TB Hip Arthritis In A Paediatric Patient, Challenges In Early Diagnosis

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INTRODUCTION:

Skeletal TB only amounts to about 4% of extrapulmonary TB manifestations in childhood (1). We report a case TB hip arthritis in a paediatric patient and discuss its challenges in early diagnosis.

CASE REPORT:

A 13 year old boy with no previous hospitalisation or underlying illnesses was referred for a limping gait. There was mild tenderness at the right hip joint with limited internal and external rotation.

CT right hip showed erosions of the femoral head, lytic destruction of femoral neck, and multiple subchondral cysts.



All TB investigations at the time including pleural fluid C&S, TB sputum AFB and Mantoux test were negative.

Arthrotomy biopsy sampling was done. Intraoperative findings were suggestive of TB and a nucleic acid amplification test was done on biopsy samples confirming TB positive.

The child is now recovering and his symptoms of hip pain have greatly improved after operation and initiation of anti TB medications.

The gold standard for laboratory TB confirmation remains as TB culture. However it takes 2-3 weeks after assay set up before getting a result. This significantly delays the time of treatment. Use of a nucleic acid amplification test (NAAT) such as GeneXpert MTB/RIF can greatly reduce this delay. GeneXpert is the only comercial NAAT recommended for the diagnosis of extrapulmonary TB by the WHO (2). If treated early, 90-95% of skeletal TB can achieve full recovery (3)

CONCLUSION:

Diagnosis of TB arthritis is challenging. Availability of rapid tests such as NAAT greatly aids in reducing delay in initiating treatment.

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DISCUSSIONS: