

Tubercular Synovitis in an Immunocompromised Patient

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Presented at EZAPICON (API Eastern Zone) on November 30, 2018

Abstract

Introduction Tuberculosis is a major health problem in immunocompromised patients, but involvement of appendicular skeleton is rare. Tuberculosis may rarely result in synovitis. In such cases other evidences of tuberculosis, such as sputum positivity, chest x-ray findings etc. may be absent. The diagnosis may be missed unless there is a high index of suspicion.

Case Report A 35 year old male patient with immunocompromised status. He presented with pain and swelling of left knee joint for 3 weeks with fever for 4 days. He was Human Immuno-deficiency Virus (HIV) positive and on Anti Retroviral Therapy (ART) with Tenofovir-Lamivudine-Efavirenz. His last CD4 count was 73. He previously received CAT-I Anti Tubercular Drugs for Extra-Pulmonary Tuberculosis. Synovial fluid was aspirated from his knee swelling and Cartridge Based Nucleic Acid Amplification Test (CBNAAT) was positive in the sample. Acid Fast Bacilli was detected in the Fine Needle Aspiration Cytology sample from his right axillary lymph node. The patient was treated with CAT-II Anti-Tubercular Drugs and had satisfactory improvement with this therapy.

Discussion Immunocompromised patients have a higher risk of developing tuberculosis and the progression of the disease is also more severe in immunocompromised patients. HIV prevalence among incident TB cases is around 4 % and 87000 new cases of HIV with TB is emerging in India.

CBNAAT has both high sensitivity and high specificity and can also detect drug susceptibility.

High index of suspicion is needed to correctly diagnose tubercular synovitis. Synovial fluid should be tested for tuberculosis in such cases.