Osteitis condensans Ilii as differential diagnosis of sacroiliitis: learning in order not to fail

Osteíte Condensante do Íleo como diagnóstico diferencial de sacroileíte: aprendendo para não errar

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Bruna Thais Raiter
Internal Medicine
Institution: Instituto de Assistência Médica ao Servidor Público do Estado
Address: Rua Pedro de Toledo, 1800, Bairro Vila Clementino - São Paulo, Brazil

Adriana Barros de Araujo Faro
Medical Students
Institution: Universidade Cidade de São Paulo
Address: Rua Cesáreo de Galero, 448 - 475, Bairro Tatuapé - São Paulo, Brazil

Gabriella Martins Ratao
Medical Students
Institution: Universidade Cidade de São Paulo
Address: Rua Cesáreo de Galero, 448 - 475, Bairro Tatuapé - São Paulo, Brazil

Júlia Duarte Solai da Silva
Medical Students
Institution: Universidade Cidade de São Paulo
Address: Rua Cesáreo de Galero, 448 - 475, Bairro Tatuapé - São Paulo, Brazil

Henrique Euzébio Guedes de Freitas
Ultrassonographist
Institution: Centro Médico e Diagnóstico por Imagem
Address: Rua Ramos Ferreira, 1280, Bairro Centro - Manaus, Amazonas, Brazil

Gabriel Pacífico Seabra Nunes
Internal Medicine
Institution: Instituto de Assistência Médica ao Servidor Público do Estado
Address: Rua Pedro de Toledo, 1800, Bairro Vila Clementino - São Paulo, Brazil
E-mail: gpsnunes@hotmail.com

Felipe Augusto da Silva Gama
Radiologist
Institution: Centro Médico e Diagnóstico por Imagem
Address: Rua Ramos Ferreira, 1280, Bairro Centro, Manaus - Amazonas, Brazil

Sandra Lúcia Euzébio Ribeiro
Internal Medicine Department
Institution: Universidade Federal do Amazonas
Address: Rua Afonso Pena, 1053, Bairro Centro, Manaus - Amazonas, Brazil

1 INTRODUCTION

Osteitis Condensans Ilii (OCI) is a rare benign condition of unknown etiology. The prevalence in overall population ranges from 0.9 to 2.5%, and it is more frequent in multiparous women before the fourth decade of life[1]. It can be asymptomatic and discovered by accidental radiologic diagnosis or it may present as inflammatory low back pain [1,2]. The symptomatic form is an important mimicking factor of sacroiliitis, and it should always be considered as differential diagnosis[1]. Given the rareness of the disease and the importance of differential diagnosis, we report an OCI case that mimics sacroiliitis.

2 CASE REPORT

A 55-year-old female patient, two prior pregnancies, that had been experiencing lumbo-sacral pain for 10 years, irradiating to lower limbs of inflammatory nature. She takes analgesic and anti-inflammatory drugs resulting in partial improvement of the pain. She denies fever or weight loss. On physical examination: pain upon bending and side movement of axial skeleton; absence of enthesitis; pain upon compression of sacroiliac joints; Schober= 10/13cm. Laboratory tests: Ht = 41%, White blood cells = 6,560/mm3, ERS = 20 mm, PCR= 5.88 mg/L (<6mg/L), rheumatoid factor = 16 IU/ml, HLA-B27 negative, hepatitis and HIV serologies - non-reagent. The hypothesis of sacroiliitis was raised. X-ray and hip magnetic resonance imaging (Figures 1A and 1B) were requested, which results were consistent with the diagnosis of OCI.

Figure 1A: Plain AP X-ray of the pelvis. Symmetric cortical sclerosis of sacroiliac joints, prominence in iliac components.

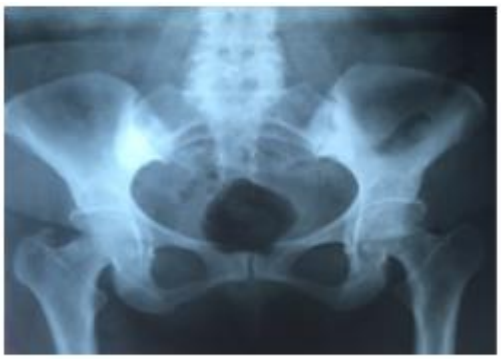
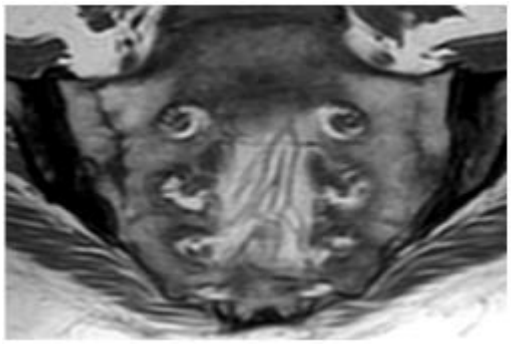


Figure 1B: Coronal T2-weighted section of the sacrum. Cortical sclerosis seen in sacroiliac joints. Symmetric areas of bone edema in sacrum wings.



3 DISCUSSION

OCI etiopathogenic mechanism is unknown, but it is believed to be related to physiological changes caused by pregnancy, both for vascular compression resulting in ischemia, and for joint overload[3].

Clinical setting can be asymptomatic or include mechanical low back pain, sometimes suggesting sciatic pain, or sacroiliac syndrome, inflammatory pain in the buttocks, morning stiffness, and restricted lumbar mobility, and it may improve with analgesic and anti-inflammatory drugs. The symptomatic presentation of the disease may often mislead the diagnosis. In the case above, the presence of low back pain that is worst in the morning, together with findings from physical examination, indicated potential sacroiliitis; however, characteristics seen in the X-ray led to the diagnosis of OCI[3-5].

The main clinical and laboratory differentiating characteristics that should be carefully observed are: absence of systemic and constitutional signs of inflammation, no eye or enthesis impairment, normal inflammatory markers, and negative HLA-B27. A few differential diagnoses are the following: inflammatory, non-inflammatory, infectious, trauma, and metastatic diseases. The main differential diagnosis are seronegative spondyloarthritis and infectious sacroiliitis, which progress in early phases with triangular sclerosis of the ilium indistinguishable from osteitis condensans. The definite diagnosis is radiologic, where we can differentiate it from inflammatory disease due to predominant sclerotic component, preservation of joint space, and absence of bone erosions[3].

The finding in classic X-ray is the presence of triangle sclerosis beneath iliac bone with intact joint edges and no erosions. In magnetic resonance imaging, however, there is symmetric sclerosis and possibility of small areas of bone edema[4].

We believe that OCI should be remembered in the differential diagnosis of low back pain, especially in women, so that an accurate diagnosis is made and treatment can be implemented.

Keywords: sacroileitis, low back pain, condensing osteitis.

INFORMED CONSENT

Written informed consent for patient information and images to be published was provided by the patient.

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CONFLICT of Interest

The Author(s) declare(s) that there is no conflict of interest.

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