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An Unexpected Cause of Inflammatory Low Back Pain: Osteitis Condensans Ilii

Sadettin Uslu

A 35-year-old woman presented with a 10-year history of low back pain. The pain was inflammatory in nature, with early morning stiffness of more than 1 hour. The patient's personal and family past medical history was unremarkable. She had a history of two pregnancies with uncomplicated normal vaginal deliveries 5 years apart. On physical examination, she had a positive FABER test and focal tenderness over the sacroiliac joints.

Pelvic radiograph revealed sclerosis at the iliac border of the sacroiliac joints (Fig. 1). Computed tomography revealed periarticular sclerosis at the bilateral sacroiliac joints (Fig. 2). Magnetic resonance imaging detected periarticular iliac-sided low signal intensity (Fig. 3). Laboratory evaluation revealed normal erythrocyte sedimentation rate and C-reactive protein levels, with negative HLA-B27. A diagnosis of osteitis condensans ilii (OCI) was established, and the patient was started on non-steroidal anti-inflammatory drugs and physical therapy. The patient had a significant clinical improvement in her back pain within a few days of the treatment.



Figure 1. **X- ray of the sacroiliac joints; anterior-posterior view revealing sclerosis at the iliac border of the sacroiliac joints (arrow)**

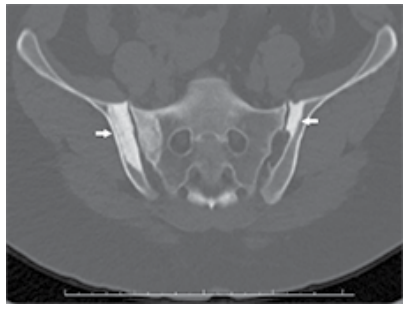


Figure 2. **Axial CT image of sacroiliac joints revealing periarticular sclerosis on both sides (arrow)**

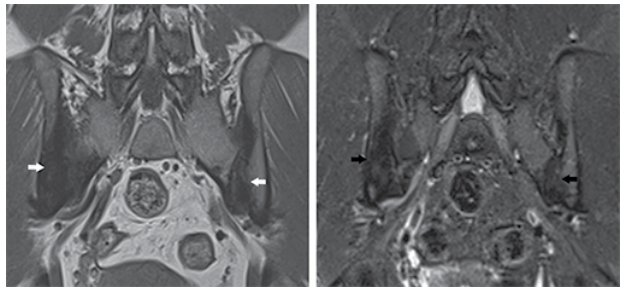


Figure 3. **Semicoronal T1-weighted (white arrow) and T2-weighted (black arrow) fat-suppressed MR images revealing periarticular iliac-sided low signal intensity with sclerosis detected at the typical anterior location**

The prevalence of OCI in the general population has been reported to be 0.9%–2.5%, mostly in women during the prepartum and postpartum periods (1). OCI is often asymptomatic; however, some features of inflammatory back pain, such as the characteristic worsening at rest and morning stiffness, might be experienced (2). OCI is diagnosed based on the accurate identification of the characteristic radiographic findings (sclerotic lesions) and the exclusion of other conditions associated with back pain (infectious sacroiliitis, Paget's disease, metastasis, and axial spondyloarthritis [axSpA]). Radiological findings of OCI include an apparent triangle of sclerosis in the ilium contiguous to the inferior sacroiliac joint without erosions or joint space narrowing (3). Nevertheless, OCI is a benign cause of low back pain and has become a crucial differential diagnosis for axSpA.

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REFERENCES

1. Mitra R. Osteitis Condensans Ilii. Rheumatol Int 2010; 30(3): 293–6.
2. Poddubnyy D, Weineck H, Diekhoff T, Redeker I, Gobejishvili N, Llop M, et al. Clinical and imaging characteristics of osteitis condensans ilii as compared with axial spondyloarthritis. Rheumatology (Oxford) 2020: keaa175.
3. Parperis K, Psarelis S, Nikiphorou E. Osteitis condensans ilii: current knowledge and diagnostic approach. Rheumatology int 2020; 40(7): 1013–9.