

Hippocampal deep brain stimulation: a therapeutic option in patients with extensive bilateral periventricular nodular heterotopia: a case report

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TREATMENT OF PERIVENTRICULAR NODULAR HETEROTOPIA (PNH)

- PNH is often associated with refractory seizures.
- PNH can present unilaterally or bilaterally.
- Individuals with bilateral PNH often present with seizures arising bilaterally.
- Resective or lesional (LITT, RF, gama-knife, *etc.*) procedures offer limited or transient results.

TREATMENT OF PERIVENTRICULAR NODULAR HETEROTOPIA (PNH)

- Neuromodulation offers a non-lesional, programmable and reversible treatment option.
- Hippocampal DBS is an efficacious treatment for refractory temporal lobe onset seizures.
- Large epileptic networks including both the heterotopic and adjacent cortex are involved in the genesis of seizures in patients with PNH.
- Bilateral hippocampal DBS may prove to be an efficacious treatment modality in patients with bilateral PNH.