

# Long term follow-up after minimally invasive sacrocolpopexy

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## ABSTRACT

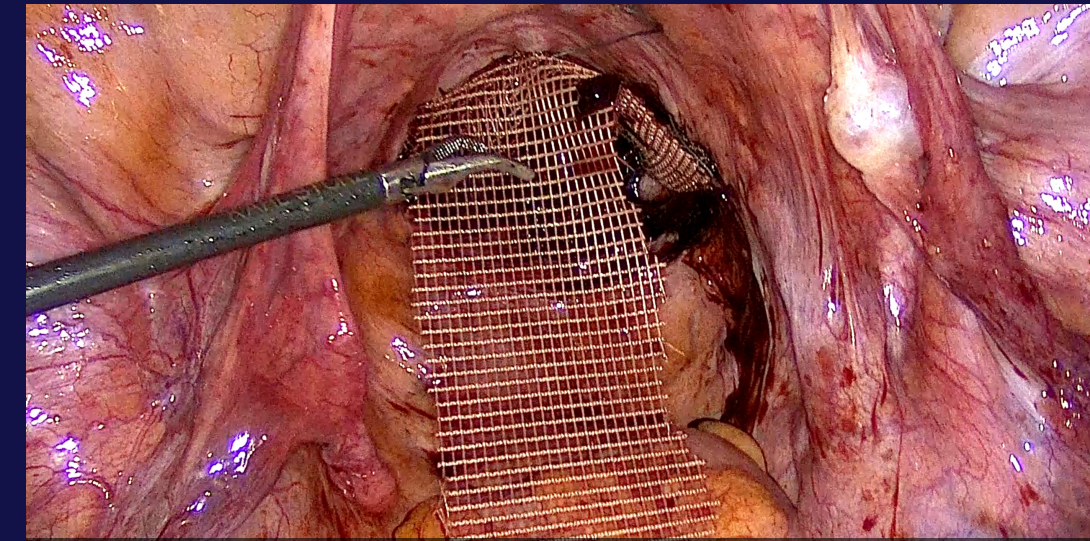
**AIM:** analyze the short term (1 year), and long term (10 years) outcome of a single institution cohort undergoing minimally invasive sacrocolpopexy for pelvic organ prolapse.

**METHODS:** This retrospective study included all cases of laparoscopic sacrocolpopexy performed between 2003 and 2016. Patients were contacted by phone in 2022 for long term follow-up. Data on operative time, length of hospital stay, conversion rate, perioperative injuries, early and late postoperative complications and subjective success rates were collected.

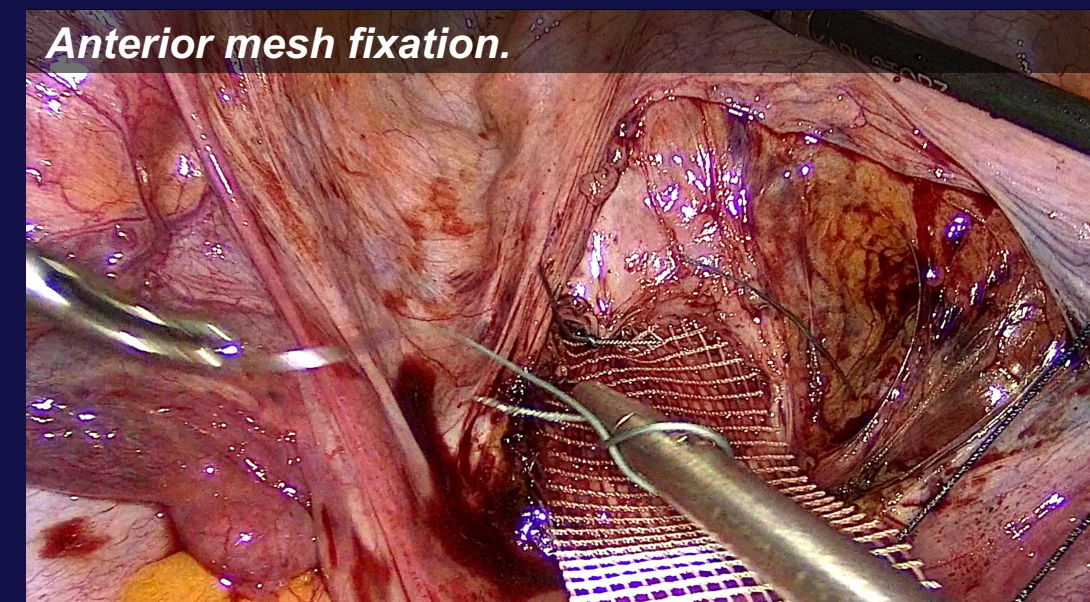
**RESULTS:** Ninety-five patients were included aged 60±12 years. Most patients (72%) presented grade 3 POP. Grade of prolapse (3±0.4 vs 3±0.5, p<0.01) and hospital stay (3±1.1 vs 3.1±1.7 days; p<0.01) were significantly higher in patients who developed early postoperative complications. At long term follow-up (12±3 years), 48 patients of the initial were contacted. Nine subjects (19%) presented a subjective recurrence with bulge symptoms. Global satisfaction about the surgery and outcomes was of 79%. The most frequent de novo reported symptom was UUI followed by SUI. Three cases (3%) of mesh erosion were described, all occurred after the 5<sup>th</sup> postoperative year.

**CONCLUSION:** Laparoscopic mesh sacrocolpopexy is a safe surgical technique that shows satisfying and consistent long-term results despite the occasional onset of new urinary symptoms.

**Abbreviations:** Body mass index (BMI), Laparoscopic mesh sacrocolpopexy (LMS), Stress urinary incontinence (SUI), Trans-obturator vaginal tape (TVTO), Urge urinary incontinence (UUI).



Posterior mesh fixation.



Anterior mesh fixation.

## METHODS

- Retrospective study, prospectively followed.
- Population: all patients undergoing LMS between 2003 and 2016.
- TVTO was simultaneously inserted only in patients with clinically objectified SUI.
- The same surgical technique was performed laparoscopically by two different surgeons : anterior-posterior double arm sacrocolpopexy/hysteropexy using a polypropylene monofilament mesh.

### Demographic and risk factors:

age, number of vaginal deliveries, BMI

### Operative data:

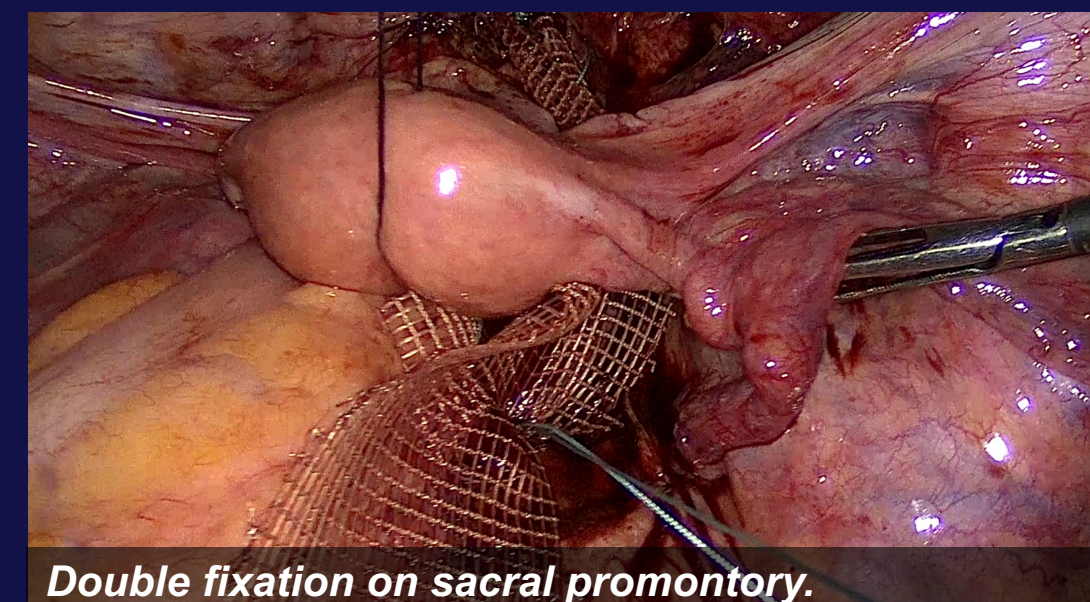
operative time (minutes), length of hospital stay (days), simultaneous procedures (hysterectomy, adhesiolysis, TVTO), and peroperative incidents (urinary, digestive or vascular injuries) .

### SHORT TERM OUTCOMES

- Follow-up at 5 weeks and 6 months
- Early post operative complications (urinary retention, wound infection, fever, ileus, constipation).
- Re-operation for TVTO (de novo SUI).

### LONG TERM OUTCOMES

- June 2022 subjective long term follow-up
  - Assessed by phone call
  - Recurrence? New onset of bulge symptoms
  - New onset of SUI, UUI, constipation, dyspareunia
  - Global satisfaction: rate 0-100%



Double fixation on sacral promontory.

## RESULTS

- Ninety-five patients were included in this study.
- 72% of patients had grade 3 prolapse, 5% grade 2 and 23% grade 4.

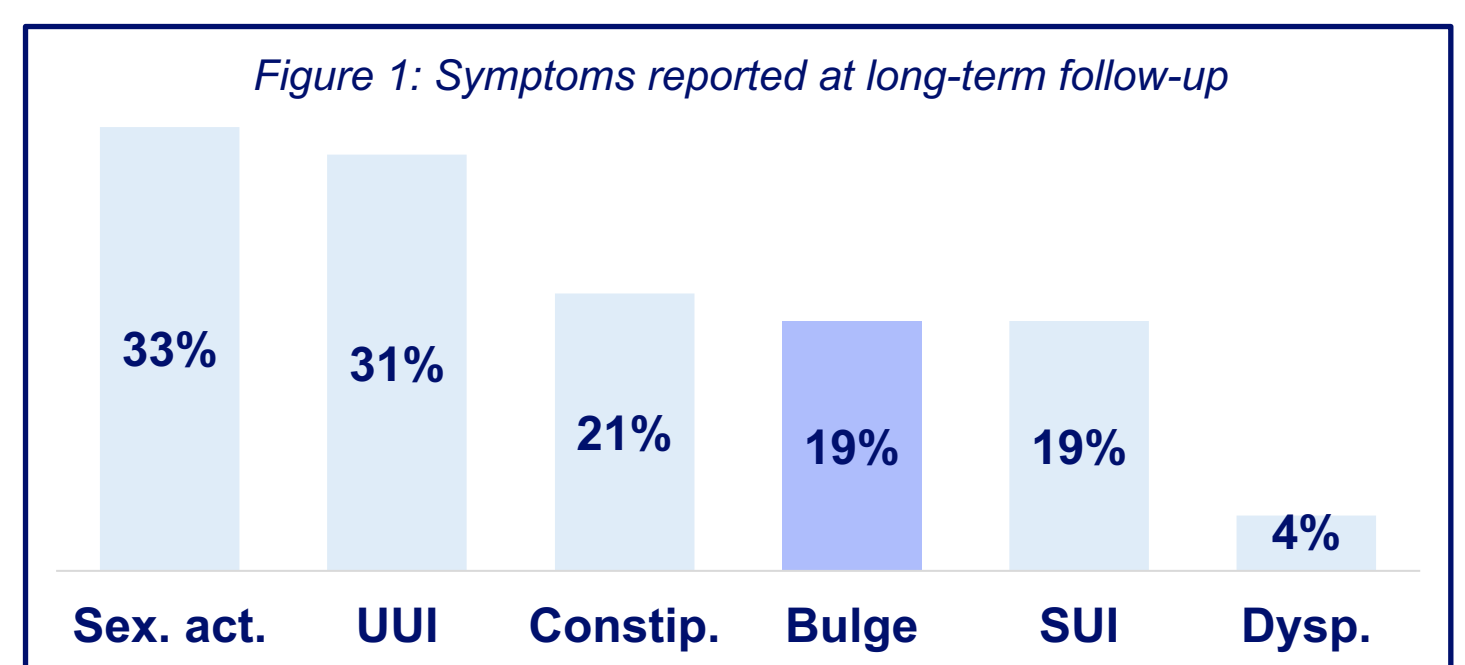
### SHORT TERM OUTCOMES (95 patients)

	Mean ± SD [min-max]
Vaginal deliveries	4 ± 2 [0-10]
BMI (kg/m <sup>2</sup> )	26 ± 4 [18 – 39]
Age at time of surgery (years)	60 ± 12 [34-83]
Operative time (minutes)	160 ± 33 [80 – 200]
Hospital stay (days)	3 ± 1 [1 – 10]
	Rate
Concomitant TVTO	24% (23/95)
De novo SUI (reoperation for TVTO)	5% (5/95)
Adhesiolysis	7% (7/95)
Only anterior mesh	6% (6/95)
Perioperative incidents	2% (2/95)
1 <sup>st</sup> year complications	11% (11/95)

Table 1: Demographic and operative data

### LONG TERM OUTCOMES (48 patients)

- Mean time follow-up 12 ± 3 years.



- Subjective recurrence most likely to have SUI.
- BMI, age, grade of prolapse, operative time, follow up length were not associated with recurrence.
- Symptomatic mesh erosion diagnosed at 5, 6, 10<sup>th</sup> postop year.
- Surgery satisfaction was on average 79%.

## CONCLUSIONS

- Laparoscopic sacrocolpopexy remains the best minimally invasive technique for surgical treatment of urogenital prolapse.
- => It can be offered to young symptomatic patients, since improvement persisted on the long term.
- Increased age and BMI did not seem to affect postoperative complications, symptoms, or outcomes.
- Satisfaction rate remained high after 10 years with a low recurrence rate.
- Mesh erosion can happen as late as 10 years post-operatively.

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