

LONG TERM FOLLOW-UP OF PELVIC ORGAN PROLAPSE REPAIR WITH ABDOMINAL SACROCOLPOPEXY: IMPACT OF AGE AND BODY MASS INDEX IN A UNI-INSTITUTIONAL SERIES OF 156 PATIENTS

Hypothesis / aims of study

Pelvic organ prolapse (POP) is a benign condition in women that can adversely affect their quality of life when interfering with voiding, defecatory as well as sexual functions. Abdominal sacrocolpopexy (by laparotomy, laparoscopy or robot-assisted) is a proven and effective surgery for the treatment of POP (1). The aim of this study is to review the cases of patients with POP who benefited from an abdominal sacrocolpopexy done by the same surgeon between 2003 and 2016 at one institution.

Study design, materials and methods

We reviewed retrospectively all the patients who were treated at our department with abdominal sacrocolpopexy (open or laparoscopic approach) between January 2003 and September 2016. Almost all the patients (96%) underwent operation by the same technique of sacral promontory fixation using double nonabsorbable polypropylene mesh (for the anterior and posterior compartments) anchored to the prevertebral ligament on the promontory by Ethibond Excel stitches (2). Only in 4% of cases, a unique mesh was fixed in the anterior compartment. Patients with urodynamically or clinically proven stress incontinence (SI) underwent a concomitant tension-free vaginal tape (TVT) procedure. We evaluated the following peroperative and postoperative outcomes: operative time, conversion rate, peroperative incidents, hospital stay, complications rate, and mesh erosion rate. We also tried to look for age and BMI implications on the operability of patients.

Results

156 patients were included and were operated by the same surgeon. Laparoscopic approach was employed in 88.3% of patients. The age of the patients ranged from 34 to 83 years (mean, 60.62 years). Their body mass index (BMI) ranged from 18.33 to 39.24 (mean, 25.9). Their parity ranged from 2 to 11 (mean, 3.98). 76.95% of patients presented POP with stage III, while 5.5% and 17.6% had stage II and IV respectively. All 3 anatomical compartments were involved in 16.2% of patients, while 51.5% of patients received sacral colpopexy only for one compartment involvement. 26.7% of patients received concomitant TVT for a documented stress urinary incontinence. The mean operative time was 155 min (range from 60 to 200 min). Conversion rate was estimated at 4.5%. A concomitant hysterectomy was done in 11% of cases. Adhesiolysis was necessary in 11% of cases. Per-operative incidents were limited to 2.6%. The mean of hospital stay was estimated at 3.4 days. The mean time of follow-up is 72 months (range from 6 to 275 months). The complication rate was estimated at 11.5%. Success rate was 100% with no noted vault prolapse recurrence. Only one patient was reoperated for low rectocele. The rate of de novo stress urinary incontinence requiring reoperation for TVT was 3.2%. Mesh erosion rate was estimated at 2.6% and all these cases benefited from exposed mesh excision. A bivariate analysis studying the impact of older age (≥ 65 years vs. < 65 years) on the operative as well as postoperative outcomes didn't demonstrate any significant difference; considering conversion rate ($p = 0.482$), operative time ($p = 0.075$), per-operative incidents ($p = 0.814$), hospital stay ($p = 0.742$), complications rate ($p = 0.322$) and erosion rate ($p = 0.433$). A similar analysis evaluating the impact of higher BMI ($\text{BMI} \geq 29$ vs. < 29) on the operability of patients didn't demonstrate also any significant difference in terms of conversion rate ($p = 0.389$), operative time ($p = 0.062$), per-operative incidents ($p = 0.547$), hospital stay ($p = 0.734$), complications rate ($p = 0.289$) and erosion rate ($p = 0.547$). Patients who benefited from a laparoscopic approach tended to have lower hospital stay (mean of 3.25 vs. 4.36 days, $p = 0.05$). Patients who required additional adhesiolysis during the operation or underwent concomitant hysterectomy needed more hospital stay (mean of 4.47 vs. 3.27, $p = 0.032$).

Interpretation of results

Considering the longer life expectancy that we witness these days, our data suggested that sacral colpopexy can always be suggested for older patients (> 65 years) who seek better quality of life with such a procedure. In addition, a higher body mass index doesn't seem to impede the realization of sacral colpopexy especially in patients with BMI more than 29 who appear to share comparable operative and long term outcomes with patients having BMI less than 29. In addition, we noted that systematic posterior compartment repair prevents long-term recurrence.

Concluding message

Our data confirm the minimal morbidity and the long-term durability of pelvic organ prolapse repair with abdominal sacrocolpopexy. Performing sacrocolpopexy in patients older than 65 years and with BMI higher than 29 doesn't seem to interfere with the operability neither the long term outcomes of these patients, which encourage us to suggest this approach independently of age and BMI in patients with POP seeking better quality of life.

References

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Disclosures

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