

Multimodal Imaging of Astrocytic Hamartomas in Tuberous Sclerosis

Avaliação Imagiológica Multimodal de Hamartomas Astrocíticos na Esclerose Tuberosa

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A 13-year-old female, diagnosed with tuberous sclerosis (TS), underwent fundus photography, fundus autofluorescence (FAF) and spectral-domain optical coherence tomography (OCT). Fundus assessment revealed the classic “fish-egg” appearance of astrocytic hamartomas located near the superior temporal vascular arcade and an optic disc pseudoedema in the right eye. FAF imaging highlighted an additional multinodular lesion in the peripapillary region (A), which seems to protrude and obscure the optic disc and retinal vessels, suggesting an astrocytic origin, as opposed to optic disc drusen. In the left eye, a more prominent multinodular hamartoma was identified inferior to the optic disc in the left eye (B). The tomographic structure and internal reflectivity of these lesions are illustrated in SD-OCT scans (images C and D for right and left eyes, respectively).

Retinal astrocytic hamartomas are observed in 30%-50% of patients with TS and represent a major finding for clinical diagnosis. Other ocular structures may be affected, including the optic nerve, iris, and ciliary epithelium, may be involved.^{1,2}

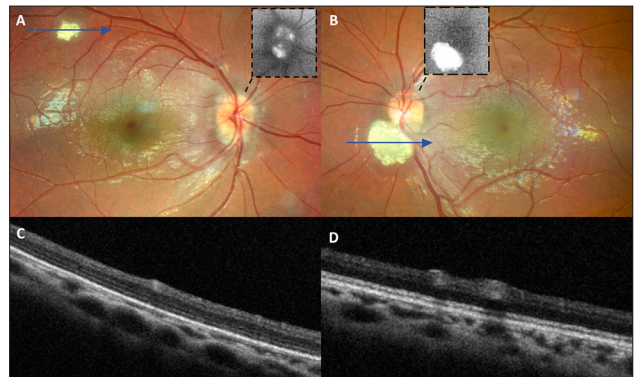


Figure 1. Astrocytic hamartomas located near the superior temporal vascular arcade (A) and in peripapillary region (B), showing the classic multinodular appearance and hyperautofluorescence in FAF. C and D illustrate the tomographic appearance of the lesions in the right and left eye, respectively.

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GCT: Diagnostic research and drafting of the text.

AC e AVE: Final revisions and scientific support.

GCT: Investigação diagnóstica e redação do texto.

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