Laparoscopic Paravaginal Defect Repair: Surgical Technique and a Literature Review

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ABSTRACT

Paravaginal defects, commonly seen in patients with anterior vaginal wall prolapse, are due to the detachment of pubocervical fascia from the arcus tendineus fascia pelvis (ATFP), at or near its lateral attachment. The majority of anterior vaginal wall prolapse is thought to be caused by paravaginal defects. Richardson et al. first described and demonstrated the anatomy of the paravaginal defect, as well as described the initial technique of the abdominal approach to repair. Since that time, the laparoscopic approach for repair has been developed and described with success rates of laparoscopic paravaginal defect repair reported in the range of 60% to 89%. This minimally invasive approach to address anterior wall prolapse eliminates the need for a vaginal incision, reduces risk of vaginal shortening and can be completed at the same time as other laparoscopic procedures, such as hysterectomy, sacralcolpopexy, and/or Burch Urethropexy. Compared to the open abdominal approach, there is improved visualization, less risk of bleeding, and faster recovery with the laparoscopic method. Compared to an anterior colporrhaphy, laparoscopic paravaginal repair is a much more anatomic repair of lateral defects and does not result in vaginal shortening. The laparoscopic paravaginal repair should be considered as the first-line treatment of anterior vaginal wall prolapse caused by lateral defects, including at time of laparoscopic/robotic sacralcolpopexy.