

## LAPAROSCOPIC SACROCOLPOPEXY (LSCP) VS TRANSVAGINAL MESH (TVM) REPAIR: COMPARISON OF ANATOMICAL AND FUNCTIONAL RESULTS IN THE MEDIUM TERM. BI-CENTER RETROSPECTIVE STUDY ABOUT 122 CASES.

### Hypothesis / aims of study

Recently, reconstructive surgery for pelvic organ prolapse (POP) experienced a rapid evolution toward new techniques using transvaginal prosthetic reinforcement.

The abdominal sacrocolpopexy is considered to be the reference technique for pelvic organ prolapse (POP) repair. Transvaginal mesh repair (TVM) techniques offer satisfactory anatomical results but seem to be associated with higher postoperative risk of complications and reoperation [1,2,3].

Only one randomized trial [2] and few retrospective trials have compared the LSCP to TVM techniques for POP repair.

The aim of the study was to compare the medium term anatomical and functional results of Laparoscopic Sarcocolpopexy (LSCP) and Transvaginal mesh (TVM, prosthesis Apogee ®) for POP repair.

### Study design, materials and methods

Bi-centric retrospective study comparing two groups of 61 patients after matching on age criterion (55 +/- 5 years), operated for POP, respectively by abdominal and vaginal routes: LSCP vs TVM repair. The perioperative data as well as anatomical and functional results (self-administered questionnaire of symptoms and quality of life) were compared.

### Results

The mean age was comparable in both groups (LSC 54.2 ± 8.59 years; TVM 58.1 ± 7.64 years; p = 0.1). Population characteristics were similar between the two groups (gender, BMI, menopausal status, history of pelvic surgery, preoperative symptoms). The mean operative time of LSCP (191 ± 48 min) was significantly higher (p = 0.001) than TVM (101 ± 30.92 min). The rate of intraoperative complications was higher in the TVM group (6.5% vs 1.6%), this difference wasn't statistically significant (p = 0.36). The average length of hospital stay and recovery time was shorter in the LSCP group in comparison to the TVM group (4.02 ± 1.37 days vs. 5.27 ± 2.2 days, p = 0.08). The anatomical result was equivalent in both groups at 8.5 months of surgery. At 18 months of surgery, functional results were higher in the LSCP group / TVM group. De novo dyspareunia was significantly higher in the TVM group: 1.6% vs. 13.1% (p = 0.015). The rate of postoperative constipation was significantly higher in the LSCP group (27.8% vs. 6.5%, p = 0.02). The rate of reoperation for complications (erosion, pain, de novo SUI) was higher (p = 0.27 NS) in TVM (14.75%) in comparison to the LSCP group (8.2%). The rate of surgery for recurrent POP was strictly identical in both groups (3.3% LSCP, VMR 4.9%, p = 1).

### Interpretation of results

The medium-term anatomical results are equivalent. The LSCP does provide a better quality of life and a greater degree of patient satisfaction with less postoperative morbidity and less reoperation rate compared with TVM techniques.

### Concluding message

The coexistence of the two surgical approaches is necessary.

Data on prosthetic repair of POPs should be confirmed by randomized trials comparing laparoscopic to vaginal route.

### References

1. Laparoscopic sacral colpopexy versus total vaginal mesh for vaginal vault prolapse: a randomized trial. Maher CF, Am J Obstet Gynecol. 2011 Apr;204(4):360.e1-7.
2. Efficacy and safety of transvaginal mesh kits in the treatment of prolapse of the vaginal apex: a systematic review. Feiner B, BJOG. 2009 Jan;116(1):15-24.
3. Surgical management of pelvic organ prolapse in women: a short version Cochrane review. Maher C, Neurourol Urodyn. 2008;27(1):3-12.

### Disclosures

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