



Laparoscopic Ventral Mesh Rectopexy and Lateral Suspension for Multicompartment Prolapse: A Video Vignette

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ABSTRACT

This case report presents the management of a patient with multicompartment pelvic organ prolapse through laparoscopic ventral mesh rectopexy and lateral suspension in a single transabdominal approach. The surgical technique was described in the video. The patient was discharged on postoperative day 3. Obstructed defecation had completely regressed. There were no complaints after 2 years. Prolapse involving more than one compartment can occur concurrently and requires multidisciplinary management.

Keywords: Rectal prolapse, laparoscopic ventral mesh rectopexy, pelvic organ prolapse, obstructed defecation syndrome

Introduction

Pelvic floor disorders are a group of conditions caused by the failure of the pelvic floor muscles to properly support the pelvic organs. They can affect the urinary, gynecological, and anorectal organs and require a multidisciplinary approach. Pelvic organ prolapse affects 25% of women, and multicompartment prolapse can be found in 10-55% of patients.¹ Laparoscopic ventral mesh rectopexy (LVMR) is a nerve-sparing technique introduced by Consten et al.² in 2004 for pelvic floor disorders, and its efficacy has been supported by many studies over the past two decades. For apical prolapse, the widely accepted approach is laparoscopic sacrocolpopexy. However, in patients wishing to preserve the uterus, lateral suspension is a safe and effective alternative³ with comparable functional outcomes and a lower risk of complications.⁴

Case Report

A 39-year-old woman presented with complaints of obstructed defecation syndrome, stress incontinence, and vaginal flatulence. The patient had a medical history of three vaginal deliveries and bilateral salpingo-oophorectomy. Informed consent for the use of patient data is obtained from all individuals who present to our university hospital. A copy of this patient's consent form is provided in the appendix. Defecography revealed an Oxford grade 3 rectal prolapse, an anterior rectocele, moderate middle compartment prolapse, and a small cystocele. The pelvic organ prolapse quantification stage was 2. A combined LVMR and lateral suspension were performed, restoring all compartments through a single transabdominal approach (Video 1).



Video 1.

Laparoscopic ventral mesh rectopexy and lateral suspension for multicompartment prolapse



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Ethics

Informed Consent: Informed consent for the use of patient data is obtained from all individuals who present to our university hospital.

Footnotes

Authorship Contributions

Surgical and Medical Practices: Ç.A., S.K., Y.Y., Concept: Ç.A., S.K., Design: Ç.A., S.K., Data Collection or Processing: Ç.A., Y.Y., Analysis or Interpretation: Ç.A., Literature Search: Ç.A., Y.Y., Writing: Ç.A., Y.Y.

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References

1. Wu JM, Vaughan CP, Goode PS, Redden DT, Burgio KL, Richter HE, Markland AD. Prevalence and trends of symptomatic pelvic floor disorders in U.S. women. *Obstet Gynecol.* 2014;123:141-148.
2. Consten EC, van Iersel JJ, Verheijen PM, Broeders IA, Wolthuis AM, D'Hoore A. Long-term outcome after laparoscopic ventral mesh rectopexy: an observational study of 919 consecutive patients. *Ann Surg.* 2015;262:742-747; discussion 747-748.
3. Wang XX, Xu Y, Song YF, Lin CQ, Jiang XX. Laparoscopic lateral suspension with mesh for severe anterior and apical pelvic organ prolapse: an observational cohort study for safety and efficacy at 2-year follow-up. *Arch Gynecol Obstet.* 2024;310:3259-3265.
4. Malanowska-Jarema E, Starczewski A, Melnyk M, Fidalgo D, Oliveira D, Dubuisson J. Comparison of sexual function between laparoscopic lateral suspension and laparoscopic sacrocervicopexy with the use of the PISQ-IR questionnaire. *Front Med (Lausanne).* 2024;11:1456073.