Retrorectal Epidermoid Cyst Presenting as Refractory Low Back and Pelvic Pain

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Introduction

Low back pain is one of the leading causes of disability worldwide, with approximately 25% of US workers reporting low back pain (1).

Among the various etiologies of low back pain, retrorectal cysts are an extremely rare cause (2). Nonspecific axial, pelvic and coccygeal pain are the most common presentations of this cyst (2).

Because symptoms are vague, and typical lumbar MRI and sacrococcygeal radiographs are normal, diagnosis can be delayed or misdiagnosed.

Case Presentation

History: 30-year-old female with history of endometriosis, fibromyalgia, and hypermobility who developed burning low back and pelvic pain after increased activity and two falls onto her coccyx. At the time of presentation he denied any lower extremity radicular symptoms.

Refractory to treatment: No relief after two epidural injections at an outside institution

Examination: Normal strength and sensation; diffuse tenderness; positive bilateral straight leg raise

Initial imaging: Lumbar spine MRI and sacrum/coccyx radiographs unremarkable

Pelvic MRI: Obtained given her history of endometriosis, revealing a 2.7 × 2.6 × 2.3 cm retrorectal mass (Figures 1–3)

Definitive management: Colorectal surgery consulted; excision with partial coccygectomy. Final pathology confirmed a benign epidermoid cyst

Outcome: Complete resolution of pain after surgery

Imaging Findings





Figures 1 and 2. Sagittal (left) and coronal (right) pelvic MRI demonstrating the retrorectal cyst posterior and inferior to the rectum.

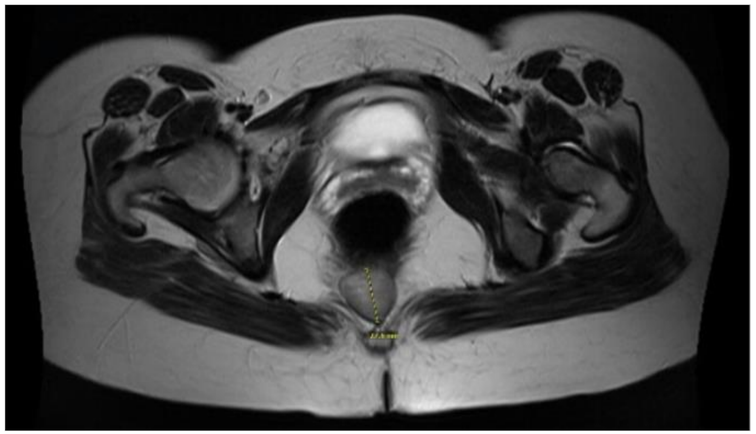


Figure 3. Axial pelvic MRI demonstrating the 2.7 × 2.6 × 2.3 cm retrorectal mass (measurement shown), later confirmed as a benign epidermoid cyst.

Discussion

- Retrorectal cysts are typically developmental cysts, commonly found in female patients (2). They arise in the presacral space, between the rectum and the sacrum/coccyx.
- Epidermoid cysts are lined by stratified squamous epithelium without skin appendages, and result from closure defects of skin, which can also lead to pilonidal disease or postanal dimple.
- Pain is typically localized in the buttocks and legs, due to mass effect on the sacral plexus. This case demonstrates a unique example of a benign epidermoid retrorectal cyst leading to diffuse low back pain.
- Diagnosis was delayed because the lesion lies below the field of a standard lumbar MRI, soft-tissue cysts are not seen on radiographs, and her symptoms overlapped with endometriosis, fibromyalgia, and coccydynia.
- Pelvic MRI characterizes the lesion and guides surgical planning. Complete excision is recommended, as these cysts are frequently misdiagnosed and can become infected or recur if incompletely removed (2).

Conclusion

Retrorectal epidermoid cysts are a rare but curable cause of refractory low back and pelvic pain.

When pain persists despite unremarkable lumbar imaging, consider pelvic MRI.

It is important not to anchor on common diagnoses and seek further evaluation with imaging, to not overlook uncommon diagnoses that can be cured with definitive surgical management.

References

1. Cashin AG, Chou R, Weimer MB, McAuley JH. Low Back Pain: A Review. JAMA. 2026;336(2):144–158. doi:10.1001/jama.2026.9631

2. Singer MA, Cintron JR, Martz JE, Schoetz DJ, Abcarian H. Retrorectal cyst: a rare tumor frequently misdiagnosed. J Am Coll Surg. 2003;196(6):880–886. doi:10.1016/S1072-7515(03)00133-9