



ORIGINAL RESEARCH PAPER

SURGICAL MANAGEMENT OF FULL-THICKNESS RECTAL PROLAPSE: A FOUR-CASE SERIES FROM A TERTIARY CARE TEACHING HOSPITAL

General Surgery

**KEY WORDS:** Rectal Prolapse, Rectopexy, Posterior Mesh Rectopexy, Thiersch Wiring, Pelvic Floor Disorders, Case Series

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| ABSTRACT | <p><b>Background:</b> Rectal prolapse is a debilitating condition characterized by circumferential full-thickness protrusion of the rectum through the anal canal. Surgical treatment is individualized according to patient age, comorbidities, prolapse severity, and associated pelvic floor disorders 2,4,5. We present a case series demonstrating different operative approaches employed in a tertiary care teaching hospital. <b>Case Presentation:</b> Four patients with grade III–IV rectal prolapse underwent surgical treatment between January 2024 and May 2026. The series included two elderly males, one middle-aged female, and one elderly female. Surgical procedures included reduction under anesthesia with Thiersch wiring (two patients), posterior mesh rectopexy (one patient), and suture rectopexy with Thiersch wiring (one patient). One patient had associated grade II cystocele and severe pelvic floor descent demonstrated on MRI defecography. All patients had satisfactory immediate postoperative recovery and were discharged in stable condition with dietary advice, bowel-regulating medications, and scheduled outpatient follow-up. <b>Conclusion:</b> The present series highlights the importance of individualized operative planning in rectal prolapse. Both abdominal and perineal procedures provided satisfactory short-term outcomes in appropriately selected patients 1,2,6.</p> |
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| <p><b>INTRODUCTION</b></p> <p>Rectal prolapse is defined as circumferential full-thickness protrusion of the rectal wall through the anal canal<sup>2,4</sup>. Although uncommon, it significantly impairs quality of life because of fecal incontinence, constipation, bleeding, mucus discharge, and discomfort<sup>4,5</sup>. Surgical correction remains the definitive treatment<sup>1,2</sup>. Multiple operative procedures are available, including abdominal rectopexy and perineal procedures such as Thiersch wiring, with the choice depending upon patient age, physiological status, associated pelvic floor pathology, and surgeon preference<sup>2,3,6</sup>.</p> <p>This case series describes four patients with full-thickness rectal prolapse managed using different operative techniques in a tertiary care teaching hospital.</p> <p><b>Case Presentation</b></p> <p><b>Case 1</b></p> <p>A 71-year-old male presented with a three-day history of irreducible mass per rectum associated with bleeding and tenderness. Clinical examination demonstrated grade III irreducible rectal prolapse with mucosal congestion. He underwent reduction under spinal anesthesia followed by Thiersch wiring using a polypropylene mesh strip passed circumferentially through a subcutaneous tunnel around the anal canal. The postoperative course was uneventful, and the patient was discharged in stable condition with stool-softening measures and follow-up advice.</p> <p><b>Case 2</b></p> <p>A 55-year-old male presented with grade IV irreducible rectal prolapse accompanied by bleeding, congestion, and tenderness. Manual reduction was achieved under spinal anesthesia, followed by Thiersch wiring using a polypropylene mesh strip. One unit of packed red blood cells was transfused during postoperative management. The patient recovered well and was discharged without early complications.</p> <p><b>Case 3</b></p> <p>A 48-year-old female presented with a one-year history of rectal prolapse. MRI defecography demonstrated severe rectal prolapse with grade II cystocele, severe pelvic floor</p> | <p>descent, levator hiatus widening, rectal intussusception, and peritoneocele. After multidisciplinary evaluation, posterior mesh rectopexy was performed through a lower midline laparotomy. A polypropylene mesh was fixed to the sacral promontory and rectum, followed by placement of a pelvic drain. Recovery was uneventful, and the patient was discharged with pelvic floor strengthening exercises, laxatives, and dietary modification.</p> <p><b>Case 4</b></p> <p>An 80-year-old female presented with a four-year history of full-thickness rectal prolapse. Clinical examination revealed approximately 5 cm of prolapsed rectum with lax anal tone. She underwent posterior anal suture rectopexy followed by Thiersch wiring under spinal anesthesia. Postoperative examination demonstrated improved anal tone without recurrent prolapse on coughing. She was discharged in stable condition with advice regarding lifelong constipation prevention and regular follow-up.</p> <div> </div> <p><b>Discussion</b></p> <p>This four-patient series demonstrates the spectrum of surgical management employed for full-thickness rectal prolapse within a tertiary care teaching hospital. The cases illustrate individualized operative planning based on patient characteristics and associated pathology documented in the discharge records. Current guidelines recommend tailoring the operative approach to patient fitness, pelvic floor dysfunction, and surgeon expertise<sup>2,3</sup>.</p> <p>The two male patients with acute irreducible prolapse</p> |
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underwent reduction under anesthesia followed by Thiersch wiring. In contrast, the younger female patient with documented pelvic floor dysfunction and associated cystocele underwent abdominal posterior mesh rectopexy after preoperative MRI defecography and multidisciplinary assessment. The elderly female patient underwent suture rectopexy combined with Thiersch wiring, reflecting an alternative operative strategy documented in the operative notes. Both abdominal and perineal approaches remain accepted treatment options with differing recurrence and functional outcomes<sup>1,2,7,8</sup>.

All four patients were discharged in stable condition without documented early postoperative complications during admission. However, long-term recurrence, functional outcomes, and continence assessment were not available from the discharge cards and therefore cannot be evaluated in this series. Long-term follow-up is important because recurrence rates vary among procedures<sup>1,8</sup>.

The principal limitation of this report is its retrospective nature and reliance on discharge documentation, which does not include long-term follow-up or recurrence data.

## CONCLUSION

This case series demonstrates that rectal prolapse can be managed successfully using different operative techniques according to patient characteristics and associated pelvic floor pathology. Reduction with Thiersch wiring, posterior mesh rectopexy, and suture rectopexy were all associated with satisfactory immediate postoperative recovery in this series. Larger prospective studies with long-term follow-up are required to determine recurrence rates and functional outcomes<sup>1,2,8</sup>.

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