SIMPLIFIED MANAGEMENT OF ANTERIOR VAGINAL WALL MESH EXPOSURE

Introduction
The use of synthetic mesh kits for the correction of pelvic organ prolapse has recently been popularized with a concomitant rise in the incidence of mesh-related complications such as exposure and/or erosion. Surgical excision is commonly necessary when conservative management fails. In the submitted surgical video, we demonstrate a simplified approach to the management of an anterior vaginal wall mesh exposure along the suture line.

Design
A retrospective query of our database was performed and identified all patients who underwent a mesh excision/revision procedure from April 2008 until February 2009. We specifically reviewed the cases of type 1 polypropylene mesh exposure and only selected those where we implemented the proposed simplified technique.

Highlights of the procedure include:
- Circumferential infiltration with a 1% lidocaine with epinephrine solution to help with dissection and hemostasis.
- Elliptical incision around the exposed mesh and undermining of adjacent vaginal epithelium for a tension-free closure.
- Careful separation of the mesh from the sub-epithelial layer.
- Plication of remaining mesh edges to reinforce the weakened area of excision.
- Irrigation, confirmation of hemostasis and closure of the vaginal epithelium without tension.

Results
26 patients underwent mesh revision during the above period. Eight underwent the described simplified surgical technique for the management of anterior vaginal wall mesh exposure (group I) and 2 patients for posterior wall exposures (group II). The average period of follow-up for each group was 11.1 weeks and 35 weeks respectively.

In group I, the mean pre-operative POP-Q measurements for points Aa and Ba were -2.8 and -2.7 respectively. Post-operatively, points Aa and Ba remained at -2.8 and -2.4 cm above the hymen. The average total vaginal length (TVL) measurements remained unchanged at 9.2 cm.

For the 2 patients in group II, there was no change in points Ap and Bp post-operatively.

Mesh exposure resolved in all subjects.

Conclusion
When synthetic mesh exposure does not respond or is not amenable to conservative management, the entire implanted material need not be removed. A simplified surgical technique of excision with re-approximation of the mesh edges and tension-free epithelial closure can be successful in re-establishing anatomical support and epithelial integrity.

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