



PSORIASIS

## DISSEMINATED AND EXTRA-PULMONARY TUBERCULOSIS IN A PATIENT UNDER ANTI-TUMOR NECROSIS FACTOR- $\alpha$ TREATMENT

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**Background:** Anti-tumor necrosis factor- $\alpha$ (TNF- $\alpha$ ) biologics had improved the treatment response of psoriasis and psoriatic arthritis, but also increased the risk of infection especially active tuberculosis. Pre-treatment screening of tuberculosis and prophylactic treatment of latent tuberculosis significantly decreased active tuberculosis.

**Observation:** A 73-year-old man presented with cough, sore throat, abdominal pain, poor appetite, and body weight loss of 10 kg in the past month. He had a history of psoriasis treated with anti-TNF- $\alpha$  biologics(adalimumab) for 26 months. He was diagnosed with latent tuberculosis and received prophylactic isoniazid for 9 months before starting adalimumab treatment. The psoriasis area and severity index(PASI) score was reduced from 19.5 to 5.7 after 6 months of adalimumab therapy. The efficacy of adalimumab was maintained and the patient was regularly followed up at the dermatologic and pulmonary department. A chest and abdomen computed tomography revealed interstitial nodules of bilateral lung, a 1.4cm cavitory lesion in the right upper lobe, and multiple intra-abdominal lymphadenopathies. Computed tomography-guided biopsy of the left paraaortic lymph nodes revealed chronic granulomatous inflammation with negative staining for acid-fast bacilli and fungi. Magnetic resonance imaging of nasopharynx showed soft tissue mass in the left oropharynx, and biopsy of the left tonsil also demonstrated chronic granulomatous inflammation with negative staining for acid-fast bacilli and fungi. The sputum samples were positive for acid-fast stain and yielded mycobacteria tuberculosis by culture. Disseminated and extra-pulmonary tuberculosis was diagnosed. The patient withdrew from adalimumab therapy and completed anti-tuberculosis treatment. A follow up computed tomography of the chest showed resolution of tuberculosis.

**Key message:** This case indicated that tuberculosis can occur in patient treated with anti-TNF- $\alpha$  biologics despite fully follow the tuberculosis prevention guidelines. Long-term monitoring by a multidisciplinary team is mandatory during anti-TNF- $\alpha$  biologics treatment.

