vs 8%) did not show any statistically significant difference. Postoperative POP-Q was similar between groups. Postoperative symptoms in terms of urinary, bowel and sexual dysfunctions did not differ between groups.

Interpretation of results

Sacrospinous and iliococcygeus fixation are both safe and effective procedures in the treatment of vaginal vault prolapse. In particular, there are not clinically significant differences in surgical data, complications, anatomical, functional and subjective outcomes between techniques.

Concluding message

Iliococcygeus fascia fixation should not be discarded in favour of the more known sacrospinous ligament fixation in the management of vaginal cuff prolapse.

References

1. Maher CF, Murray CJ, Carey MP et al. Iliococcygeus or sacrospinous fixation for vaginal vault prolapse. *Obstet Gynecol.* 2001 Jul;98(1):40-4.

Disclosures

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