

Clinical-Medical Image

Cytotoxic Lesion of the Corpus Callosum

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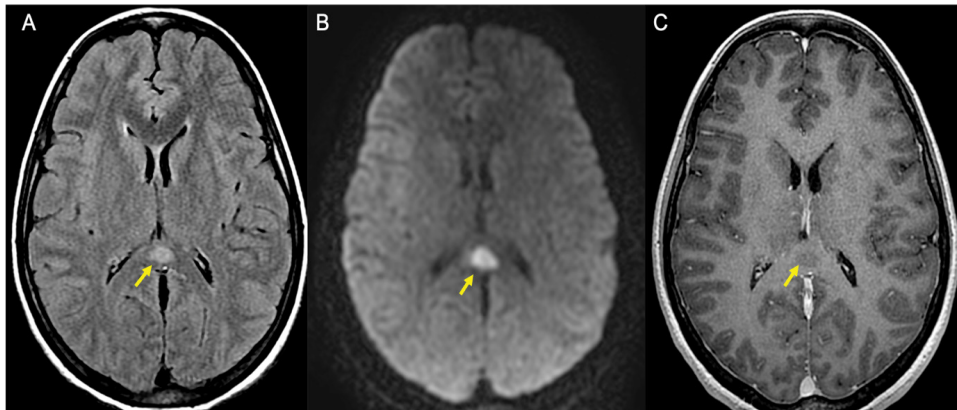


Figure 1: Brain MRI is specific, (A) showing an oval shaped well-defined lesion of the splenium of the corpus callosum (Yellow arrow), with restriction in diffusion (B) and non-enhanced with contrast (C), which is characteristic.

Clinical Image

A 33 years old woman, with no medical history record, was admitted in the ER for fever and consciousness disorder evolving for a few days [1-3].

The patient had received her second dose of Sars-CoV-2 vaccine 15 days before.

Clinical exam revealed a GCS (Glasgow Coma Scale) of 13/15, a slight fever (38.5°C), and tetraparesia.

Blood tests only showed a high CRP (C-reactive protein) level at 160 mg/L, with no sign of infection. Sars-CoV-2 PCR (Polymerase chain reaction) was negative.

Cytotoxic lesions of the corpus callosum are caused by cytotoxic edema due to cytokines storm after infection, trauma, and sub-arachnoid hemorrhage, drug therapy such as seizure drugs, vaccination, metabolic disorders and malignancy.

Clinical symptoms aren't specific

- Consciousness disorders, seizures, hallucinations, nuchal rigidity etc.

Brain MRI is specific, showing an oval shaped well-defined lesion of the splenium of the corpus callosum (Yellow arrow), with restriction in diffusion (B), non-enhanced with contrast (C), which is characteristic (Figure 1).

Differential diagnosis

- Ischemic stroke of the anterior cerebral artery, however, this diagnosis is rare because of redundant blood supply.
- Acute disseminated encephalomyelitis that is more aggressive with asymmetric lesions.

Treatment

- Treatment remains on steroids and immunoglobulin administration.

Keywords: Corpus; Callosum; Lesion; MRI

Declaration of Interests

The authors declare that they have no competing interests.

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References

- [1] Youn T, Yang H (2021) Cytotoxic lesion of the corpus callosum (CLOCCs) after SARS-CoV-2 mRNA vaccination. *J Korean Med Sci* 36: 1-2.
- [2] Gaur P, Dixon L, Jones B, Lyall H, Jan W (2020) COVID-19-associated cytotoxic lesions of the corpus callosum. *Am J Neuroradiol* 41: 1905-1907.
- [3] Rasmussen C, Niculescu I, Patel S, Krishnan A (2020) COVID-19 and involvement of the corpus callosum: Potential effect of the cytokine storm. *Am J Neuroradiol* 41: 1625-1628.