

ROBOTIC-ASSISTED LAPAROSCOPIC REPAIR OF ANTERIOR AND APICAL PROLAPSE BY LATERAL SUSPENSION WITH MESH: A DIDACTIC VIDEO

Introduction

Sacral colpopexy was the first technique used to treat pelvic organ prolapse (POP) with robotic assistance. However, dissection at the level of the promontory may be associated with rare but potentially serious complications, in particular life-threatening vascular injuries. To avoid this risk, lateral suspension with mesh may be an interesting alternative.

Design

Our video presents the case of a 73 years old menopause patient gravida 5 para 4, with history of asymptomatic myomatous uterus, breast cancer 5 years earlier, and vaginal POP repair one year ago with posterior colporrhaphy. She was referred to our clinic for POP stage 3, complaining of pelvic discomfort. On clinical examination, there was a stage 3 apical and anterior compartment defect (Aa +2, Ba +2, C +1) without significant posterior compartment defect. Preoperative ultrasonography showed a 3 cm anterior myoma and an atrophic endometrium. We decided to perform a robotic-assisted laparoscopic repair of anterior vaginal wall and uterine prolapse by lateral suspension with mesh in association with a bilateral adnexectomy.

Results

We used the Da Vinci Xi robot with an 8 mm umbilical port for a 0° optique, and two 8 mm ports placed laterally, 4 cm over the anterior superior iliac spine on each side. We used a 10 mm right paraumbilical assistant port to introduce sutures and mesh. We performed dissection of the vesico-vaginal space followed by placement of a polypropylene mesh (TiLOOP® "Prof Dubuisson" @ 9X 41.5 cm, 65g/m²) consisting of an anterior part of 6 cm length and 5 cm width with two lateral arms of 3 cm width. The mesh was fixed to the vagina by 6 to 8 sutures of 2-0 polyglactin 910 (Vicryl® suture 2-0, V3170H, JB needle by Ethicon). It was also fixed to the isthmus of the uterus by 2 sutures of 0 polyester (Ethibond® suture 0 V7 needle by Ethicon). Once the mesh was sutured, the two lateral arms were pulled retroperitoneally by the assistant through a peritoneal incision situated about 4 cm over the anterior superior iliac spine, just at the end of the lateral ports. One of the lateral arms of the robot was undocked to perform this manoeuvre. Thereafter, the peritoneum of the vesicouterine fold was closed over the mesh with uninterrupted suture of polyglactin 910 (Vicryl® suture 0 CT-2 needle, V330). During the closure, we performed a plication of the round ligaments and included the mesh in the suture thus increasing the binding of the mesh to the uterus and to the round ligaments. After checking the result of the procedure and avoiding excessive tension and in order to avoid sliding during the healing, the arms of the mesh were fixed to the peritoneum of the abdominal wall by the field assistant with absorbable tacks (Absorba Tack® fixation device by Covidien).

Conclusion

Our video demonstrates that in case of anterior vaginal wall and uterine prolapse, hysteropexy with lateral suspension may be an alternative to the classical sacral hysteropexy, with reduced risk of complications. Robotic assistance is not mandatory but offers a better 3 dimension vision and allows us to avoid the transparietal passage of the mesh of the traditional laparoscopic technique, thus limiting the risks of ilioinguinal and ilio-hypogastric nerves injury.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** HUG commission **Helsinki:** Yes **Informed Consent:** Yes