THE MASQUERADE: TUBERCULOUS OSTEOMYELITIS OF TIBIA IN A 1 YEAR OLD INFANT

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Introduction: Extrapulmonary tuberculosis (TB) is often secondary to some primary foci in lungs. Of these 1%-3% have involvement of the skeletal system. The overall occurrence in children younger than 5 years lies between 5% and 10% with half of them involving the spine. Solitary involvement appears to be the predominant skeletal manifestation of osseous tuberculosis and can pose difficultly in accurate diagnosis.

Discussion: A 11 month old boy with no known medical illness presented with right leg swelling for 1 week and refused to bear weight. However, patient is afebrile, no history of trauma, no tuberculosis contact nor constitutional symptoms. On examination, patient had 1x1cm swelling over distal third of right leg. X-ray reported bone lesion with periosteal reaction at metaphysic of right tibia with pathological fracture. MRI reported findings suggestive of osteosarcoma with differential diagnosis of chronic osteomyelitis and benign bone tumor. Blood investigation showed normal white cells count with elevated erythrocytes sedimentation rate (ESR) and C-Reactive protein (CRP). Post core biopsy, histopathological examination (HPE) showed presence of chronic inflammation, fibrosis with area of necrosis, no malignancy seen. Tissue culture showed Staph. Aureus. Patient was started on antibiotics for 2 months. Infective blood markers remained static after 5 months. Patient underwent open biopsy and bone curettage. HPE showed necrotizing granulomatous inflammation secondary to tuberculosis, presence of acid-fast bacilli (AFB) on the smear. TB Polymerase Chain Reaction (PCR) was negative. Patient was started on anti-TB medications for 1 year, 2 months after treatment, patient was pain free, actively bear weight on leg cast, X-ray showed sclerotic edges over bone defect.

Conclusion: Solitary lesions can masquerade as benign or malignant bone lesions. 2 Our case highlights the high degree of suspicion one must have in diagnosing pathological fracture of long bones. Error in diagnosis and treatment burdens the medical resources and overall morbidity.