

IMPACT OF SACROSPINOUS VAULT FIXATION IN POP-Q AND LUTS: A PROSPECTIVE ANALYSIS

Hypothesis / aims of study

The aim of this study was to prospectively and objectively evaluate the results of the sacrospinous vaginal vault fixation utilizing the Pelvic Organ Prolapse Quantification System (POP-Q) which is recommended by the International Continence Society (ICS). To our knowledge this is the first quantitative evaluation of this procedure.

Study design, materials and methods

From March 2003 to February 2006 forty-seven consecutive patients with uterine or vaginal vault prolapse underwent the procedure (28 with uterine prolapse; 18 with vaginal vault prolapse and 1 with cervical prolapse). The same surgeon operated on all patients and mean follow-up was 142.7 days. Pre-operative evaluation consisted of physical exam, POP-Q scores and evaluation of urinary symptoms by analogic and visual scale. All patients complained of genital prolapse. Intraoperative and post operative complications were described.

Results

Mean age was 63.6 years (47 to 85 years), mean parity was 5.7 (1 – 15), of which 5.3 were vaginal deliveries (0 – 13). Urge incontinence, urgency and nocturia improved significantly after surgery ($p < 0.05$). SUI was statistically similar both before and after surgery. Twenty six patients underwent concomitant anterior colporrhaphy, 12 underwent posterior colporrhaphy and another 12 had correction of enterocele along with vault fixation.

Two patients complained of pain in the right gluteal region, which subsided after 3 months.

Total vaginal length (TVL) pre-op was 8.8cm and post-op was 7.7cm. POP-Q scores before and after surgery were, respectively: Aa (+0.7 versus -1.7), Ba (+3.2 versus -1.7), C (+3.2 versus -7.6), Ap (-0.2 versus -2.7) and Bp (+2.1 versus -2.7), all with p values < 0.0001 (Figure 1). No patient complained of prolapse after surgery.

Interpretation of results

Overall success rate was 97.9% for apical prolapse which unquestionably enforces the efficacy of this technique.

The most frequent late complication of surgery was the high cystocele rate found after surgery. However, there was still a considerable improvement in procidentia of the anterior vaginal wall after surgery which could be better evaluated by the mean Aa point, which changed from +0.7 to -1.7 and Ba point, which changed from +3.2 to -1.7. This finding may be explained by posterior axis deviation of the vagina determined by the surgical technique adopted, although all patients were asymptomatic regarding cystocele.

The markedly improvement in irritative symptoms after surgery are related to reestablishment of vaginal posterior axis according to the Integral Theory of Continence (Petros and Ulmsten, 1993).

Concluding message

Sacrospinal ligament fixation has low morbidity and high cure rate, demonstrated by substantially improvement in POP-Q scores after surgical approach. Although there was a significant improvement in LUTS after surgery, we notice 70% of asymptomatic anterior vaginal wall prolapse after one year follow-up, probably due to alteration of the vaginal axis.

References

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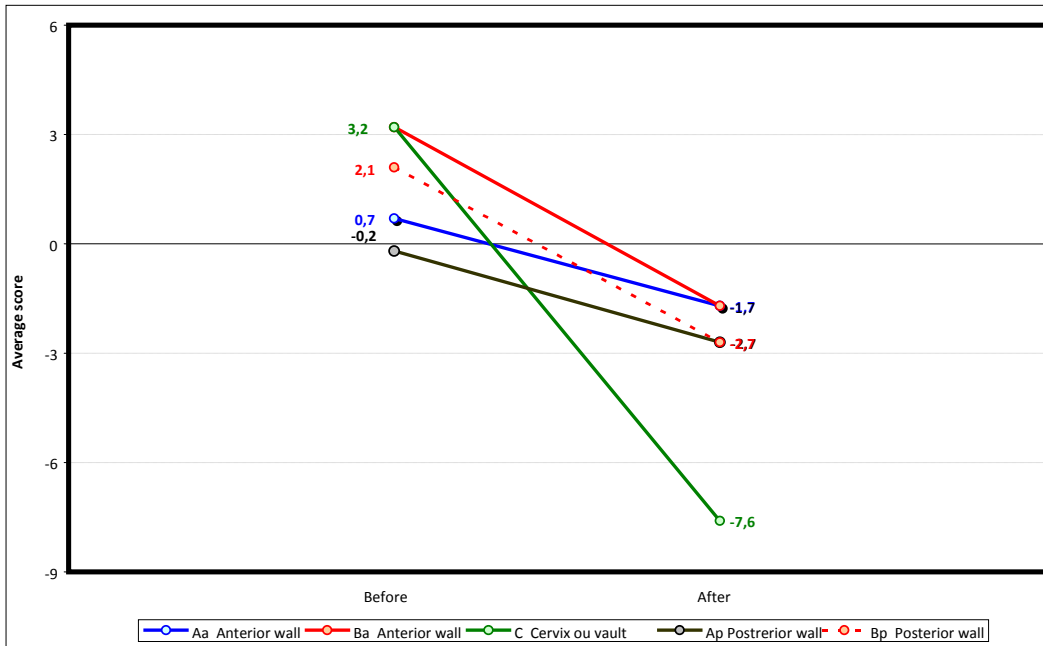


Figure 1: Comparison of POP-Q scores before and after sacrospinous

FUNDING: We disclose any commercial or other associations that might pose a conflict of interest in connection with submitted material.

CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.

HUMAN SUBJECTS: This study was approved by the Comitê de Ética do Hospital Estadual de Sumaré and followed the Declaration of Helsinki Informed consent was obtained from the patients.