

ROBOTIC LAPAROENDOSCOPIC SINGLE SITE (R-LESS) MESH SACROCOLPOPEXY

Introduction

This movie describes our experience with robotic laparoendoscopic single site (R-LESS) mesh sacrocolpopexy for vault prolapse.

Design

We present our experience with robotic laparoendoscopic single site mesh sacrocolpopexy and illustrate our technique in a 55-year old female with recurrent vault prolapse including a large enterocele.

Key technical points are:

- A single 4cm peri-umbilical incision and insertion of the GelPoint laparoscopic system.
- Configuration of robotic ports in GelPoint system to facilitate movement of robotic arms intracorporally.
- EEA clamp placed in the vagina at the start of the procedure and moved around by the assistant.
- Use of a 30 degree up scope to allow maneuvering between the two robot side ports. Identification of the promontory is facilitated by the tactile feedback of the electrified hook and the Maryland forceps.
- To enhance visualization of the pelvis, the small and large intestines are retracted upwards and away from the pelvic cavity, and temporarily tacked to the pelvic side-wall using a hem-o-lok® clip at the start of the procedure.
- The mesh, which has been measured, trimmed and already secured with 2/0 Vicryl sutures on the back table, is introduced via the assistant port.
- Mesh fixation with absorbable sutures which incorporate strong bites into the vaginal wall and occasionally the levator muscles.
- Additional sutures can be placed at the vaginal apex to firmly secure the mesh to the apex of the vagina.
- Mesh is secured to the anterior vertebral ligament with 2/0 Ethibond non-absorbable sutures.
- To restore proper vaginal cuff support and avoid vaginal distortion, we do not place the mesh under tension but simply ensure that the mesh lays along the concavity of the sacrum in its prepared groove.
- Next the peritoneum is closed over the mesh with a running V-loc suture. This peritoneal closure ensures prevention of bowel adhesions to the mesh.
- Cystoscopy with administration of IV indigo carmine is performed to ensure no bladder or ureteric injuries.

Results

Although early in our experience, no patients were converted to standard robotic sacrocolpopexy nor were they converted to open. No bladder, ureteric, rectal injuries or vaginotomies occurred. Immediate patient recovery has been excellent with both patients being discharged home one day after the procedure with minimal pain medication requirements. Side docking for concomitant access to the vagina was not found possible with this technique as yet.

Conclusion

We report our experience of robotic laparoendoscopic single site (R-LESS) mesh sacrocolpopexy. Although technically more challenging than the traditional robotic approach, it is feasible. Patients are extremely satisfied with the cosmetic results. Long term follow-up is necessary to determine efficacy, however, it is anticipated that anatomical success based on the POP-Q classification system will be satisfactory.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	NONE