

## RECURRENT HIGH-STAGE PELVIC ORGAN PROLAPSE REPAIR AND MESH : ARE THEY COMPATIBLE IN THE ELDERLY?

### Hypothesis / aims of study

There is now emerging data on the use of mesh in the repair of pelvic organ prolapse (POP). However, literature focusing on its use in the elderly is scarce. We report on the anatomical and functional outcomes with quality of life (QoL) assessment in an elderly cohort with recurrent high stage POP who had undergone mesh reconstruction.

### Study design, materials and methods

Data were prospectively collected. The POP-Q system was used for staging. All patients underwent history, physical examination, and fluoroscopic urodynamics pre-operatively. All patients have recurrent prolapse. Pessary was used to reduce POP when testing for occult stress incontinence (SUI). Regarding reconstructive approach, full informed consent was obtained regarding the option of using mesh or native tissue. Only Amid type 1 macroporous mesh was used. Post-operative follow-up at 6, 12, and 18 months with POP-Q staging and 2 QoL questionnaires – the Pelvic Floor Distress Inventory Short Form 20 (PFDI-SF20) & Pelvic Floor Impact Questionnaire Short Form 7 (PFIQ-SF7). Both have urinary, bowel and sexual function domains. The Student's t-test was used for statistical analysis.

### Results

There were 30 patients aged over 70 of whom 22 consented to mesh repair for Stage 3 or 4 POP. Mean follow-up 17.3 months (range 6 – 48). Six (27%) had abdominal sacrocolpopexy, and 16 (73%) underwent cystocele repair with transobturator mesh systems. Ten of these 16 (63%) also had concomitant apical prolapse requiring sacrospinous colpopexy. 3 had concomitant posterior colporrhaphy.

15/22 (68%) has urodynamic or occult SUI pre-operatively. Three (20%) required a mid-urethral sling procedure post-POP repair due to worsening of SUI. In the other 12 patients (80%) the SUI either improved or remained stable and hence did not desire further sling after POP was treated.

20/22 (91%) showed good anatomical outcome with POP reduced to Stage 1 or less. Mean total PFDI-SF20 score decreased from 179.6 preoperatively, to 78.4 at 6 months, 72.7 at 12 months, and 53.4 at 18 months ( $p < 0.001$ ). Mean total PFIQ-SF7 score dropped from 142.6, to 43.4 at 6 months, 19.1 at 12 months and 19.8 at 18 months ( $p < 0.005$ ). Improvement was seen across each of the urinary, bowel, and sexual domains of each questionnaire. One pt (4.5%) developed a small vaginal extrusion at 9 months which healed after 6 weeks of topical estrogenisation.

### Interpretation of results

At mean follow-up of 17.3 months, this study showed favorable anatomical and functional outcomes of Amid Type 1 mesh use in the elderly with recurrent high stage POP. It is interesting to note when using a protocol where slings are not concomitantly placed during POP surgery in patients with concomitant SUI, 80% of patients did not require or desire a subsequent sling. This is due either to SUI improvement post-POP repair alone, or SUI remained unchanged but did not desire further sling as POP had already improved their QoL. Based on this result, one needs to insert 5 concomitant slings to prevent 1 SUI case in this elderly cohort.

### Concluding message

This study showed that satisfactory anatomical and functional outcomes can be achieved when mesh is used in the elderly with recurrent high-stage POP repair, with minimal morbidity. As 80% of our patients with concomitant SUI did not desire a subsequent sling, and the fact that slings are not without complications, this revisits the issue of placing concomitant slings at the time of prolapse repair, especially in the elderly, who may be more susceptible to complications.

<b><i>Specify source of funding or grant</i></b>	<b>NONE</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>It is because mesh use in RECURRENT prolapse repair is now more widely acceptable in clinical practice, esp. in abdominal</b>

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sacrocolpopexy with Level 1 evidence. All pts had full informed consent regarding options ( 22/30 chose mesh, 8/30 still chose native tissue). Our department do NOT use mesh in PRIMARY repairs (except in abdominal sacrocolpopexy) as quality long term data is still lacking.

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*Was the Declaration of Helsinki followed?*

Yes

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*Was informed consent obtained from the patients?*

Yes

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