

Images in medicine

## Sciatic compressive neuropathy due to heterotopic ossifications secondary to severe COVID-19 infection



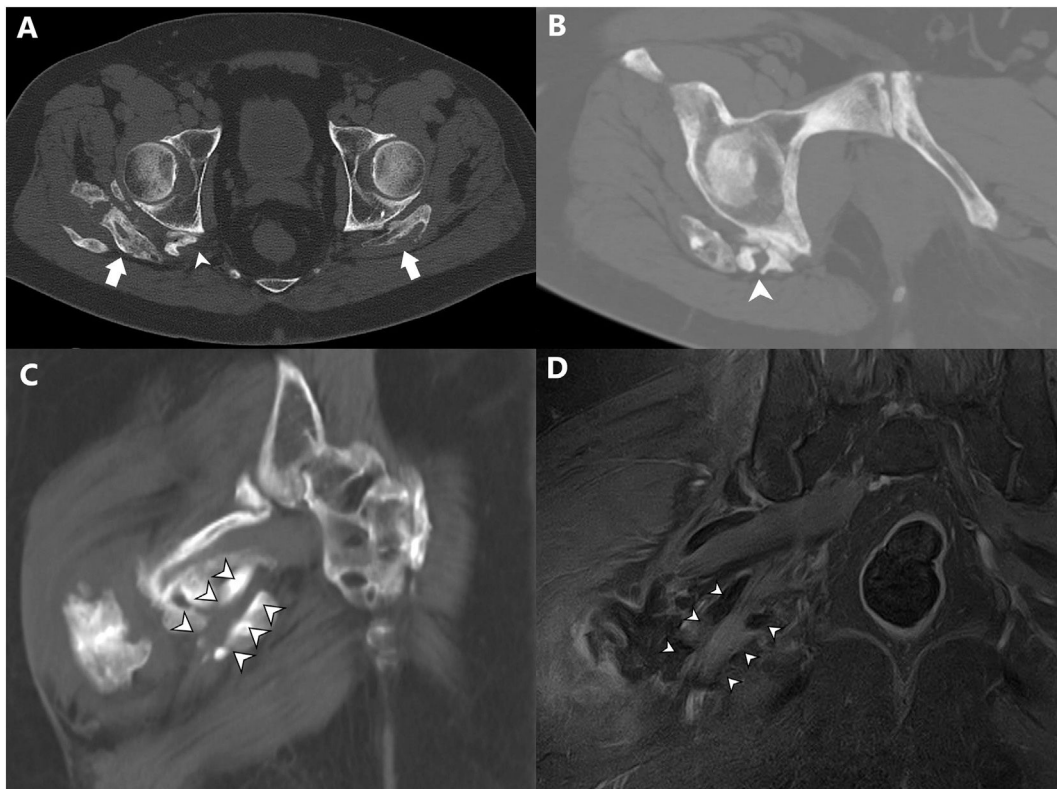
### Neuropatía compresiva ciática por osificaciones heterotópicas secundarias a infección grave por COVID-19

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A 53-year-old male with a history of obesity, hypertension and ICU admission (16 days) due to severe SARS-CoV-2 pneumonia presented with intense pain in the right hip and weakness. The Lasègue sign was present. CT and MRI of the lumbo-pelvic region were performed.



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In A (axial CT), arrows indicate heterotopic ossifications (HO) in both hips. The ossified areas contact and surround the right sciatic nerve (arrowheads), which is more visible in B-C (multiplanar reconstructions). D shows a coronal T2-F/S MRI slice with the sciatic nerve thickened and hyperintense, indicating inflammation (arrowheads).

The presence of calcifications with cortical or bone marrow in soft tissues is characteristic of HO. In the initial phases, ossification may not exist, but an evolutionary study confirming ossification is sufficient for diagnosis. MRI plays a secondary role in further characterization of soft tissues.

HO is a heterogeneous and poorly understood pathology in which abnormal processes of inflammation and repair activate extraosseous osteogenesis. Most patients have a history of surgery, trauma, neurological injury, or burns. Recently, a higher prevalence has been reported in patients with severe COVID-19.

HOs are usually asymptomatic and managed conservatively with symptomatic and rehabilitative treatment, surgery is exceptionally performed.