

## **SURGICAL MANAGEMENT OF SACROCOLPOPEXY MESH COMPLICATIONS**

**BACKGROUND:** Abdominal sacrocolpopexy (SC) with polypropylene mesh is a reliable and effective approach to treating pelvic organ prolapse. Risks of mesh complications range from 0% to 5%,<sup>1</sup> including mesh erosion at 2.7%. Some complications can be managed conservatively with estrogen and antibiotics. Erosions and mesh perforations, however, require mesh removal. Experienced surgeons thus should perform this procedure to resolve any post- and intraoperative complications.

**OBJECTIVES:** To highlight our experience and demonstrate our technique for robotic-assisted laparoscopic (RAL) surgery for the treatment of complex mesh complications through a retrospective review of 15 cases of patients who underwent this procedure at our institution.

**METHODS:** Retrospective review from a single surgeon was conducted for 15 cases of RAL SC mesh removal at a tertiary surgical center between December 2013 and April 2019. Cases were included if SC mesh perforation was imminent or found to have perforated nearby structures. Results are presented as median (range) for continuous variables and *n* (%) for categorical variables.

Key segments of the procedure are demonstrated in photographs taken from the procedure's video: Patient 1, a 52-year-old woman with a history of SC for pelvic organ prolapse 3 years prior. SC mesh removal and repeat SC with cadaveric fascia are performed.

**RESULTS:** Fifteen cases were completed using RAL approach without the need for conversion to an open procedure. Median patient age was 51 years and median follow up was 1.4 years. Preoperative symptoms are shown in Table 1. The most common sites of mesh perforation involved the posterior bladder wall (40 %), vaginal apex (33 %), and sigmoid colon (6 %). Three patients had concomitant vesicovaginal fistulas. Operative details are found in Table 2. Repeat SC was performed using cadaveric fascia in 85% of cases. Three patients developed postoperative complications requiring additional surgery: a colovesical fistula, a vesicovaginal fistula, and a mesh exposure. At final follow up, 64% of patients were completely continent (0 pads per day). No patients developed pelvic organ prolapse postoperatively.

**CONCLUSIONS:** Mesh complications following abdominal SC are rare but can have devastating consequences. This article highlights an efficacious RAL technique in the removal of polypropylene mesh as well as our single institution experience and outcomes.