

Transient lesions of the splenium of the corpus callosum following rapid withdrawal of levetiracetam^{*}

Ryo Sawagashira¹, Hisashi Narita², Naoki Hashimoto²,
Tsugiko Kurita², Shin Nakagawa², Takuya Saitoh³,
Ichiro Kusumi²

¹ Department of Psychiatry, Otaru General Hospital, Hokkaido

² Department of Psychiatry, Hokkaido University Graduate School of Medicine, Hokkaido

³ Department of Child and Adolescent Psychiatry, Hokkaido University Graduate School of Medicine, Hokkaido, Japan

Received February 28, 2017; Accepted May 14, 2017

Key Points

- Transient lesions of the splenium of the corpus callosum (SCC), characterized by MRI findings, are clinically rare with a prevalence of approximately 0.7% (Nelles, 2006).
- Transient lesions of the SCC are significant from a clinical standpoint as differential diagnoses include serious conditions.
- Most drug-induced cases of transient lesions of the SCC are caused by rapid withdrawal of antiepileptic drugs. There are few reports of SCC caused by rapid withdrawal of levetiracetam.

Possible causes of transient lesions of the SCC

Drug-induced

- **Rapid withdrawal of AEDs**
- NMS
- Drug toxicity - cyclosporine, fluorouracil, metronidazol

Infection

- Encephalitis
- Salmonella
- Malaria
- Rotavirus infection

Miscellaneous

- Vitamin B12 deficiency
- Trauma-axial injury

AEDs= Antiepileptic drugs

NMS= Neuroleptic malignant syndrome

(Modified from Malhotra et al., 2011)