

Subacute Osteomyelitis Of Tibia Diaphysis

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INTRODUCTION:

Subacute osteomyelitis may have deceptive features which can delay the diagnosis. Whereas metaphyseal localization is the most frequent, the involvement of diaphysis is still rare. The tibia and femur are the most commonly affected long bones. Clinical examination, blood and radiological tests are only reliable for diagnosis in combination. *Staphylococcus aureus* is the most common organism detected, Antibiotic treatment is usually sufficient to eradicate the infection, with a short course intravenously and early conversion to oral treatment.

REPORT:

A twelve year old girl presented to our center complaining of pain over her left leg for past one year. There was no history of trauma. She has no medical, surgical history, trauma, open fracture, infectious episode or sickle cell disease. The patient has good overall health but with slight inflammation of the skin and a transfixing bone pain on palpation of distal third of tibia diaphysis. The contralateral knee and hip had normal full painless range of motion and there we no evidence of infectious disease. There were no trophic skin abnormalities. Xray lower third left tibia showed expansile sclerotic lesion with some amorphous features. Transition zone is wide and ill defined. There is cortical thickening as well as some periosteal reaction. No breakthrough of the cortex noted. MRI showed hyperintense lesion in lower half left tibia with cortical thickening and periosteal reaction as well as a rim enhancing focus is suggestive of subacute osteomyelitis with query abscess. A surgical bone biopsy revealed there is no suggestive features of osteomyelitis. The patient was started on antibiotics for 6 weeks. The clinical evolution was good with pain relief one week after treatment onset.

Figure 1: MRI left Tibia

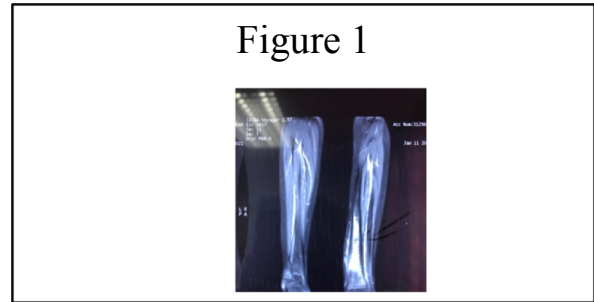


Figure 2: Xray Left Ankle



CONCLUSION:

Acute and subacute haematogenous osteomyelitis in children is potentially devastating, with a high morbidity. Delay in diagnosis and inappropriate treatment can result in sepsis, chronic infection, disruption of longitudinal bone growth and angular deformity. Correct and timely treatment improves outcome however, with evolving microbiology, including the emergence of methicillin resistant *Staphylococcus aureus* (MRSA), early selection of the correct antibiotic is vital.

REFERENCES:

1. E.B. Hoffman, J.D. de Beer, G. Keys, P. Anderson Diaphyseal primary subacute osteomyelitis in children Journal Pediatric Orthopaedics 1990; Pg250-254.