Spinal Cord Presentation of Biopsy-Proven PET-Positive Giant Cell Arteritis

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A 63-year-old man presented with sudden bilateral lower limb weakness and right sided sensory loss to pain and temperature, on a background of recently diagnosed biopsy-negative giant cell arteritis (GCA) treated with prednisone 50mg. ESR was normal. Somatosensory evoked potentials revealed central conduction delay. PET/CT imaging revealed major vessel hypermetabolism (Figure 1), indicative of active GCA confirmed on repeat temporal artery biopsy (Figure 2). Spinal cord involvement was suspected; intravenous steroids, cyclophosphamide, followed by tocilizumab were commenced with good response. Clinicians should be aware of rare manifestations of GCA and PET-CT might be helpful in evaluation of disease activity.
Figure 1. (A, B, C) Axial and (D) Sagittal-oblique PET-CT shows vertebral (v), femoral (f), and popliteal (p) artery hypermetabolism (arrows).
**Figure 2. Temporal artery biopsy.** Inflammatory infiltrate present along the internal elastic lamina (A), composed of lymphocytes, histiocytes and occasional multinucleated giant cells and neutrophils (B). (Scale bar 500 µm)

2. Slart R. FDG-PET/CT(A) imaging in large vessel vasculitis and polymyalgia rheumatica: joint procedural recommendation of the EANM, SNMMI, and the PET Interest Group (PIG), and endorsed by the ASNC. Eur J Nucl Med Mol Imaging 2018;45:1250-1269.
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