

SHORT AND INTERMEDIATE-TERM COMPLICATIONS OF THE PROLIFT® TRANSVAGINAL MESH PROCEDURE

Hypothesis / aims of study

Since 1996, prosthetic meshes have become increasingly popular for the transvaginal surgical cure of pelvic organ prolapse [1]. In 2004, the TVM group from France presented their technique for pelvic floor reconstruction using a mesh and trocar kit [2]. procedure. We present our short and intermediate-term complications with the Prolift® transvaginal mesh procedure for pelvic organ prolapse by a single surgeon at our institution.

Study design, materials and methods

We present a retrospective review of patients who underwent a total vaginal mesh procedure by a single surgeon to repair pelvic organ prolapse between June 2005 and June 2008. Office and hospital charts were reviewed and complications were noted. Complications were divided into two categories: major and minor. Major complications were those requiring hospital re-admission or surgical intervention. Minor complications were those with minimal patient morbidity.

Results

A total of 80 consecutive vaginal mesh procedures were performed using the Gynecare Prolift kit. Ages ranged from 35 to 86 years (mean age 68 years). Follow-up periods ranged from 2 to 40 months (mean follow-up of 10 months). 2 patients had concomitant vaginal hysterectomies, 1 had concomitant diagnostic laparoscopy for recurrent ovarian cyst, and 1 had a concomitant parathyroidectomy. 38 had concomitant tension-free vaginal tape procedures. There were 4 (5%) major complications: 1 lower extremity DVT requiring anti-coagulation, 1 delayed bleed requiring transfusion and angio-embolization, 1 patient with vaginal wall extrusion of mesh, and 1 patient with rectal erosion of mesh. The patient with the delayed bleed had a concomitant transvaginal hysterectomy and presented on post-operative day #11. The patient with the vaginal wall extrusion of mesh was treated with transvaginal excision after conservative approach failed. The patient with rectal erosion of mesh was treated with transanal excision of mesh after conservative approach failed. There were 13 (16%) minor complications: 8 urinary tract infections, 1 episode of transient urinary retention, 1 episode of pseudogout, 2 intra-operative bladder lacerations, and 2 vaginal mesh extrusions. The urinary tract infections were all treated successfully with oral antibiotics. The bladder lacerations were noted intra-operatively, repaired primarily, and managed successfully with Foley catheter decompression. Healing was confirmed with a cystogram at the time of catheter removal. There were 2 minor (2.5%) short-term complications related to the mesh itself, both vaginal extrusions, both managed non-operatively. 1 healed with the addition of topical estrogen cream, the other treated by simple excision in the office.

Interpretation of results

Our study has shown that the Prolift® transvaginal mesh procedure is safe, with short and intermediate-term complications equivalent to other approaches to treating pelvic organ prolapse, such as abdominal or laparoscopic sacral colpopexy and synthetic or biologic mesh augmented isolated cystocele or rectocele repair. We were able to show that this procedure demonstrated a notable lack of any functional bowel-related complications such as ileus or small bowel obstruction, which is akin to more invasive approaches like abdominal or laparoscopic sacral colpopexy. In terms of technical complications, the 2 bladder lacerations amounted to 2.5% of our patient population. These surgical complications were recognized immediately and managed successfully intraoperatively without difficulty. In addition, although some major complications were noted, a majority of these issues were able to be managed on an outpatient basis. This included mesh erosions which, although comprised of only 5% of our patients, were successfully managed with both conservative treatment and outpatient surgical excision.

Concluding message

The short and intermediate-term major and minor complication rates are comparable to those reported for laparoscopic and abdominal mesh procedures for pelvic organ prolapse, with the notable lack of any functional bowel-related complications such as ileus or small bowel obstruction. A majority of major complications were treated with outpatient management.

References

1. Julian TM. The efficacy of Marlex mesh in the repair of severe, recurrent vaginal prolapse of the anterior midvaginal wall, Am J Obstet Gynecol 1996; 175(6): 1472-5
2. Berrocal JCH, Cosson M, Debodinance P et al., Conceptual advances in the surgical management of genital prolapse. The TVM technique emergence, J Gynecol Ostet Biol Reprod 2004; 33:577–587

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<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes