

Atypical subependymal giant cell astrocytoma and neonatal tuberous sclerosis

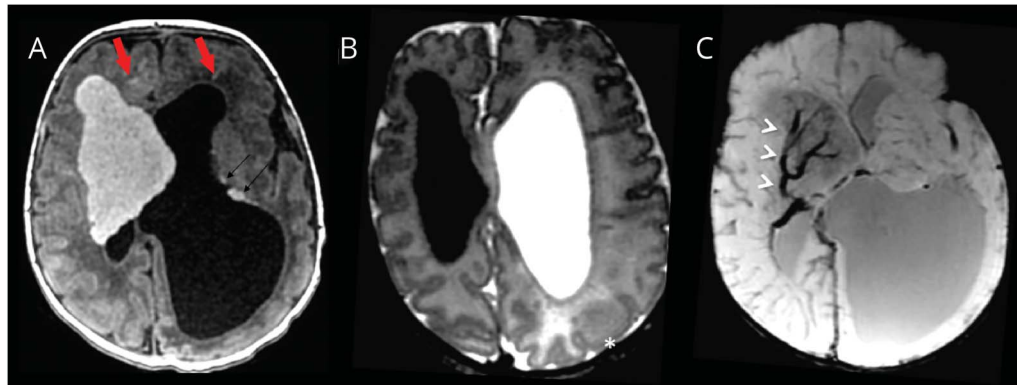
Laiz Laura de Godoy, MD, and César Augusto Pinheiro Ferreira Alves, MD

Neurology® 2018;90:570-571. doi:10.1212/WNL.0000000000005181

Correspondence

Dr. de Godoy
laizgodoy@hotmail.com

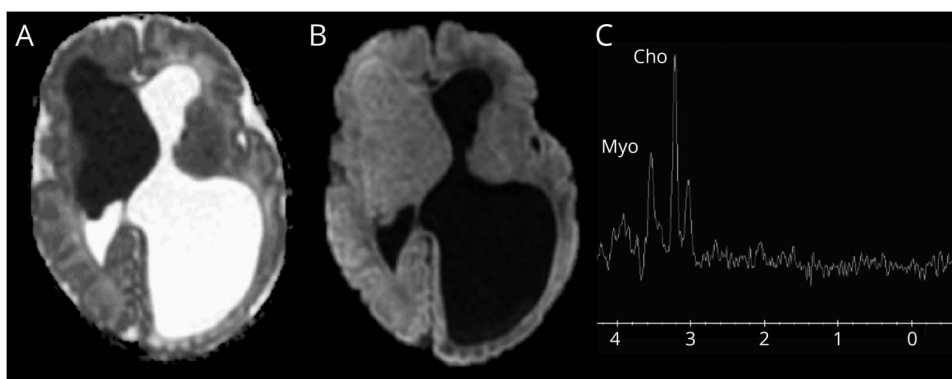
Figure 1 Brain MRI



Axial MRI of tuberous sclerosis brain findings. Subependymal giant astrocytoma: (A) T1-hyperintense; (B) T2-hypointense; (C) susceptibility-weighted imaging—exuberant venous drainage (arrowheads). Subependymal nodules: (A) T1-hyperintense (black arrows), radial bands (red arrows); and (B) cortical tubers (asterisk).

A 9-day-old girl had, on prenatal ultrasound, brain and cardiac lesions suspicious for tuberous sclerosis. Brain MRI demonstrated a large intraventricular and intraparenchymal mass centered on the foramen of Monro, which had unusual imaging findings: a homogeneous T1-hyperintense and T2-hypointense signal (figure 1, A and B) related to scarce myelination; remarkable venous drainage on susceptibility-weighted imaging (figure 1C); and apparent diffusion coefficient hypointensity, corresponding to blackout T2 effect (figure 2, A and B).

Figure 2 Brain MRI



Subependymal giant astrocytoma: (A) apparent diffusion coefficient hypointensity; (B) diffusion-weighted imaging isointensity related to blackout T2 effect; (C) spectroscopy (point resolved spectroscopy echo time 35) study shows choline (Cho) 3.2 ppm and myo-inositol (Myo) 3.5 ppm peaks.

From the Department of Radiology, Division of Neuroradiology, Fleury Group and Hospital das Clínicas, São Paulo, Brasil.

Spectroscopy showed increased choline and myo-Inositol peaks (figure 2C). These findings are consistent with neonatal subependymal giant astrocytoma.^{1,2} Subependymal nodules, cortical tubers, and radial bands were also atypically T1-hyperintense and T2-hypointense (figure 1, A and B).

Author contributions

Laiz Laura de Godoy: study concept and design. César Augusto Pinheiro Ferreira Alves: study concept and design, critical revision of manuscript for intellectual content.

Study funding

No targeted funding reported.

Disclosure

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

References

1. Raju GP, Urion DK, Sahin M. Neonatal subependymal giant cell astrocytoma: new case and review of literature. *Pediatr Neurol* 2007;36:128–131.
2. Baron Y, Barkovich AJ. MR imaging of tuberous sclerosis in neonates and young infants. *AJNR Am J Neuroradiol* 1999;20:907–916.

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This information is current as of March 19, 2018

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