When back pain hides a different story

Karen Cajiao MD, Maryam Tanweer MD, Santhi Singanamala MD
Department of Medicine, Saint Mary’s Hospital, Waterbury, CT, USA

OBJECTIVES

• Recognize the challenge encountered in diagnosing infective endocarditis (IE) when the only manifestation is musculoskeletal.
• Comprehension of the whole clinical picture, including past medical history (PMH), physical exam, and blood cultures.

CASE DESCRIPTION

56 years old male with a history of chronic back pain and polysubstance abuse presented to the emergency department for acute onset of worsening back pain.

Patient was in no acute distress.
Vital signs:
BP 116/58
HR 71
RR 18 T 97.5
SpO2 98%
Tenderness to palpation around the lower lumbar spine and paraspinal muscles was noted.

MRI lumbar spine confirmed old compression fractures of T12 and L1, with no acute fracture, discitis, or osteomyelitis. Due to initial concern for osteomyelitis, secondary to IE blood cultures were drawn, which grew methicillin-resistant Staphylococcus aureus (MRSA). The patient was initially started on Vancomycin, which was later switched to Daptomycin due to MIC 1.

DISCUSSION

Transesophageal echocardiography (TTE) revealed a small aortic mass, and subsequent TEE confirmed vegetation.

This case illustrates how some cases of IE can manifest as musculoskeletal symptoms alone, making it a challenge to recognize and diagnose. These findings are essential due to the potential to distract attention from the original cause leading to delay in diagnosis. IE is known to cause nonspecific muscle and joint pain in some patients (15-40%)1. Compared to fever, which is a common symptom seen in 90% of patients with IE, in our case, the patient presented with no fever. Physicians must get familiar with these scenarios. A thorough medical history to identify high-risk patients, a thorough physical exam, and a low threshold to order blood cultures would lead to an IE diagnosis without delay. The sensitivity of blood cultures for IE is about 90%. We suggest that blood cultures should be taken for a patient with an active history of IV polysubstance abuse who presents with new-onset of musculoskeletal symptoms. A prompt diagnosis is critical to provide timely and targeted therapy to prevent life-threatening complications. In our case, given our high clinical suspicion, we were able to start antibiotics without delay.

REFERENCES