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## Cathodal Transcranial Direct Current Stimulation for Treatment of Rasmussen Encephalitis

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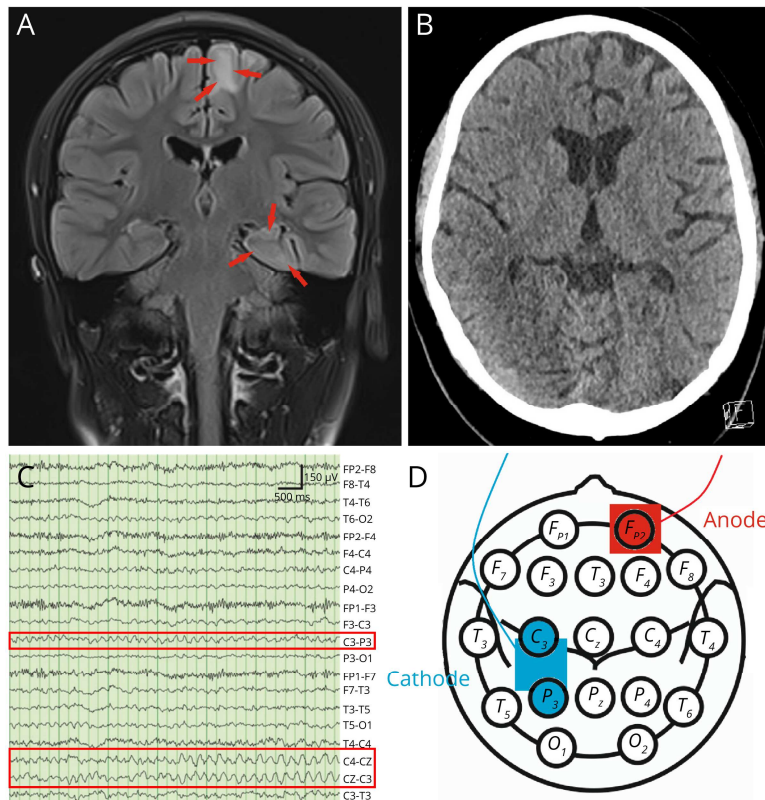
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A 9-year-old female presented with acute amnesia and dysphasia, resolving within 24 hours. After 2 months of episodic altered behaviour, she developed right leg focal motor seizures with secondary generalisation. FLAIR MRI, CT, and brain biopsy confirmed the diagnosis of Rasmussen's encephalitis (Figure), a progressive inflammatory neurological disease<sup>1</sup>.

Despite anti-convulsants and prednisolone-azathioprine immunotherapy, the seizures evolved over 12 months to *epilepsia partialis continua* (Video 1), with hemiparesis, cognitive decline and focal EEG changes. To avoid hemispherectomy, cathodal transcranial DC stimulation was administered once daily<sup>2</sup> (Figure, D). After 8 days, seizures stopped for 18 weeks and she could ambulate unaided (Video 1).

**Figure Case: Rasmussen's encephalitis**

**A)** FLAIR MRI with left temporal lobe and superior frontal gyrus changes in Rasmussen's encephalitis. **B)** CT showed hemicortical atrophy. **C)** Focal epileptiform EEG changes localised to C3/P3. **D)** Location of anode (FP2) and cathode (C3/P3) for cathodal transcranial DC stimulation (2 mA; 20 mins daily for 8 days).



<http://links.lww.com/WNL/C518>

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