



Multidrug-resistant *S.aureus* infectious sacroiliitis complicated with iliac osteomyelitis in previously healthy adolescent

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BACKGROUND

Infectious sacroiliitis (ISI) is an uncommon condition, accounting for 1-2% of all osteoarticular infections in pediatric patients. The clinical presentation is insidious and the signs and symptoms are nonspecific, associated mainly with low back pain and fever. Pelvis radiography may reveal the presence of sacral and iliac bone sclerosis, joint irregularities, bone erosions and, in advanced degrees, joint enlargement and even total ankylosis. Other imaging methods may also contribute to the diagnosis, such as bone scintigraphy, computed tomography (CT) and magnetic resonance imaging (MRI). Late diagnosis can lead to complications such as abscess formation, osteomyelitis and sepsis. The treatment requires prolonged antibiotic therapy, reserving the surgical approach for selected cases.

CASE REPORT

FHAS, 14 years old, white, male, previously healthy, started low back pain and claudication with progression to fever and progressive worsening of pain after 48 hours of the disease's onset. Patient denied recent trauma or infection. Initial exams showed blood count with hemoglobin 14.6g/dL, leukocytes 18100/mm³ (82% neutrophils) and platelets 223000 /mm³, erythrocyte sedimentation rate of 83mm³/hour and C-reactive protein of 6.6mg/dL (reference value: 1mg/dL). He was hospitalized for investigation, receiving ceftriaxone and oxacillin. Performed right hip and thigh ultrasonography, lumbosacral CT, echocardiogram, abdominal ultrasonography and ophthalmologic evaluation, all without abnormalities. The MRI of the bilateral hip and sacroiliac (SI) joints showed effusion in right SI without signs of osteomyelitis (Figures 1 and 2). He persisted with fever and pain despite the antibiotic treatment and a new MRI showed irregular osteolytic lesion and intraosseous abscess in the right iliac bone (1.7x1.5x0.8cm), diagnosed as osteomyelitis (Figures 3 and 4). The blood culture of the entrance was positive for multidrug-resistant *Staphylococcus aureus*. Vancomycin and gentamicin were introduced, which were later changed to linezolid due to lower toxicity. He presented improvement of the fever, but maintaining lumbar pain, being necessary a surgical approach. Anatomopathological examination of bone fragments and soft tissues revealed an acute suppurative inflammatory process. He remained hospitalized until complete resolution of the condition, being discharged with oral antibiotics after 40 days of hospitalization. He is currently being followed up in a pediatric rheumatology outpatient clinic and is asymptomatic and without joint sequelae.

CONCLUSION

Although it is an uncommon condition, it is necessary to include ISI in the differential diagnosis of lumbar pain associated with fever in children and adolescents, due to the associated complications, which may increase hospitalization time and reduce quality of life in affected patients.