Conversion from abdominal sacrocolpopexy to vaginal surgery with transobturator mesh placement in the treatment of vaginal vault prolapse

HAIM KRISSI, YOAV PELED

Urogynecology Unit, Department of Obstetrics and Gynecology, Rabin Medical Center, Petach Tikva, affiliated to Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Abstract: Vaginal vault prolapse may be treated by laparoscopic or abdominal sacrocolpopexy or by vaginal suspension procedures. Laparoscopic sacrocolpopexy that prove to be too complex can be completed via an abdominal approach. This is the first report in the literature of conversion from abdominal sacrocolpopexy to vaginal surgery with synthetic mesh insertion via the transobturator route.

Key words: Pelvic organ prolapse; Vaginal vault prolapse; Transobturator mesh; Sacrocolpopexy; Conversion.

INTRODUCTION
Pelvic organ prolapse affects an estimated one-third of women, of whom 0.5% have clinically significant post-hysterectomy prolapse. Treatment may be administered via the laparoscopic, abdominal, or vaginal approach. Laparoscopic or abdominal sacrocolpopexy is preferred because of the low morbidity and high success rate. The reported rate of intraoperative conversion from laparoscopic to abdominal sacrocolpopexy is about 2%. The main reasons for conversion are organ laceration, bleeding, or severe pelvic adhesions.

We report, for the first time, conversion from abdominal sacrocolpopexy to vaginal surgery with transobturator mesh placement for the treatment of vaginal vault prolapse.

CASE REPORT
A 71-year-old woman presented with a bulge from the vagina of 5 years’ duration. Her medical history revealed 3 previous vaginal deliveries. She had undergone vaginal hysterectomy with posterior and anterior colporrhaphy 6 years previously for the treatment of uterine prolapse and anterior and posterior wall prolapse. She was also receiving medical treatment for high blood pressure and diabetes type 2. She had never smoked or received hormonal replacement therapy.

The suspected recurrent pelvic organ prolapse was evaluated according to the Pelvic Organ Prolapse quantification (POP-Q) system, as recommended by the International Continence Society [7]. Findings revealed stage 2 apical prolapse, stage 3 anterior wall prolapse, and stage 3 posterior wall prolapse. There was no stress incontinence on reduction of the prolapse. After receiving a detailed explanation of the treatment protocol, the patient provided written informed consent to undergo abdominal sacrocolpopexy with abdominal mesh placement combined with bilateral salpingooophorectomy and posterior colporrhaphy.

The surgical team was led by an experienced surgeon in abdominal sacrocolpopexy procedure. Preoperative antibiotic prophylaxis consisted of cephazolin 1 g and metronidazole 500 mg. The operation was performed under general anesthesia via an abdominal median longitudinal incision from the umbilicus to the symphysis pubis. After the peritoneum was opened, severe adhesion of the omentum and small bowel to the pelvis was noted. Meticulous adhesiolysis was performed, including bilateral salpingooophorectomy. However, the severe bowel adhesions and the excessive bleeding from the adhesion site necessitated careful hemo-
New vaginal mesh kits have been recently introduced to surgically treat apical, anterior, and posterior wall prolapse. Their use makes it easier for the surgeon to avoid the presacral vessels intraoperatively. Compared to conventional prolapse repair, vaginal transobturator mesh placement is associated with higher cure rate, fast recovery time, and rapid return to activities of daily living although the clinical significance of the improved anatomical results is still unclear. A randomized controlled trial yielded fewer anatomic failures at 12 months after vaginal-mesh insertion than after standard vaginal surgery. However, the decrease in symptoms and improvement in quality of life were equal in both groups. Nevertheless, the main disadvantage of using a standardized, trocar-guided mesh kit for prolapse repair is a higher short-term rate of surgical complications and postoperative adverse events.

In the patient described here, abdominal prolapse surgery had to be completed by a vaginal approach with the mesh kit because of severe pelvic adhesions that included the small and the large bowels. This successfully prevented adhesiolsis and intestinal damage. The vaginal surgery itself was relatively uneventful and not significantly different from primary vaginal procedures for prolapse repair. The severe abdominal adhesions had no effect on the vaginal dissection. We performed a full-thickness wall incision so that the mesh could be inserted under the fascia, thereby lessening the risk of erosion. We routinely recommend the regular use of vaginal estrogen cream to all patients after mesh insertion.

In conclusion, vaginal surgery for vaginal vault suspension with the use of a trans-obturator mesh kit should be considered when abdominal or laparoscopic approach are suspected to be difficult because of severe abdominal or pelvic adhesions.

ACKNOWLEDGMENTS

Funding: There was no funding for this paper.

Conflict of Interest: The authors have no conflicts of interest to report.

REFERENCES