

SINGLE INCISION POSTERIOR SLING FOR UTERINE PROLAPSE

Introduction

Although sacropromontopexy has become a widely used procedure for apical vaginal prolapse repair, the risk of bleeding, injury of the rectum, as well as other abdominal viscera still represents a major concern (1,2). Posterior transcoccygeal mesh brings the risks of the transgluteal route, mostly pudendal blunt injury leading to intraoperative bleeding and post operative chronic pain (3), so that it has not reached enough reability and nowadays has been avoided.

A new implant for colpexy was developed in order to allow for a single incision apical transvaginal level I repair, using a low amount of syntethic material.

The set consists of a macroporous polypropylene 8 x 1,2 cm mesh and a multipoint anchoring system, which is composed of two polypropylene bristly arrowhead attached to polypropylene stitches, which are fixed to the mesh during the procedure and a disposable retractable insertion guide for insertion of the anchoring system into the sacrospinous ligaments. The back of the multipoint anchoring system has a safety stop, specially designed to prevent from inserting it too deep through the sacrospinous ligament avoiding lesions to structures such as pudendal artery and nerve. This procedure can be performed alone for pure apical defects or combined to posterior site specific repair or coporrhaphy when necessary. This video highlights the technical details of the procedure.

Design

It is presented the surgical treatment of a patient with a vaginal apical (uterine) prolapse stage 3 according to the POP-Q system. The procedure begins with hydrodissection of vaginal wall. Then, a vertical incision is done in the posterior vaginal wall near to the cervix, as long as necessary to ensure proper dissection and identification of uterosacrous ligaments and posterior aspect of the cervix. Blunt dissection is performed towards the ischiatic spine, and coccygeous muscle and sacrospinous ligaments are identified bilaterally. Polypropylene 2.0 stitches were used to suture the mesh to the uterosacrous ligament and posterior aspect of pericervical ring.

Then, the retractable insertion guide is primed with the multipoint anchoring system and introduced toward the ischiatic spine guided by surgeon's index finger and introduced into the sacrospinous ligament, 1.5 cm medial to ischial spine. The tissue anchoring system is delivered and the retractable insertion guide is gently retracted.

Both sides of the mesh are attached to the polypropylene stitches in order to elevate the cervix and the vaginal apex to DeLancey's level one. Rectovaginal septum defects repair can be added to the procedure when necessary. Finally, the vaginal incision is closed in the usual manner. A Foley catheter is left overnight.

Results

This procedure was performed in 4 patients (mean age 65 years-old) with POP-Q stage 3 posterior/apical prolapses. No intra-operative complications or post-operative significant adverse events were observed. None presented post-operative vaginal mesh exposure. Mean follow up was 4 months (3 to 6 months). In this preliminary results, all of the patients were considered cured (POP-Q posterior/apical stage was 0 or 1).

Conclusion

Posterior sling plus multipoint anchor system adds the advantages of transvaginal approach to a high level of safety and level I correction of apical defects. It represents a real evolution of pelvic prolapse surgery.

References

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Disclosures

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