

LAPAROSCOPIC SACROCOLPOPEXY ACCORDING TO PATIENT AGE

Hypothesis / aims of the study:

To compare the functional and anatomical short-term outcomes and operative complications associated with laparoscopic sacrocolpopexy in women younger and older than 70 years old.

Study design, materials and methods:

We retrospectively reviewed all the data on female patients who had undergone laparoscopic sacrocolpopexy between January 2005 and December 2014 in two tertiary care centres. The study group, which consisted of women over 70 years old, was compared with a group of younger women. The following data were extracted from their charts: age at the time of surgery, BMI, menopausal status, initial stage of genital prolapse (according to the Baden-Walker classification), past medical history, obstetric and surgical histories, past prolapse treatment(s), date of the sacrocolpopexy procedure, operative and perioperative data, complications, anatomical results, and functional results. Operative and perioperative data included the concomitant surgical procedure (subtotal hysterectomy or mid-urethral sling), length of the operation, occurrence of complications, analgesic requirements, and length of hospital stay. Follow-up visits were at least 8 weeks postoperatively. At these visits, POP was assessed using the ICS-POP quantification. Surgery was considered successful if the patient was symptomatically satisfied and if the POP score was below stage 2 for all compartments. Statistical analyses of the data were performed using R statistical software (Bell Laboratories, Lucent Technologies, Paris, France). Descriptive statistics are shown as medians. The Mann–Whitney U-test was used to compare continuous variables and Fisher's exact test to compare categorical variables. A p-value of <0.05 was considered statistically significant.

Results: 191 women underwent consecutive laparoscopic sacrocolpopexy during the study period. The study group consisted of 47 women over 70 years old. The second group consisted of 144 women under 70 years old. Patient characteristics were similar in terms of the BMI (25.7 vs. 24.2, $p=0.37$), parity (2 vs. 2, $p=0.6$), and previous surgical treatment of genital prolapse (0% vs. 3.5%, $p=0.98$). However, patients over 70 years old differed significantly from younger women in terms of age (74 vs. 55, $p<0.001$), menopausal status (100% vs. 62.5%, $p<0.001$), stress urinary incontinence (25.5% vs. 46.5%, $p=0.018$), prolapse ICS stage 3 (50% vs. 53.2%, $p=0.83$), and prolapse ICS stage 4 (31.9% vs. 17.4%, $p=0.05$) of previous pelvic floor rehabilitation treatment (21.3% vs. 42.4%, $p=0.041$). Concomitant mid-urethral sling procedure was more common in the younger group: 25.5% vs. 46.5% ($p=0.01$). However, there was no significant difference between the groups in subtotal hysterectomy (21.3% vs. 33.3%, $p=0.17$) or number of meshes (2 meshes for 91.5% vs. 92.4%, $p=0.76$). Perioperative complication rates were similar for the two groups: bladder injuries (0 vs. 1.39%, $p=1$), rectal injuries (0% vs. 0.69%, $p=1$), vaginal injuries (2.13% vs. 0%, $p=0.246$). Abdominal conversion was not required for any patient in either group. The median follow-up period was equal for both groups: 8 weeks (IQR 6–12) vs. 8(IQR 6-8). The overall anatomic repair rate was 97.87% and 95.14% for the older and younger groups, respectively ($p=0.682$). During follow-up, 3 patients in the younger group had prolapse recurrence: one prolapse of the anterior compartment after 4 years, one of the medium compartment after one month and one patient had grade 4 prolapse after eight months. Two of these women underwent a second laparoscopic sacrocolpopexy. No significant difference was observed in complication rates between the groups. During follow-up, various functional dysfunctions were reported in the older and younger groups, respectively: chronic lower back pain (0/47 vs. 4/144, $p=0.574$), straining to defecate (1/47 vs. 6/144, $p=1$) and constipation (5/47 vs. 10/144, $p=0.531$). De novo urinary incontinence occurred more often in the older group (29.79% vs. 13.19%, $p=0.014$). A secondary mid-urethral sling procedure was required in 12.76% of patients in the older group vs. 4.86% of patients in the control group ($p=0.09$). Mid-urethral sling erosion occurred in 3 patients in the younger group from 2 to 6 months after surgery. No erosion was reported in the older group. The overall reoperation rate (including surgery for de novo urinary stress incontinence) was 12.77% for the older group versus 11.81% for the younger group ($p=0.80$).

Interpretation of results

Genital prolapse mainly occurs in elderly people. Even though many surgical techniques to treat genital prolapse have been described, surgeons are still reluctant to propose surgery using insufflation of gas to create pneumoperitoneum in elderly women. In fact, regardless of the surgical route, Sun et al. showed that women over 80 years old were more exposed to complications than women of 60 (OR 1.4 [95% CI 1.3-1.5]) [1]. Controversial results on sacrocolpopexy in elderly women have been published. A study analyzing abdominal sacrocolpopexy found no significant difference in complication rate between women aged over 70 and younger women [2]. In contrast, in a retrospective study of laparoscopic and robot-assisted laparoscopic sacrocolpopexy, Turner et al. showed that age over 70 was associated with more major complications (OR 2.99 [95% CI 1.24-7.2]) [3]. In the present study, rates of perioperative complications were similar in both groups (2.13% vs. 2.08%) and lower than reported by Turner et al. Previous studies only focused on major complications and did not report anatomical or functional outcomes. We observed the same short-term rate of functional and anatomical outcomes in both groups.

Concluding message

Our findings suggest that laparoscopic sacrocolpopexy is feasible whatever the patient's age and can be proposed as a reference surgical treatment of genital prolapse in elderly women. However, prospective studies in a larger population are needed.

References

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Disclosures

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