356

Rosenblatt P [1], Rardin C[2]
1. Mount Auburn Hospital, 2. Women & Infants' Hospital

LAPAROSCOPIC SACROCOLPOPEXY WITH "Y-SHAPED" MERSILENE MESH GRAFT

Synopsis of Video

The purpose of this video is to demonstrate the procedure of laparoscopic sacrocolpopexy with Mersilene mesh for the treatment of post-hysterectomy vaginal vault prolapse. The patient is a 49 year old woman who underwent a vaginal hysterectomy and anterior repair for pelvic prolapse and re-presented two years later with a 6-month history of increasing vaginal bulging and pelvic prolapse. Pelvic examination revealed complete vaginal vault eversion with a well-supported bladder neck. Urodynamic testing with prolapse reduction failed to reveal any evidence of potential stress incontinence. As demonstrated in this video, the laparoscopic approach to sacrocolpopexy for the treatment of post-hysterectomy vaginal vault prolapse begins with identification of the anatomic structures of the presacral space. The sacral promontory, right ureter, and common and internal iliac arteries are then identified. The classic waterbed sign of the left common iliac vein is demonstrated. With the bladder partially filled with saline, an incision is made in the peritoneum to mobilize the bladder off the anterior, pubocervical fascia. Dissection is continued for several centimeters, in order to create a wide area for placement of the anterior portion of the "Y"-shaped mesh.

Similarly, a posterior peritoneal incision permits entry into the avascular recto-vaginal space, where the posterior endopelvic fascia is identified. The peritoneum over the sacral promontory is then incised, with special care to avoid injury not only to the common iliac vessels, but also the middle sacral artery and vein, which can usually be identified with careful dissection in the presacral space. Dissection is continued until the anterior longitudinal ligament of the sacral promontory is identified. The peritoneal incision is extended inferiorly medial to the right uterosacral ligament, and lateral to the rectum. This maneuver facilitates reperitonealization over the synthetic graft at the completion of the procedure. The "Y'-shaped synthetic graft is then inserted into the abdomen and the anterior portion of the mesh is draped over the pubocervical fascia. A series of interrupted CV-0 Gore-Tex sutures on a THX-26 needle are used to secure the mesh to the anterior and posterior fascia. All sutures are tied down using an extracorporeal knot-tying technique. The mesh is then secured without tension to the anterior longitudinal ligament of the sacral promontory with three sutures using standard laparoscopic suturing techniques. The mesh is then buried under the peritoneum, to prevent the potential development of internal hernias that may result from bowel getting trapped between the mesh and the peritoneum. By applying the same principles used in a traditional abdominal sacrocolpopexy, a laparoscopic approach to this procedure may provide better exposure for the surgeon and less morbidity for the patient.