



Intersphincteric anal abscess, a rare cause of axial low back pain: A case report

Ezgi Can

Gülhane Research and Training Hospital, Department of Algology, Ankara, Türkiye

*Corresponding author: ezgiacarcn89@gmail.com (Ezgi Can)

■ ABSTRACT

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A 60-year-old male patient presented with axial lower back pain. He had suffered from pain for one month. Within a week, the patient's pain had increased, and he experienced additional symptoms of fever, malaise, and weight loss. Lumbar MRI revealed an intersphincteric anal abscess extending to the level of the lower lumbar vertebrae. The patient was then referred to a general surgeon. After drainage of the abscess and administration of broad-spectrum antibiotics, the patient's pain resolved within one week. This case report describes a rare presentation of lower back pain, in which a normal physical examination led to an initial delay in considering an anal abscess. The diagnosis of an advanced intersphincteric abscess was ultimately established by a lumbar MRI, which had been ordered to investigate for possible malignant metastasis.

Keywords: Anal abscess, Low back pain, Analgesia

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■ INTRODUCTION

Majority of lower back pain has a mechanical origin and develops as a result of overuse, strain or trauma to the spine and surrounding structures [1–3]. This type of pain is primarily caused by degeneration of the disc and facet joints as well as strains and sprains in the paraspinal muscles and connective tissues [2]. To define low back pain as mechanical, it is necessary to exclude inflammatory, neoplastic, metabolic, and infectious pathologies, as well as all other causes such as fractures and referred pain from internal organs [2,4].

At this stage, identifying symptoms such as advanced age, trauma, history of cancer, immunosuppression, fever, weight loss, fatigue, and abnormal physical and neurological examination findings is the most important step in the evaluation. These symptoms are known as 'red flags' in lower back pain [4,5]. Although these patients constitute a very small percentage of all patients with low back pain, failure to recognize them leads to increased morbidity and mortality rates.

Anorectal infections may manifest as either acute abscesses or persistent anal fistulas. They are more common in men aged between 30 and 50 years [6]. Perianal abscesses are characterized by increased pain when sitting or defecating as well as a tender, reddened mass in the area. However, intersphincteric

and supralelevator abscesses typically do not exhibit any signs or symptoms. In progressive cases, pelvic and rectal pain may extend to the lumbar region and be accompanied by fever and malaise [6,7].

Our case report presents a patient with an intersphincteric anal abscess that extended to the lumbar region and who presented with low back pain.

■ CASE REPORT

A 60-year-old male patient presented with axial low back pain that had been localized in the lower lumbar region for one month. The pain increased with coughing and straining and was particularly worse when sitting or lying down. There were no accompanying systemic symptoms or signs, such as leg pain, numbness, urinary or fecal incontinence, fever, or weight loss, at the initial presentation. The patient had undergone right upper lobectomy for early-stage lung adenocarcinoma three years ago, with no evidence of distant metastasis. There were no abnormal findings on physical or neurological examination, except for tenderness of the lower lumbar paravertebral muscles. Since the patient was over 50 years of age, had recently experienced low back pain, and had a history of cancer, a contrast-enhanced lumbar MRI was planned, with

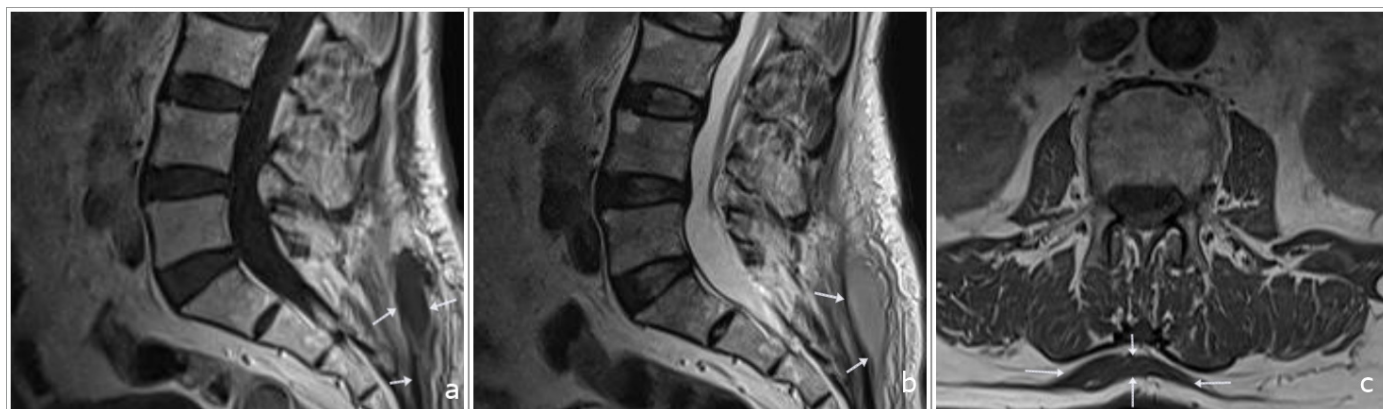


Figure 1. Images of the abscess collection areas on different MRI sections: a) T1-weighted sagittal, b) T2-weighted sagittal, and c) T1-weighted axial.

suspicion of possible metastasis, and pain treatment, including nonsteroidal anti-inflammatory drugs and myorelaxants, was prescribed.

One week later, the patient's pain had increased and was accompanied by fever, malaise, and weight loss. A contrast-enhanced lumbar MRI scan showed no evidence of metastasis but revealed an intersphincteric abscess extending from the anal region to the lower lumbar vertebrae (Figure 1). Blood tests confirmed a leukocyte count of $16,800/\mu\text{L}$ and C-reactive protein level of 231 mg/L . The patient was referred to department of surgery. Following abscess drainage and broad-spectrum antibiotic treatment, the patient's clinical condition improved within one week following surgical drainage. Informed written consent was obtained from the patient on 25.03.2025.

■ DISCUSSION

Perianal abscess is a common colorectal disease that typically affects people aged 30–40 years, with an incidence rate of 0.5–1% [6–8]. Perianal infections are often cryptoglandular in origin, and manifest as acute abscesses or chronic anal fistulas. The causative agents of the infection are microorganisms of fecal (*Escherichia coli* and anaerobes) and cutaneous (*Staphylococcus aureus*) origin, which originate in the anal crypts and often progress to the anal glands, subsequently settling in the intersphincteric space [9,10]. The risk of development increases in cases of Crohn's disease and immunodeficiency, including malignancy and AIDS [11].

Patients primarily complain of severe anal pain when walking, which is aggravated by strain or sneezing. In the later stages, symptoms such as fever, urinary retention or sepsis may also be seen [6]. Although diagnosing a perianal abscess is usually simple, there are typically no visible signs of intersphincteric or supralevator abscess [6,7]. As in our case, the initial presentation may only be backpain, with a delay in diagnosis.

Symptoms that are considered “red flags” in patients with low back pain are those that are less frequently detected, such as neoplastic, infectious and traumatic conditions. However, if these symptoms are not identified, morbidity and mortal-

ity can significantly increase [12,13]. Important signs to look for in the medical records of the patients include resting pain, which was present in our case, and constitutional symptoms, such as fever and weight loss. Pain at rest suggests neoplastic and infectious pathologies, whereas symptoms such as fever and malaise suggest infectious or inflammatory conditions [12]. Therefore, it is crucial to evaluate risk factors for red flags and perform further investigations for differential diagnosis when necessary. In our case, the patient's history of lung adenocarcinoma, accompanied by resting pain, fever, and weight loss, necessitated further investigation to rule out infectious and malignant processes.

Our patient had the characteristics of a “red flag” at the first presentation due to new-onset low back pain at the age of 50 years and a history of cancer. Fever, malaise, and weight loss should also be considered in patients presenting with low back pain during follow-up examinations. In addition, elevated white blood cell counts and CRP levels support an infectious process. Lumbar spinal imaging (contrast-enhanced magnetic resonance imaging) revealed an intersphincteric abscess extending to the lumbar region. Although there were no findings suggestive of an abscess on physical examination, it presented as a rare cause of low back pain.

■ CONCLUSION

Our case is a challenging, unexpected, and instructive case in which anorectal pathologies should be considered in patients presenting with lower lumbar region pain that increases at rest, accompanied by fever, malaise, and weight loss unresponsive to medical treatment. Furthermore, regardless of the stage and presence of cure, cancer patients are prone to spread of infections with an insidious onset.

Informed Consent: Informed written consent was obtained from the patient and was attached as a document.

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