Clinics in Surgery

Clinical Image
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A Bifocal Lytic Lesion of Sacrum

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Keywords

Osteomyelitis; Sacral bone; *Staphylococcus lugdunensis*

Abbreviations

SL: *Staphylococcus lugdunensis*; MRI: Magnetic Resonance Imaging; CT-Scan: Computerized Tomography Scan

Clinical Image

A healthy 10 years old girl consulted in the emergency room for a 1-month progressively increasing sacral pain, associated with asthenia and walking impairment. There has been neither weight-loss nor fever. Initial X-ray and ultrasound showed no abnormality. Biological analysis revealed an inflammatory syndrome (White Blood Cell Count: 12443/mL, C-reactive protein 23.6 mg/l). A sacral MRI showed a bifocal inflammatory lesion sitting both on the 1st and 2nd sacral element, and on the 4th and 5th (Figure 1). The MRI was completed by a CT-Scan, showing a lytic bifocal lesion of the 1st and 2nd, and on the 4th and 5th sacral elements (Figure 2). Facing this bifocal lesion, we suspected Langerhans cell histiocytosis, aseptic osteitis, tumoral or infectious process. A surgical biopsy was performed; pathology revealed no argument for a tumoral process. On the systematic bacteriological analysis, a *Staphylococcus lugdunensis* (SL) was found, in favor of an infectious osteomyelitis. Accordingly to senility spectrum (sensible to methicillin), intravenous antibiotherapy was started, followed by oral antibiotherapy for 30 days. Clinical and radiological follow-up at 1, 3 and 12 months demonstrated complete resolution. In literature [1], no case of infectious sacral osteomyelitis has been previously reported in children. Moreover, no previous case of osteomyelitis related to *Staphylococcus lugdunensis* (SL) was described in pediatric population. SL is a coagulate-negative staphylococcus emerging over the past 10 years as a significant pathogen. Several clinical studies have emphasized its pathogenicity compared to other coagulate-negative staphylococci [2,3]. It has been involved in adult bone infection [4,5], and in discitis in children [6]. Facing a child with sacral pain and asthenia, infectious osteomyelitis should be mentioned, and a biopsy is recommended. Probabilistic antibiotic should then be started before analysis result [7].

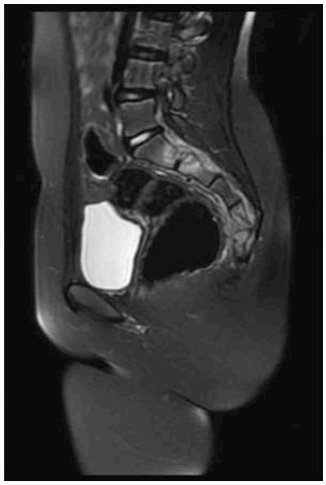

Figure 1: MRI sagittal T2 Fat Sat view of the sacrum, showing 2 lesions: One including the 1st and 2nd sacral element, the other one on the 4th and 5th.

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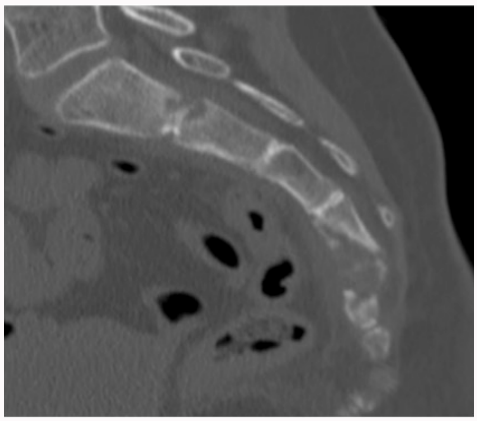

Figure 2: TDM sagittal view of the sacrum showing 2 lytic lesions: One including the 1st and 2nd sacral element, the other one on the 4th and 5th.

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