Benign Presacral Tumor Mimicking a Pilonidal Abscess: A Diagnostic Pitfall

Amram Kupietzky MD[1], Yehonatan Bar-Moshe MD[2], and Ido Mizrahi MD[1]

[1]Department of Surgery, Hadassah Medical Center, Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem, Israel
[2]Department of Radiology, Hadassah Medical Center, Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem, Israel

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Presacral tumors are rare and heterogeneous neoplasms that develop in the space between the rectum and sacrum. Their low prevalence and diverse embryologic origins often complicate diagnosis and management. We present the case of a 43-year-old woman who was initially misdiagnosed with a pilonidal abscess, later identified as a benign presacral tumor.

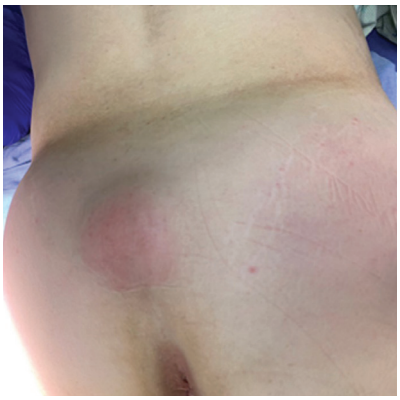
PATIENT DESCRIPTION

A 43-year-old woman presented with a gradually enlarging mass in the pilonidal region over the course of several months. She was referred to our colorectal clinic with a presumptive diagnosis of a pilonidal abscess made by her primary care physician. The patient was otherwise healthy, with no complaints of pain, fever, chills, or unintentional weight loss.

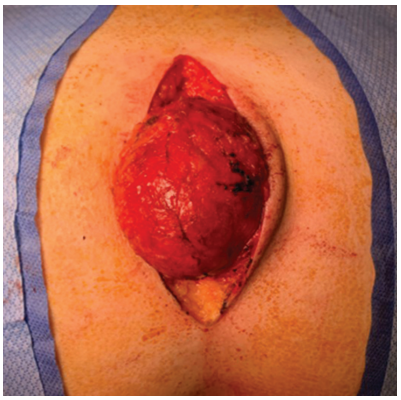
On physical examination, a non-tender mass was palpated over the coccygeal region. Notably, there were no midline pits or visible hair [Figure 1A]. Given the atypical presentation, a magnetic resonance imaging (MRI) was performed, which

Figure 1. Presacral tumor in a 43-year-old woman

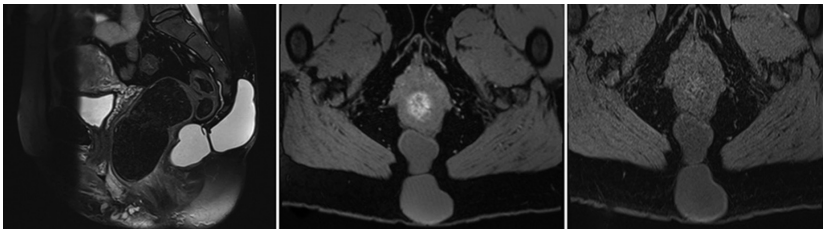
[A] A non-tender mass palpated over the coccygeal region



[C] A well-encapsulated, large presacral tumor

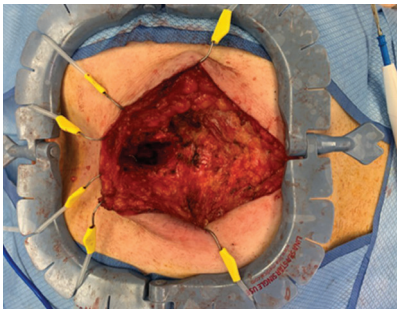


[B] Magnetic resonance imaging [I] Midsagittal T_2 weighted fat-saturated, [II] axial fat-saturated pre-contrast, and [III] fat-saturated post-contrast T_1 weighted images through the pelvis



[D] The mass excised en-bloc along with the tip of the coccyx

[E] The post-excision surgical field



revealed a well-defined, large presacral bilobular thin-walled cystic mass, posterior to the rectum, without any post contrast ring-enhancement or intramural solid nodule [Figure 1B].

Due to the low anatomical position of the mass relative to the sacrum, a Kraske approach was selected for surgical excision. Under general anesthesia, the patient was placed in the prone jackknife position. A vertical midline incision was made 7 cm cephalad to the anal verge, over the coccyx. This position exposed a well-encapsulated, large presacral tumor [Figure 1C], which was excised en-bloc along with the tip of the coccyx [Figure 1D, Figure 1E].

The specimen was sent for pathological evaluation, which revealed a retrorectal epidermal cyst. The patient's postoperative course was uneventful, and she was discharged on postoperative day one.

Informed consent was obtained from the patient.

COMMENT

Presacral (retrorectal) tumors represent a spectrum of heterogeneous lesions, ranging from benign congenital cysts to aggressive malignant neoplasms invading surrounding structures [1]. The presacral space is anatomically defined anteriorly by the mesorectum and rectal fascia, posteriorly by the anterior sacrum and coccyx, superiorly by the peritoneal reflection, inferiorly by the supralevator space, and laterally by the ureters, iliac vessels, and sacral nerve roots [2].

These tumors are difficult to classify due to the complex embryologic origins of the surrounding tissues, which arise from all three germ layers. Consequently, tumors in this region may be congenital, neurogenic, osseous, or of miscellaneous origin. Benign congenital lesions, such as developmental cysts, are the most common, accounting for 55–70% of cases [3]. However, malignant entities such as sacrococcygeal chordomas and other aggressive lesions have been reported as well. Importantly, misdiagnosing an anterior sacral meningocele as a cystic lesion and attempting biopsy can result in life-threatening meningitis [4].

Comprehensive preoperative imaging, particularly with MRI, is essential for accurate diagnosis and surgical planning. Lesions above S3 are resected via a trans-abdominal approach while lesions lower than S3 are resected via a posterior perineal approach (Kraske). Biopsy is generally avoided unless imaging strongly suggests a malignant lesion and safe access can be ensured.

Pilonidal disease, by contrast, is a common superficial suppurative condition of the sacrococcygeal region [5]. It typically presents acutely with pain, drainage, and visible midline pits or sinuses in the gluteal cleft. Diagnosis is usually clinical, and treatment often involves incision and drainage or definitive surgical excision.

In our case, the overlapping anatomical location with pilonidal disease initially led to misdiagnosis. A key clinical distinction is that pilonidal disease often presents with signs of inflammation, while presacral tumors, especially benign ones, tend to be asymptomatic unless large.

Our case highlights the importance of maintaining a broad differential diagnosis for atypical presentations in the sacrococcygeal area. MRI played a pivotal role in guiding management and avoiding a potentially hazardous misdiagnosis.

CONCLUSIONS

Presacral tumors are rare and often diagnostically challenging due to their nonspecific symptoms and anatomical overlap with more common conditions like pilonidal disease. Our case underscores the vital role of imaging in distinguishing between benign superficial infections and deeper congenital or neoplastic processes, guiding safe and effective surgical intervention.

Correspondence

Dr. A. Kupietzky

Dept. of Surgery, Hadassah Medical Center, Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem 9112001, Israel

Email: amram.kupietzky@mail.huji.ac.il

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There are conditions of blindness so voluntary that they become complicity.

Paul Charles Joseph Bourget (1852–1935), French poet, novelist and critic