ELBOW TUBERCULOSIS: PATIENT WITH SOFT TISSUE MASS & ELBOW ARTHRITIS IN FOLLOWING OF OLD PENETRATING TRAUMA

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ABSTRACT: Chronic arthritis is one of the most important, extra pulmonary tuberculosis By taking TB into consideration in the process of examination of chronic infection of bones and joints, one can avoid many complications and resulting from permanent deformities. The studied patient had a trauma history and fracture in distal of Humerus and elbow joint subluxation. despite the operations, deformities and movement restrictions were still persistent. After three and half years she had been the olecranon soft tissue mass with fluctuation and erythema. under treatment by Intravenous antibiotics didn’t display an appropriate response. the patient’s MRI in T1&T2-Weighted, showed a degeneration process associated with the deformity of joint space in the anterior aspect of elbow. After two months, having obtained positive results for all the TB cultures of the drained fluid, the patient was kept under treatment for a period of one year. One cannot disregard the possibility of T.B just due to the lack of common signs and lab data should think other ways of diagnosing this important disease.

Keywords: Chronic Arthritis, Olecranon Bursa, Soft Tissue Mass, Tuberculosis Bursitis.

INTRODUCTION

Chronic arthritis is one of the most important, extra pulmonary tuberculosis. TB is the most common etiology of chronic infections of joints. By taking TB into consideration in the process of examination of chronic infection of bones and joints, in particular in cases which the patient shows the insufficient response to common Antibiotics, one can avoid many complications and resulting from permanent deformities.

CASE REPORT

The studied patient was a 65 year old woman who three and half years prior to her visit, had had a trauma history and fracture in distal of Humerus and elbow joint subluxation. To ease the problem, she had twice undergone an orthopedic operation. However, despite the operations, deformities and movement restrictions were still persistent. At the same time, she had been enduring pain, which was accompanied by a gradual swelling and slight fever for a month before her visit. In the examination, the olecranon soft tissue mass with fluctuation and erythema was observed. Pain and movement restriction had been progressively aggravated in comparison to the past. Having admitted and under treatment by Intravenous ciprofloxacin and clindamycin for two weeks unfortunately the patient didn’t display an appropriate response. Therefore, she was re-examined again after two weeks.

Simple radiography showed very slight changes. However, the patient’s MRI, without Gd. Injection in T1&T2-Weighted in sagittal & axial planes, showed a degeneration process associated with the deformity of joint space in the anterior aspect of elbow. Bony structure was normal (1).

She had to undergo drainage of fluid collection and meanwhile due to the low response of the patient to Antibiotic therapy. Smear of acid fast Bacilli and Bacterial culture of the drained fluid were negative. Tuberculin skin test was about 11 millimeters without history of BCG vaccination & previous disease. Wright's
test of serum was negative, CXR was normal, ESR=78mm & CRP= 35 In Histopathology, Smears of turbid, milky fluid, stained by a pap-method, showed only few inflammatory cells, mostly PMNs in the protein background were shown, while in a case of tuberculosis bicipitoradial bursitis. The histological specimen revealed an epithelioid cell granuloma with central necrosis (2). The patient was prescribed with oral ciprofloxacin and clindamycin and temporarily discharged. After two months, having obtained positive results for all the TB cultures of the drained fluid, the patient was kept under treatment for a period of one year and other treatments were terminated. Currently, the patient’s conditions have dramatically improved, and she feels much better.

**DISCUSSION**

One cannot disregard the possibility of T.B just due to the lack of common signs and lab data and hence in case of no suitable clinical response in chronic infections and should think other ways of diagnosing this important disease. Scott and co-workers reported an isolated olecranon post traumatic bursitis (3). Septic TB arthritis 79% of the synovial fluid cultures have been reported to be positive (4). Common ways such as smear of acid fast Bacilli (AFB) and T.B culture should be used in diagnosis because, in spite of the time-consuming aspect of verification and also finding of new ways for diagnosis, these methods, are still cost-benefit and valuable in diagnosis.

**APPENDIX**

**Fig 1**: T2-weighted sagittal image degeneration process associated with the deformity of joint space in the anterior aspect of elbow
Fig 2: T2-weighted axial image degeneration process associated with the deformity of joint space in the anterior aspect of elbow

Fig 3: T1-weighted axial image degeneration process associated with the deformity of joint space in the anterior aspect of elbow
Fig 4: T1-weighted sagital image degeneration process associated with the deformity of joint space in the anterior aspect of elbow

REFERENCES


