A 5-Year Single-Center Experience on Laparoscopic Sacrocolpopexy

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Hypothesis / Aims of Study:

Hypothesis: The pelvic organ prolapse is a frequent pathology in multiparous postmenopausal women, associated with changes in quality of life, bladder, bowel, and sexual dysfunctions. The preference by a laparoscopic approach for pelvic pavement reconstruction in woman with pelvic organ prolapse has increased in the last decades due to a better visualization of the pelvic anatomy and a better access for the prosthesis fixation. The laparoscopic sacrocolpopexy is a well-accepted procedure for the uterine and apical prolapses with excellent surgical results, high satisfaction rates and low complication rates.

Aims of Study: Review and describe the most important aspects of laparoscopic sacrocolpopexy procedure; Review the surgical indications, associated procedures and possible outcomes of laparoscopic sacrocolpopexy; Report the surgical experience of the Centro Hospitalar Lisboa Central Urology Department in the last 5 years; Assess the clinical and functional outcomes for sexual, bladder and bowel domains.

Study Design, Materials and Methods:

- Vaginal application of estrogens one month prior to surgery for improving trophism and healing;
- Place the patient in lithotomy;
- Place the arms along the body to minimize the risk of brachial plexus injuries;
- Catheterize patient with a 14Fr Foley;
- Establish pneumoperitoneum with Veress needle;
- Make a 15-20 Tendonius position to rule out intestinal loops of the pelvic cavity;
- Placement of laparoscopic trocars and trocars changed as follows:
  - 12Fr trocar for the 2CP optic in umbilical region;
  - 5mm trocar in the right iliac fossa;
  - 5mm trocar in the left iliac fossa;
  - 12Fr trocar in the left flank.

Preoperative Procedures

- Direction of vesicourethral space: With the help of a surgical set, the peritoneum covering the vesicourethral space is cut and dissected toward the vesicourethral space by holding the bladder and exposing the anterior wall of the vagina.
- Direction of rectovaginal space: The incision must be pulled forward toward the sacrum to identify the rectovaginal space. The peritoneum over the vaginal vault should be excised and dissected toward the rectovaginal septum.
- Prothesis fixation in vesicourethral space and in the bladder wall. The two anterior prothetic arms are fixed with a non-resorbable suture (2/0 Vicryl) in the vesicourethral space with absorbable Vicryl (2/0). A second loop is tied on the anterior prothetic arm to fix it to the bladder wall. The prothesis is fixed in the vesicourethral and bladder wall in order to avoid a bladder wall prolapse.

Surgical Procedure

- Perioperative complications:
  - Urinary retention
  - Infection
  - Blood loss
  - Adhesions

Table 1: Published review of surgical interventions. Pub - Number of pregnancies and births; PCO-Q: Quantitative assessment of the degree of uncorrected prolapse (“YVic’s Organ Prolapse Quantification Scale”); SS: Stress Urinary Incontinence; HR-QOL – Health-Related Quality of life; ICIQ-VS: “International Consultation in Incontinence Questionnaire for Vaginal Symptoms.”

Quantitative Assessment of Health Related Quality of Life

Overall, how much do your vaginal symptoms interfere with your daily activities?

Graphic 3: Quantitative assessment of the health related quality of life according to the International Consultation in Incontinence Questionnaire for Vaginal Symptoms (ICIQ-VS).

Assessment of Patients Satisfaction

Questions

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<thead>
<tr>
<th>Question</th>
<th>Yes (%)</th>
<th>No (%)</th>
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<tbody>
<tr>
<td>Are you globally satisfied with the results obtained with the treatment?</td>
<td>27 (96,6%)</td>
<td>1 (3,4%)</td>
</tr>
<tr>
<td>Would you choose again to perform this surgical procedure?</td>
<td>27 (96,6%)</td>
<td>1 (3,4%)</td>
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Table 2: Perioperative complications occurred.

Table 3: Postoperative complications occurred.

Interpretation of Results / Concluding Message:

Laparoscopic sacrocolpopexy is a well-accepted procedure for correction of complete pelvic organ prolapse. The principal complication was the development of stress urinary incontinence; the global satisfaction and the quality of life levels were high; Our results confirm the efficacy of this procedure, the low-term morbidity rate, high satisfaction level and good clinical and functional outcomes in sexual, bladder and bowel domains.