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Editorial

A complication occurred fourteen days following the laparoscopic correction of pelvic organ prolapse using lateral suspension with mesh

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Abstract This case report describes a postoperative complication following laparoscopic lateral suspen-sion with mesh for the treatment of pelvic organ prolapse (POP) in a 67-year-old woman. The pa-tient initially presented with grade III anterior vaginal prolapse and grade IV apical uterine pro-lapse. A laparoscopic lateral suspension procedure was successfully performed, and the patient was discharged on postoperative day two without complications. However, two weeks later, she experienced pelvic discomfort, and examination revealed a recurrence of the prolapse due to the failure of the right lateral arm of the mesh. The mesh was successfully reattached via a second laparoscopic procedure, and the patient had an uneventful recovery. This case highlights the po-tential for mesh dislocation postoperatively, underscoring the importance of secure mesh attach-ment to prevent recurrence of prolapse.

Keywords: Vaginal Prolapse; Mesh; POP; Pelvic Organ Prolapse

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1. Introduction

In the past, several surgical methods have been suggested to address pelvic organ prolapse (POP) by lifting the vaginal vault and pelvic organs in order to restore the normal structure of the pelvic floor. The majority of these surgeries were conducted either through the vaginal or abdominal route. The advancements in laparoscopic surgery allow us to utilize this technique for treating vaginal prolapse [1,2,3]. Dubuisson et al. initially described the laparoscopic lateral suspension technique utilizing mesh [4]. Laparoscopic lateral suspension is a procedure used to treat genital prolapse. It is effective in avoiding injury to the promontory and eliminates the need for extensive peritonealization. This article discusses a postoperative complication of laparoscopic lateral suspension utilizing mesh that arised in a patient two weeks after the initial procedure.

2. Case presentation

A 67-year-old woman, who has had one spontaneous vaginal delivery with a normal fetal weight, has been brought to us due to a grade III anterior vaginal prolapse and a grade IV apical uterine prolapse according to the Baden and Walker clinical classification. She did not mention any dysfunctional symptoms related to the urine or gastrointestinal tract, such as urinary stress incontinence, urge incontinence, or anal incontinence. She did not mention any chronic diseases or past pelvic surgery. A laparoscopic lateral suspension procedure was recommended and carried out using a polypropylene mesh (Gynemesh 25 9 25 cm, Ethicon, Inc., Somerville, NJ). The vesicovaginal space, located between the

bladder and the anterior vaginal wall in the fascia plane, was identified. Subsequently, a polypropylene mesh was divided into two long arms (2 cm wide) and a rectangular piece (4 cm wide). The mesh was created over the dissected front portion and secured with individual number 2/0 prolene sutures. A 5-mm cut was made on both sides, located 2 cm above the iliac crest and 4 cm beyond the anterior superior iliac spine. A laparoscopic gripping instrument was inserted via the incision using a retroperitoneal approach and positioned beneath the round ligament until the appropriate arm was released. The mesh was firmly grabbed and then dragged laterally until achieving the desired tension. The mesh was attached and secured to the muscle fascia using a separate number 2/0 Vicryl suture, and then trimmed at the skin level. Ultimately, the peritoneum was sutured closed over the mesh to fully encase the graft in the retroperitoneal space using a con-tinuous number 3/0 Stratafix suture. The duration of the operation was 1 hour and 20 minutes. No significant intraoperative blood loss was reported and no perioperative problems were detected. The urinary catheter was extracted at completion of the surgical procedure. The patient did not report any discomfort on postoperative day 0 and day 1 while using an elastomeric analgesic pump containing 10 mg of morphine and 60 mg of ketorolac every 12 hours. The patient was discharged on postoperative day 2. Two weeks following the surgery, she returned to our outpatient clinic with a sensation of pelvic discomfort. She reported experiencing flu-like symptoms seven days ago, including frequent spells of coughing. No additional symptoms were reported. During the physical examination, we observed a grade III anterior vaginal prolapse located on the right side of the vagina. We conducted an exploratory laparoscopy and discovered a 2 cm tract indicating the failure of the right lateral arm of the Mesh.

Using the same retroperitoneal approach as the initial surgical procedure, a laparoscopic grabbing instrument was inserted to retrieve the loose arm and reattach and secure the mesh. The duration of the operation was 30 minutes and no difficulties arose during the perioperative period. The patient was discharged within a span of 48 hours. During a clinical follow-up on the seventh day after surgery, the patient did not report any symptoms and there was no recurrence of the prolapse.

3. Discussion

Preliminary findings indicate that the laparoscopic lateral colpo-uterine suspension with mesh reinforcement is both feasible and successful in treating genital prolapse. The surgical indications that are pertinent are cystocele and/or hysterocele [5]. Common consequences of pelvic organ prolapse repair employing mesh include vaginal mesh erosions and subsequent infections, although they are more commonly found with transvaginally implanted meshes [6]. It is not advised in the literature to suture the arms of the mesh to the subcutis. Nevertheless, we have noticed that, following physical activity by the patient, one of the arms has become dislocated despite the suturing. Hence, it is crucial to firmly attach the mesh to the skin in order to avoid this difficulty, which for-tunately may be easily rectified.

4. Conclusion

Laparoscopic lateral suspension with mesh is a reliable and effective procedure for treating vaginal vault prolapse.

This method provides a different option for repairing the structure of the vaginal apex as an alternative to laparoscopic sacrocolpopexy. The procedure has a reduced duration, minimal problems during the perioperative period, and lowers medical ex-penses by limiting the need for analgesics and other medications, as well as shortening hospital stays. Additional research should be conducted to further evaluate the feasibility of applying this technique.

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