

EXPERIENCE OF TRANSVAGINAL RESECTION OF MESH EXPOSURE IN BLADDER AFTER TVM (2 CASES REPORTED)

Introduction

Transvaginal placement of surgical mesh (TVM) for pelvic floor reconstruction has been widely used in patients with pelvic organ prolapse (POP). The common complications including: mesh exposure, mesh contracture, organ perforation etc. Although mesh exposure in bladder has a low incidence, but handle more complex. The common treatment for mesh exposure in bladder is transvesical resection of mesh because performers are more familiar with this surgery path despite larger wounds will be left in abdominal operation. Usually, surgeons worry about that transvaginal path has surgical separation difficulty and will lead to further bladder damage causing mesh adhesion.

2 cases with complication of mesh exposure in bladder after TVM hospitalized in our department in the year of 2011. Case 1: 72-year-old female, 3 years after Prolift-T pelvic floor reconstruction, detected inactivity calculus on right lateral bladder wall by medical examination and diagnosed mesh exposure by cystoscopy. The reason for exposure in this case was bladder perforation by puncture of right anterior straps and it was undetected in surgical procedure. Case 2: 54-year-old female, 6 months after Proxima-C pelvic floor reconstruction, with symptom of urinary frequency, detected bladder wall unsmooth and diagnosed segmental mesh exposure by cystoscopy. The reason for exposure in this case was incomplete repair of vesical injury by surgical separation. We performed transvaginal resection of mesh to both of them to remove the exposed mesh in bladder.

Design

Operation is performed under general anesthesia in patient's dorsosacral position. An ureteral stent should be inserted to the nearside of the exposed mesh in bladder so that we can avoid ureteral injury in surgical procedure. A middle vertical incision in the anterior wall of vagina should be made between bladder neck and cervical (without hydrodissection). After dissecting to the surface of mesh, dissociate the vaginal wall towards the exposure side along the surface of mesh adequately by using a fine operation scissors. Then we can obtain ideal surgical field after separation another side slightly. Cut off the mesh from the middle; pull the edge of mesh in exposure side; dissociate the underneath of mesh literally close to it. While meeting separation difficulties, it is approach to the exposure location. This possible position should be marked by sutures. Then refill the bladder; draw the sutures outside to confirm the location under cystoscopy direct vision; open the bladder at marking position in filled condition; excise the exposure mesh under direct vision (excision should keep away from ureteral stent). If the location is too close to the ureteral meatus, we advise to deal with mesh exposure by abdominal operation and ureteric reimplantation should perform simultaneously. Finally, close the bladder by simple continuous suture under direct vision away from ureteral stent; close the vaginal incision and avoid dead spaces formation. Operative field should be rinsed repeatedly during operation. The ureteral stent can be easily removed postoperative. patient should indwelling Fr.18 double lumen urinary catheter for 4 weeks.

Results

2 patients had undergone transvaginal resection of mesh at mean surgical time less than 1 h, and discharged with urinary catheter 2 days after surgical procedure. Both of them removed catheter at our outpatient service 4 weeks postoperation. In 3 months follow-up, there was no severe genital prolapse recurrence finding, no voiding disorder complaint.

Conclusion

Transvaginal resection of mesh exposure in bladder after TVM is simple and feasible, but requires meticulous surgical procedure and the consciousness of ureteral injury prevention. The wounds of this procedure can be significantly decreased compared with transvesical method dealing with exposed mesh in bladder.

Disclosures

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