

# Giant Rectocele Mimicking Cystocele in an Elderly Woman with Long-Term Manual Vaginal Splinting After Home Deliveries: A Case Report

## OPEN ACCESS

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### PEER REVIEW

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## ABSTRACT

**Background:** Large rectoceles are a recognized cause of obstructed defecation in multiparous women, yet markedly enlarged lesions that clinically resemble anterior compartment prolapse are uncommon. Misinterpretation as cystocele may delay definitive diagnosis and management, particularly in patients with limited access to specialized care.

**Case Presentation:** A 71-year-old woman with a history of five unassisted home vaginal deliveries presented with a decade of obstructed defecation, incomplete evacuation, and chronic reliance on manual vaginal splinting. Initial gynecologic evaluation suggested cystocele; however, targeted pelvic examination and magnetic resonance imaging revealed an isolated grade III rectocele without accompanying cystocele or enterocele. She underwent native-tissue transvaginal rectocele repair with posterior colporrhaphy and perineoplasty. Recovery was uneventful, and at 6-month follow-up she remained fully asymptomatic, with complete resolution of splinting and no evidence of recurrence.

**Conclusion:** This case highlights that giant rectoceles may mimic anterior compartment prolapse and remain untreated for years when healthcare access is limited. Accurate compartment-specific assessment supported by imaging is crucial for avoiding diagnostic error. Native-tissue transvaginal posterior colporrhaphy with perineoplasty offers an effective, mesh-free solution with excellent functional outcomes even in severe, long-standing rectocele.

**Keywords:** Rectocele, Obstructed defecation, Posterior colporrhaphy, Pelvic floor disorders, Case report

## Introduction

Rectocele represents one of the most common manifestations of posterior compartment pelvic organ prolapse, arising from a defect in the rectovaginal fascia that permits anterior bulging of the rectal wall into the vagina.<sup>1-3</sup> Although many women remain asymptomatic, clinically significant rectoceles are frequently associated with obstructed defecation symptoms—including straining, incomplete evacuation, and the need for digital vaginal assistance—which can profoundly impair quality of life.<sup>2-5</sup> Epidemiologic studies emphasize that multiparity, childbirth-related pelvic floor injury, and menopause are major contributors to fascial

attenuation, and the disorder is particularly prevalent among women with long-standing, untreated pelvic floor dysfunction.<sup>1,3</sup>

Accurate diagnosis requires integration of symptom assessment with targeted pelvic examination and, when indicated, radiologic evaluation.<sup>1,4</sup> Imaging modalities such as defecography or pelvic magnetic resonance imaging help differentiate rectocele from co-existing abnormalities including cystocele, enterocele, perineal descent, or rectal intussusception, thereby informing surgical planning.<sup>1,6-8</sup> Current consensus guidelines underscore that conservative measures—pelvic floor physiotherapy, bowel habit optimization, and pessary use—constitute first-line

therapy; however, many patients with advanced or persistent symptoms ultimately require surgical correction.<sup>1,3,9</sup>

A wide spectrum of operative techniques has been described, encompassing transvaginal, transanal, transperineal, abdominal, and laparoscopic approaches.<sup>1,10</sup> The literature reflects considerable heterogeneity and ongoing debate.<sup>1,11</sup> Vaginal posterior colporrhaphy remains the most commonly performed operation, with reported symptom relief in 70–90% of patients and durable anatomic correction in most series.<sup>3,4,11–13</sup> Comparative studies and systematic reviews consistently demonstrate that transvaginal native-tissue repair is superior to the transanal route in terms of recurrence, while offering comparable or better improvement in obstructed defecation.<sup>4,11,14,15</sup> Although laparoscopic ventral mesh rectopexy has gained traction for complex posterior compartment defects, mesh-augmented vaginal repairs have not shown superiority to native-tissue techniques and carry risks of erosion, extrusion, and dyspareunia.<sup>5,8,11,16–18</sup> As a result, high-quality reviews and expert consensus statements conclude that native-tissue transvaginal repair remains the standard of care for isolated posterior compartment prolapse in typical patients, despite variability in long-term functional outcomes.<sup>1,11,15–19</sup>

Nevertheless, several gaps persist in the existing literature.<sup>1,11,20</sup> Evidence regarding optimal technique—fascial midline plication versus site-specific repair, incorporation of levatoroplasty, or the role of perineoplasty—remains limited, and postoperative resolution of obstructed defecation does not always correlate with anatomic success.<sup>1,11,19,20</sup> Furthermore, the majority of published cohorts consist of urban, medically supervised populations, whereas delayed presentation due to limited access to gynecologic or colorectal care—particularly among rural, multiparous women—remains underrepresented.

Although rectocele is frequently encountered in clinical practice, extremely delayed presentation with long-term manual vaginal splinting and giant size mimicking cystocele is rarely reported. The case presented here illustrates a severe, long-standing grade III rectocele in a woman with decades of

untreated symptoms, successfully managed with native-tissue transvaginal posterior colporrhaphy and perineoplasty, and highlights diagnostic, technical, and functional considerations relevant to contemporary practice.

### Case Presentation

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

A 71-year-old woman presented to the proctology outpatient clinic with a 10-year history of painful defecation, persistent sensation of incomplete evacuation, and reliance on digital vaginal assistance to facilitate stool passage. She resided in a rural village approximately 50 km from the hospital and had never previously undergone medical evaluation for these symptoms.

Her obstetric history included five vaginal deliveries, all occurring at home without skilled birth attendance. She denied chronic constipation, laxative use, chronic cough, and chronic obstructive pulmonary disease. There was no history of pelvic surgery. She had undergone menopause in her late forties, was not sexually active, and reported no flatus or fecal incontinence. Her height was 155 cm and weight approximately 65 kg.

Before referral, she had been evaluated by the gynecology department for a protruding vaginal mass initially suspected to represent cystocele due to symptoms suggestive of anterior compartment prolapse. Owing to diagnostic uncertainty, she was referred to general surgery for further assessment.

On pelvic examination, a large posterior vaginal wall bulge extending beyond the vaginal introitus during straining was noted. Digital rectal examination demonstrated a prominent anterior rectal wall protrusion into the vaginal lumen. Given the severity of symptoms and concordant clinical findings, transvaginal rectocele repair with posterior colporrhaphy and perineoplasty was planned.

### Surgical Technique



Figure 1. Intraoperative view of the posterior vaginal wall defect and completed posterior colporrhaphy and perineoplasty

The patient was placed in the lithotomy position under general anesthesia after urinary catheterization. A horizontal incision was made on the posterior vaginal wall. The vaginal mucosa was dissected sharply and bluntly from the underlying rectal wall to enter the rectovaginal space. The rectovaginal fascia was identified and reapproximated using interrupted absorbable braided polyglactin sutures (size 0). Bilateral plication of the pelvic floor musculature was performed. No mesh was used. Redundant, chronically thickened posterior vaginal mucosa contributing to a pseudocystocele-like appearance was excised as part of the perineoplasty. The vaginal epithelium was then closed with absorbable sutures, and a vaginal pack was placed at the conclusion of the procedure (Figure 1)

#### Postoperative Course and Follow-Up

Postoperatively, the patient received prophylactic antibiotics, thromboprophylaxis, and multimodal analgesia including non-steroidal anti-inflammatory drugs and paracetamol. Stool softeners were administered to ensure atraumatic bowel movements. The vaginal pack was removed on postoperative day 2. No early postoperative complications occurred. She was discharged on postoperative day 3 with instructions to follow a liquid diet for 15 days, followed by gradual reintroduction of solid foods. Abstinence from sexual activity was advised for 8 weeks.

At the 15-day follow-up visit, the surgical site was well healed without discharge, erythema, or infection. The patient reported marked clinical improvement in defecation. By the 6-month evaluation, she remained completely asymptomatic, with normal bowel habits, no need for digital assistance, and no evidence of recurrence on physical examination.

#### Discussion

This case illustrates several important aspects of the presentation, diagnosis, and management of advanced posterior compartment prolapse, particularly in patients with longstanding obstructed defecation who have not previously accessed specialized pelvic floor care. Although rectocele is a common pelvic floor disorder, giant rectoceles accompanied by extremely delayed medical consultation are distinctly uncommon.<sup>21</sup> The patient's obstetric history—five unassisted home vaginal deliveries—represents a significant risk factor for cumulative pelvic floor trauma.<sup>1,3</sup> Repetitive non-institutional childbirth, often lacking perineal support and postpartum assessment, can result in progressive levator ani stretch injury, denervation, and weakening of the rectovaginal fascia.<sup>1,3,10</sup> Over time, such untreated pelvic floor damage may gradually enlarge a rectocele to the point of marked protrusion, as seen in this case.<sup>7,9,19</sup>

A particularly striking feature was the patient's 10-year reliance on manual vaginal splinting, which reflects not only the severity of obstructed defecation syndrome (ODS) but also the chronicity of compensation for a mechanical outflow obstruction. Prolonged splinting behavior is considered one of the most specific clinical indicators of a high-grade rectocele and constitutes a major justification for surgical intervention once conservative modalities fail.<sup>2,4,7</sup> The patient's symptoms—

straining, incomplete evacuation, and digital assistance—are consistent with the classical presentation described in multiple series, where obstructed defecation is reported in up to one-third of patients undergoing posterior colporrhaphy.<sup>2,4,7,14,16,20</sup> Notably, such chronic symptoms can also worsen prolapse progression through repetitive pressure on an already weakened septum.<sup>1</sup>

An additional diagnostic nuance in this case was the false cystocele appearance created by redundant posterior vaginal mucosa. Giant posterior wall descent may mimic anterior compartment defects, leading to misinterpretation on initial gynecological evaluation.<sup>1,10</sup> This phenomenon underscores the importance of meticulous, compartment-specific pelvic examination and timely multidisciplinary collaboration. Imaging plays an equally crucial role. Pelvic MRI in this patient demonstrated an isolated grade III rectocele without cystocele, enterocele, or intussusception—a finding aligned with guideline recommendations by the FIGO Working Group, which emphasizes the utility of imaging for complex or ambiguous presentations of ODS. Radiologic clarification ensures that surgical planning accurately targets the structural defect without unnecessary or misdirected intervention.<sup>8</sup>

The surgical management in this case—native-tissue transvaginal posterior colporrhaphy accompanied by perineoplasty—is strongly supported by contemporary evidence.<sup>3,11,15</sup> Comparative studies, including the randomized trial by Nieminen et al., demonstrate significantly lower recurrence rates with the transvaginal approach compared with transanal repair (7% vs. 40%) and superior anatomic correction on defecography.<sup>14</sup> Posterior colporrhaphy remains the most frequently employed and well-studied technique, with symptom improvement rates ranging between 70% and 90% across multiple series.<sup>4,9,12</sup> Moreover, the avoidance of mesh in this patient is consistent with current evidence discouraging routine mesh augmentation in posterior repairs due to the lack of functional advantage and the potential for serious complications.<sup>16,17</sup> Mesh erosion rates up to 30% and dyspareunia rates exceeding 25% have been reported, while randomized trials have failed to demonstrate superiority of posterior mesh repair over native-tissue techniques.<sup>16-18</sup> These findings reaffirm that native-tissue repair remains the standard of care for isolated posterior compartment prolapse, particularly in older women and those without multicompartment defects.

Perineoplasty played an important role in this patient's functional restoration. Long-standing rectocele often produces thickened, prolapsed vaginal mucosa and perineal body attenuation, contributing to both the pseudocystocele-like appearance and impaired defecatory mechanics. Reconstruction of the perineal body narrows the genital hiatus, restores posterior support, and enhances the effectiveness of fascial plication.<sup>4,8</sup> Several studies report improved patient satisfaction and decreased need for splinting when perineoplasty is incorporated into rectocele repair.<sup>4,7</sup>

The patient's postoperative course was uneventful, and she experienced complete resolution of obstructed defecation and

elimination of manual assistance by six months, with no evidence of recurrence. These outcomes are consistent with the favorable symptom resolution rates reported after transvaginal repairs of large rectoceles (90% improvement in Yamana et al.; 70–81% in Schwandner et al.).<sup>4,9</sup> Although some studies note persistent ODS despite adequate anatomic correction—reflecting the multifactorial nature of pelvic floor dysfunction—this patient's rapid and complete symptomatic recovery strongly suggests that her symptoms were primarily attributable to the anatomic defect rather than contributing functional disorders such as pelvic floor dyssynergia or slow-transit constipation.<sup>16,19</sup>

Beyond the surgical success, this case also carries broader public health implications. The patient's decade-long symptom tolerance and absence of prior pelvic examination reflect structural disparities in healthcare access, especially in rural settings. Delayed recognition of pelvic floor disorders may permit progressive anatomic deterioration, increase symptom burden, and diminish quality of life. Improved education, primary care screening, and earlier referral pathways are critical to mitigating such outcomes in underserved populations.

In summary, this case illustrates that severe rectoceles may remain unrecognized for many years in women with limited access to specialized care, that meticulous clinical assessment supported by targeted imaging is critical for accurately differentiating isolated posterior defects from multicompart ment prolapse, and that native-tissue transvaginal posterior colporrhaphy with perineoplasty provides a safe and effective corrective option even for giant, long-standing rectoceles. This case adds to the growing evidence that conventional, mesh-free vaginal repair provides durable anatomical restoration and excellent symptom resolution when applied to appropriately selected patients.

## Conclusion

Giant rectoceles may remain unrecognized for years, particularly among women with limited access to healthcare and repeated home vaginal deliveries, where cumulative pelvic floor trauma goes untreated. As demonstrated in this case, large posterior vaginal wall prolapse can clinically mimic an anterior compartment defect, underscoring the need for meticulous pelvic examination and selective imaging to avoid diagnostic misinterpretation. When the underlying defect is accurately identified, native-tissue transvaginal posterior colporrhaphy with perineoplasty remains a highly effective treatment, offering durable anatomic correction and excellent symptom resolution without the risks associated with mesh reinforcement or more invasive abdominal procedures. This case highlights that even in long-standing, advanced rectocele, timely and appropriate surgical management can restore normal defecation and significantly improve quality of life.

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