

ANTERIOR-APICAL SINGLE-INCISION MESH SURGERY (SIMS) IN THE TREATMENT OF ANTERIOR VAGINAL WALL PROLAPSE, TWO-YEARS FOLLOW UP

Hypothesis / aims of study

The aim of this study was to assess the surgical and functional outcomes of single-incision vaginal surgery for the treatment of advanced pelvic organ prolapse (POP).

Study design, materials and methods

Thirty-five patients underwent surgery to treat their symptoms of POP (> stage II) according to the Pelvic Organ Prolapse Quantification System (POP-Q).

The primary objectives were the anatomical correction of anterior POP (> stage II), assessed by means of a vaginal examination and a translabial ultrasound, and resolution of cervico-urethral obstruction with elevated post-void residual assessed prior to surgery by means of urodynamic testing. Anatomical recovery was assessed via a vaginal examination using the ICS-POP-Q system, with uroflowmetry with assessment of post-void residual and with the use of a translabial ultrasound to assess the correct position of the mesh. The subjective outcome was measured using questions 2 and 3 of the Pelvic Organ Prolapse Distress Inventory 6 (POPDI-6). We also assessed patient quality of life pre- and postoperatively. The baseline data for the patients are in table 1.

Variable	Value
Age, yr	66.4
Parity	3.0 (1–5)
Body mass index	26.3 (3.0)
Postmenopausal	34
Previous pelvic surgery	0
Vaginal hysterectomy	8
Total abdominal hysterectomy	0
Operative time, min	46
Intraoperative blood loss, mL	52
Haemoglobin difference, g/dL	0.7
Hospital stay, day	2.5
Concurrent surgery	
Vaginal hysterectomy	3
Major complications	0
Mesh exposure, vagina	0
Objective cure, %	97.7
Subjective cure, %	92.0

Results

Thirty-five women with cystocele (15 stage III, 20 stage IV), underwent surgery using the single-incision technique via the transvaginal route. The intermediate follow-up was two years. Restorelle SmartMesh with the Digitex suture delivery system via a single-incision technique was used in all patients. All patients showed a significant improvement in terms of anatomical outcome

after prolapse surgery ($p < 0.05$), and there were no recurrences requiring further surgical intervention. The anatomical success coefficient was 97.7% with a significant improvement in quality of life ($p < 0.0001$) and a significant reduction in post-void residual. There was a simultaneous significant improvement in POPDI-6, UDI-6, IIQ-7, and PISQ-12 scores after surgery. There were no cases of mesh dislocation. No *de novo* dyspareunia was reported. No mesh extrusion has been reported to date. However, some patients have presented with stress urinary incontinence, for which three patients were treated via surgery.

Interpretation of results

The Anterior-apical single-incision mesh surgery is an evolution of the prolapse's surgery. It has minor complications and the results are good and durable in a long time. The patients are met and they improve her quality of life

Concluding message

We can conclude that the single-incision technique via a transvaginal route for the repair of bladder prolapse is a safe, conclusive technique with a high rate of both recovery and continued recovery.

Disclosures

Funding: no **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it's usual surgery **Helsinki:** Yes **Informed Consent:** Yes