

Facial dystonic seizures-*plus* associated with anti-LGI1 antibody encephalitis

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We present a 39-year-old, right-handed woman with anti-LGI1 antibody encephalitis (LGI1 encephalitis). Indirect immune fluorescence revealed anti-LGI1 antibody titres of 1:3.2 and 1:32 in the CSF and blood,

respectively. The most common seizure type associated with LGI1 encephalitis is faciobrachial dystonic seizure (FBDS) (Irani *et al.*, 2011, 2013) and FBDS-*plus* (Beimer and Selwa, 2017; Chen *et al.*, 2017). Left facial

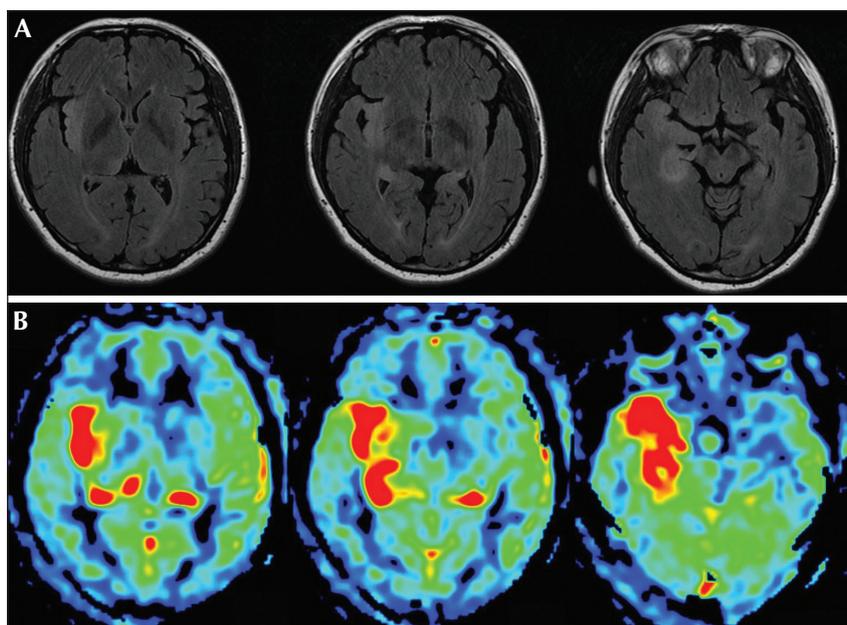


Figure 1. (A) MRI showing right mesial temporal lobe, insular lobe, and thalamus high-intensity signal on Flair-weighted images. (B) Arterial spin labelling showing that the blood flow increased in the right mesial temporal lobe, insular lobe, and bilateral thalamus.



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dystonic seizures (FDS) in the patient progressed to focal seizures with shouting, oral automatisms, numbness of the left side of the face and left upper limb, and palpitation (*video sequences 1-3*). Electrographically, artefacts of FDS were followed by rhythmic theta activity with evolution, predominant on right temporal and anterior frontal regions, and increased heat rate. MRI revealed right mesial temporal lobe, insular lobe, and thalamus high-intensity signal on Flair-weighted images (*figure 1A*). Arterial spin-labelling showed that the blood flow increased in the right mesial temporal lobe, insular lobe, and bilateral thalamus (*figure 1B*). We propose the term “facial dystonic seizures-*plus*”

(FDS-*plus*) to describe these episodes. Recognition of the broad range of seizure types associated with LGI1 encephalitis is crucial for early diagnosis and definitive treatment. □

Legend for video sequences

Videos show facial dystonic seizures-*plus* associated with LGI1 encephalitis.

**Key words for video research on
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Phenomenology: facial dystonic seizures-*plus*
Localisation: seizure type associated with LGI1 encephalitis
Syndrome: LGI1 encephalitis
Aetiology: brain damage from anti-LGI1 antibody

Disclosures.

None of the authors have any conflict of interest to declare.

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