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RESEARCH ARTICLE

SHOULDER TUBERCULOSIS MIMICKING TENOSYNOVIAL GIANT CELL TUMOR IN CHILD: CASE REPORT

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Abstract

The shoulder tuberculosis is rare in children, only few cases has been reported. Various clinical presentations make diagnosis more challenging. The synovial biopsy is the key stone to joint tuberculosis diagnosis. We report a case of shoulder tuberculosis in children mimicking tenosynovial giant cell tumor, treated with anti-tubercular therapy for 6 months, with excellent outcomes.

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Introduction:-

Diagnosis of joint tuberculosis (TB) remains a challenge especially in non-weight bearing joints. It becomes even more difficult to detect when it's isolated in the peripheral joint in children, creating a major diagnosis problem. The TB of the shoulder joints occurs in 0.9% to 1.7 % of all extra-pulmonary forms [1]. We report an isolated shoulder TB joints in an 11-years old boy which mimicked a tenosynovial giant cell tumor.

Case Report:

An 11-year-old boy was referred to our department with 5 months history of progressive right shoulder swelling. He had no history of trauma, fever, chronic cough or weight loss and he didn't take any medicines. He had an uncle who has a pulmonary tuberculosis under treatment. The physical exam revealed a tenderness and swelling of the shoulder. The overlying skin was normal, and there was no limitation of overhead movement of the right shoulder. The exam of the other joints didn't show any abnormalities. The sedimentation rate was raised at 20 mm/hr, the rest of the laboratory tests, including blood cells count, C protein reactive, were normal. The X ray of the right shoulder was normal. The ultrasound and the MRI showed a diffuse synovial thickness with no bone lesion, suggestive of tenosynovial giant cell tumor (figure 1). The tumoral excision was performed under general anesthesia. The histological exam of the piece showed a caseous necrosis with granulomas suggestive of TB. Chest W-ray was performed, and it was normal, the acid-fast culture and the skin test was not performed. The patient was given anti-tubercular therapy consisting of isoniazid, rifampicin and pyrazinamide for 4 months and isoniazid with rifampicin for 2 months. After 12 months of follow up, the patient healed without complications.

Discussion:-

The osteoarticular TB is uncommon, it's present 4-10 % of extrapulmonary TB [2]. The clinical presentation of osteoarticular TB is varied, thereby making the diagnosis more challenging. There are five common presentations reported; Poncet's disease, peripheral arthritis, osteomyelitis and dactylitis, tenosynovitis and bursitis, and Pott's disease [3-5].

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The Tuberculosis of the shoulder present 0.9% to 1.7 % of all extra-pulmonary forms [1], 3 types are seen, the caries sicca, the caries exudate and the caries mobile. The caries sicca variety as seen in our patient, is rarely described in children, it's commonly reported in adults [6,7]. Nonspecific signs of the joint TB like in our case may lead to delayed diagnosis, and by that to a joint destruction, dislocation or bone fracture [8]. Biopsy is the key stone to confirm joint a tuberculosis diagnosis. Iagnocco et al [9] reported that > 90% of the synovial specimens shows a granulomatous synovitis. The MRI is a good tool for diagnosis, and can make the difference between tuberculosis lesion and others conditions. However, it fails to do so in the early stages, and may not be specific as proven in our case. This case brings out a rare presentation of tuberculosis localization and calls us to be more mindful of this diagnosis, especially in epidemic filled countries.



Figure 1:- MRI of shoulder showing a diffuse synovial thickness.

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