

EFFICACY OF POSTERIOR PELVIC FLOOR REPAIR USING VAGINAL MESHES - A COMPARATIVE RETROSPECTIVE STUDY

Hypothesis / aims of study

Pelvic organ prolapse (POP) affects nearly 30% of women between the age of 20 and 59 and may have a significant impact on their quality of life. There are many options for surgical correction of this condition whether vaginal, abdominal or laparoscopic. Vaginal meshes have been developed with the intention to improve the outcome of pelvic floor reconstructive surgery. AIM: To evaluate the efficacy of posterior pelvic floor repair using Prolift® or Pelvicol/Pelvisoft®.

Study design, materials and methods

Retrospective and non-randomized study in 117 women submitted to rectocele surgery between January 2006 and August 2008. Seventy-one were submitted to correction using Posterior or Total Prolift® and 46 underwent posterior pelvic floor repair using a biologic implant - Pelvicol/Pelvisoft®.

The evaluation of the pelvic floor was performed according to Pelvic Organ Prolapse Quantification at three and twelve month. Cure was considered when Aa and Ba point were lower than -1 cm. If the Aa and Ba point were lower than 1 cm we considered that an improvement.

Age, parity, race and menopause status were also analyzed.

The Student's t test for parametric and Mann-Whitney U test for non parametric continuous variables and the chi-square test for categorical variables were used. P values less than 0.05 were considered statistically significant.

Results

Average patients age was 64.3 ±8.4 years in the Prolift® group and 63.0 ±9.8 years in the Pelvicol/Pelvisoft® group. Regarding race 98% and 97% were caucasian in the Prolift® and Pelvicol/Pelvisoft® group respectively. All but one (98%) had at least one vaginal delivery, the average parity was 2.4 (range 1-7) and 89% were in postmenopause in the Prolift® group. All but 2 (94%) had at least one vaginal delivery, average parity was 2.7 (range 1-7) and 85% were in postmenopause in the Pelvicol/Pelvisoft® group. Before surgery 33.4 % were classified as POPQ II, 59.4% as POPQ III and 7.2% as POPQ IV in the Prolift® group. The cure rate of for this group after 3 and 12 months were 67.1% and 55.1% respectively. We found also a 28.6% and 32.6% improvement at 3 and 12 months.

In the Pelvicol/Pelvisoft® group 50% were classified as POPQ II, 45.6% as POPQ III and 4.4% as POPQ IV. The cure rate in this group after 3 and 12 months were 57.1% and 52.5% respectively. We found also a 40.5% and 35% improvement at 3 and 12 months.

Although the Prolift® group presented slightly higher cure rates, this difference was not statistically significant at either 3 or 12 months (p= 0.316 and p=0.834).

Interpretation of results

In the posterior compartment, the cure and anatomical improvement rate of surgery with collagen (non-permanent) and polypropylene (permanent) are not statistically different.

Concluding message

The use of mesh reinforcement for posterior repairs may offer acceptable success rates.

<i>Specify source of funding or grant</i>	no funding or grant
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	retrospective clinical study based in medical records
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes