Case of Tb Lymphadenitis after TNFα Inhibitor use in Ankylosing Spondylitis patient Negative of LTBI

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Recently, biological disease modifying antirheumatic drugs (DMARDs) are used for treatment of rheumatic diseases. In particular, for patients with ankylosing spondylitis (AS), if response to DMARDs is poor, using tumor necrosis factor alpha (TNFα) inhibitor is considered first. In Korea, tuberculosis (Tb) infection rate is high, so confirmation of latent Tb infection (LTBI) is performed before using TNFα inhibitor. For patients with LTBI, it is recommended to use TNFα inhibitor after sufficient treatment for LTBI. However, even if negative results were confirmed in LTBI test prior to drug use, Tb involvement must be suspected if an unknown infection persists in TNFα inhibitor users. A 34-year-old man visited emergency room with polyarthritis, back pain, and fever. HLA B27 was positive, and acute phase reactant was high, radiologic findings showed both sacroiliitis, patient was diagnosed as AS and treated, but the use of infliximab was planned because response was poor with DMARDs, NSAIDs and steroids. The patient was confirmed negative in QuantiFERON test at the time of diagnosis of AS, and also confirmed negative in the test before the use of infliximab. After using infliximab, arthritis, back pain, and acute phase reactant improved, but after 3 weeks, fever and a high rise in acute reactant occurred. Arthritis and back pain did not worsen. The patient was hospitalized and examined. Multiple enlarged lymph nodes in both upper/lower paratracheal, left hilar, and paraaortic areas were observed, and diffusely scattered tiny miliary nodules in both lungs were observed on chest CT. Bronchoscopy and endobronchial ultrasound-guided biopsy were performed for lymph nodes to differentiate sarcoidosis, Pneumocystis jirovecii pneumonia, and miliary Tb. In bronchoalveolar lavage specimen, there were no cultured microorganisms, and granuloma was confirmed in histological examination, and Tb lymphadenitis was diagnosed. Tb medication was applied after bronchoscopy, and fever peak gradually decreased and CRP decreased. The use of inflximab was discontinued. This case suggests even if LBTI is negative, Tb-related diseases must be considered in patients using TNFα inhibitors.

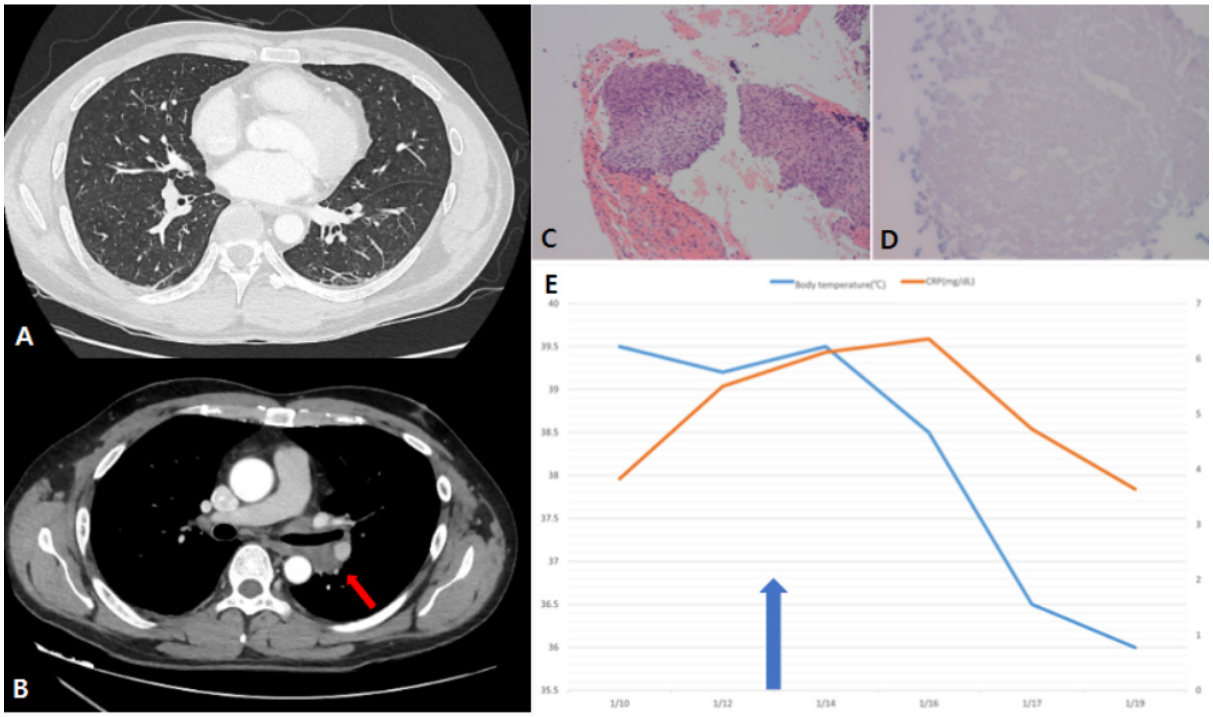

Figure 1 (A) Chest CT shows diffusely scattered tiny miliary nodules in both lungs (B) Red arrow indicate lymph node(10L) enlargement, and bronchial ultrasound-guided bronchial needle aspiration was done (C)(D) is pathology of Bronchoscopic lymph node biopsy. (C) Granuloma with necrosis (X100) was found. (D) AFB stain (X400) : acid –fast bacilli identified. (E) is graph of body temperature and CRP, Blue arrow indicates the initiation of Tb medication.