## Possible acute multifocal demyelinating lesions in a COVID-19 patient

Possíveis lesões desmielinizantes multifocais agudas em um paciente com COVID-19

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A 49-year-old man was admitted with cough, dyspnea, and fever. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) polymerase chain reaction (PCR) from nasopharyngeal swab was positive. Due to severe acute respiratory syndrome, he was intubated. On day 19, sedatives were held. On neurological examination, he was lethargic, with asymmetric quadriplegia (left>right) and global hyporeflexia. Brain magnetic resonance imaging revealed multifocal brain lesions (Figures 1A, 1B and 1C). He was treated with high-dose steroids and showed clinical and radiological improvement (Figure 1D).

This case highlights that possible acute disseminated encephalitis should be considered a potentially treatable cause of encephalopathy or multiple neurological deficits in COVID-19 patients<sup>1,2</sup>.



**Figure 1.** (A) Axial images in the FLAIR T2W showing multiple lesions with T2 hypersignal in the cerebral and cerebellar white matter (arrows), with no mass effect. (B) Axial diffusion (DWI) — Absence of restriction on diffusion in the topography of the lesions and (C) axial T1 post-contrast (Gd) show no enhancement (arrowhead). (D) Control examination after corticosteroid therapy showing marked involution of brain lesions and disappearance of cerebellar lesions in the axial FLAIR T2W images.

2.

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