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Tuberculosis Presenting as an Inflammatory Pseudotumor of the Sciatic Nerve in a Rheumatoid Arthritis Patient Taking Etanercept

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Active tuberculosis (TB) in patients treated with anti–tumor necrosis factor-α (TNF-α) agents usually results from the reactivation of a latent infection.[1,2]

A 46-year-old woman with rheumatoid arthritis in Disease Activity Score in 28 joints remission who was taking etanercept (ETN) was admitted in our hospital due to a 4-month history of progressive hypoesthesia and paresthesia, initially on her left foot and later with extension up to the left knee.

The neurological examination revealed decreased muscle strength, particularly in the left foot dorsiflexion. Electromyography showed postganglionic changes in nerve conduction, affecting motor and sensory fibers, with signs of subacute and severe denervation of L5–S1 myotome-dependent muscles, suggesting a proximal lesion above the sciatic trunk. Lumbar spine magnetic resonance imaging (MRI) was irrelevant, and MRI of the thighs showed a fusiform left sciatic nerve mass with contrast enhancement (Figure 1).

Figure 1. Coronal T1-weighted fat-saturated gadolinium-enhanced image of the thighs, showing fusiform thickening along the longest axis of the left sciatic nerve with diffuse heterogeneous contrast enhancement with an approximate length of 22 cm and maximum transverse diameter of 1.6 cm.

Histology of the left sciatic nerve biopsy showed a lymphoplasmacytic inflammatory infiltrate, with necrotic epithelioid granulomas and multinucleated giant cells, with no signs of malignancy (Figure 2). These features, despite the negative Ziehl-Neelsen staining, associated with a positive tuberculin test (negative tuberculin test previously to ETN), led to a diagnosis of TB of the sciatic nerve sheath and the suspension of this anti–TNF-α agent; treatment with isoniazid, rifampicin, pyrazinamide, and ethambutol was initiated. After 9 months of treatment and a rehabilitation program, the patient showed significant clinical and imaging improvement.

In countries with high incidence of TB, it is recommended to screen and treat latent TB prior to anti-TNF therapy.[3] Extrapulmonary TB may arise, even without evidence of lung involvement, as this rare case described.

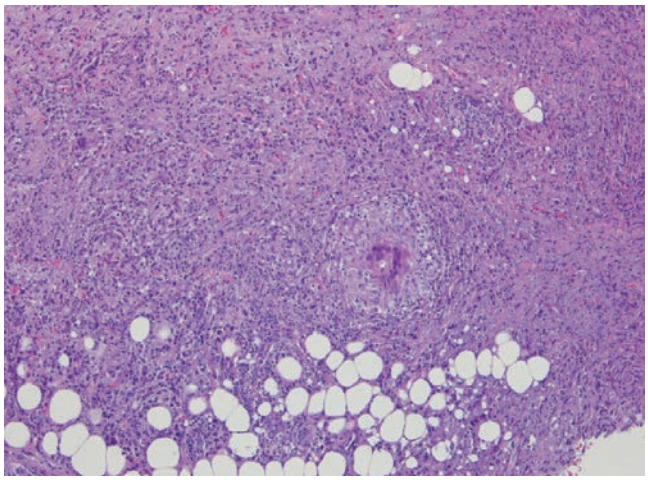

Figure 2. Histology of the left sciatic nerve. Fibroadipose tissue with inflammatory infiltrate with necrotic granuloma and multinucleated giant cells (H&E stain, 100×).

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