

Teaching NeuroImages: Cerebral inception

A “brain” within a brain

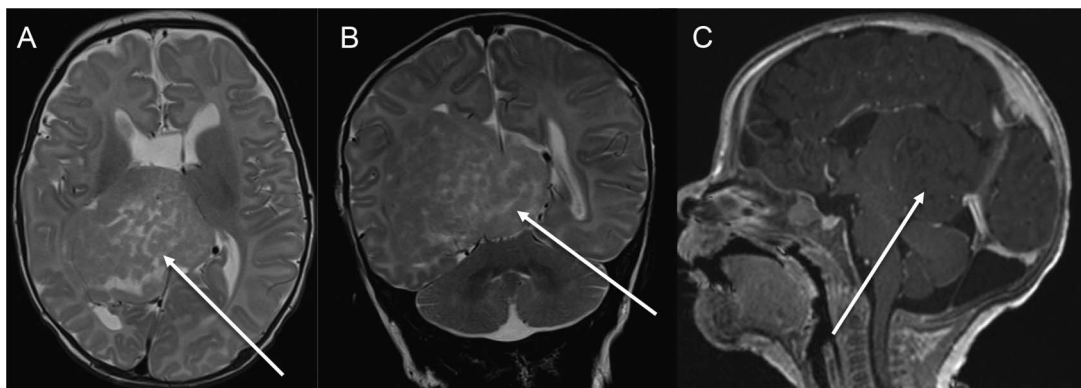
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Figure Brain MRI



T2-weighted axial (A), T2-weighted coronal (B), and T1-weighted sagittal (C) images demonstrate a large mass within the medial aspect of the right hemisphere (temporo-parietal lobes) displacing the right ventricle. It has signal characteristics similar to normal gray and white matter with rudimentary gyration and sulcation. There was no enhancement following gadolinium administration (not shown).

An 8-week-old term infant with congenital nephrotic syndrome developed stiffening following general anesthetic. His neurologic examination and EEG were normal. MRI brain demonstrated a large mass of dysplastic brain isointense to cortex with intervening “sulcal” spaces (figure). The infant continued to have infrequent seizures.

Glioneuronal hamartomas are well-circumscribed, non-neoplastic, masses of disorganized mature neuronal and glial cells arising from abnormal neural development.¹ Accompanying gray and white matter heterotopia are common.² Glioneuronal hamartomas make up a small but significant proportion of patients operated on for drug-resistant epilepsy.² Very large hamartomas, as described, are rare.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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Appendix 1 Authors

Name	Location	Role	Contribution
Emma Macdonald-Laurs, MBChB	Starship Children's Hospital	Author	Report design and conception, project execution, interpretation of neuroimages, writing of first draft, review and editing of manuscript
Richard J Leventer, MBBS, PhD	Royal Melbourne Children's Hospital	Author	Interpretation of neuroimages, review and editing of manuscript
Rakesh Patel, MBChB	Starship Children's Hospital	Author	Report conception, review and editing of manuscript

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