

Reversible splenial lesion syndrome in neuroleptic malignant syndrome.

ABSTRACT

Background: Reversible focal lesions in the splenium of the corpus callosum (SCC) or reversible splenial lesion syndrome are rare and little is known about their pathophysiology. **Case summary:** The authors describe a case of a 65-year-old female who presented with fever, abnormal behaviour and mild hypernatremia. She was on neuropsychiatric treatment for bipolar disorder but denied any history of seizure. After an extensive workout to exclude infection, a clinical diagnosis of neuroleptic malignant syndrome (NMS) was made. Initial magnetic resonance imaging (MRI) of the brain showed a lesion in the SCC characterized by high-signal intensity on T2-weighted and FLAIR sequences with reduced signal intensity on T1-weighted sequence. Diffuse weighted imaging (DWI) showed restricted diffusion. There was no enhancement following Gadolinium administration. The follow-up MRI 8 weeks later showed complete resolution of the SCC lesion. **Conclusion:** While the pathophysiology of reversible SCC lesions is still unclear, this case highlights the need to consider NMS in the differential diagnosis of reversible splenial lesion of the corpus callosum.

Keyword: Corpus callosum; Neuroleptic malignant syndrome; Reversible splenial.