

# Periventricular pleomorphic xanthoastrocytoma (PXA)

## An uncommon tumor at an atypical site

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The patient was a 15-year-old male with seizures. Diagnostic imaging demonstrated a solid-cystic expansive lesion, centered on the white matter of the left temporo-occipital paratrighonal region, with growth into the ventricular system (Fig 1).

Histological analysis led to the diagnosis of pleomorphic xanthoastrocytoma (PXA) (Fig 2).

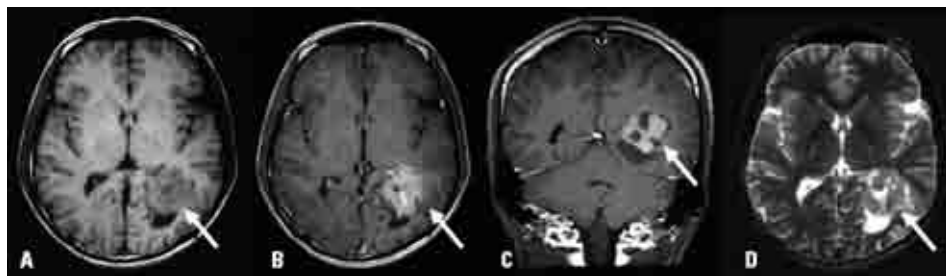
PXA is classically a tumor with a predilection for superficial growth affecting young adults, and is rarely seen in paratrighonal/intraventricular locations. The tumor in this case may have arisen in and around the ventricle or from subcortical white matter.

The patient has now been followed for ten years. The

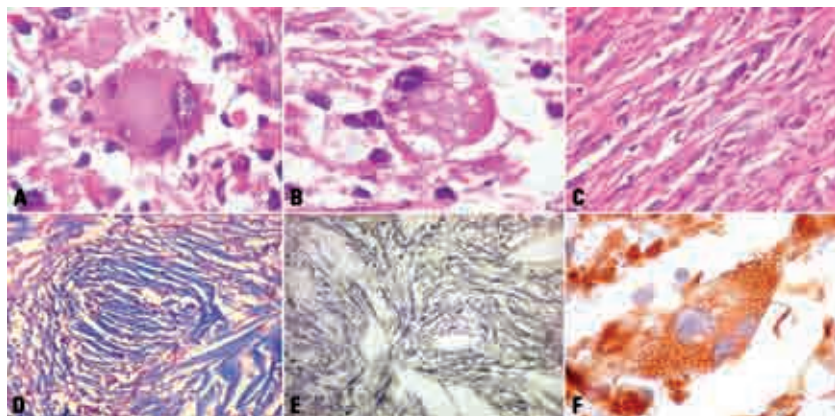
tumor recurred after five years without anaplastic transformation. He appears to be free of disease at present.

### REFERENCES

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**Fig 1.** [A] Axial T1 weighted image (WI) demonstrating a left temporo-occipital lesion of low to iso-intensity. Axial [B] and coronal [C] T1 WI after gadolinium showing a heterogeneously enhanced lesion. [D] Axial T2 WI demonstrating iso to high intensity of the lesion.



**Fig 2.** [A] Multinucleated tumor cell featuring prominent nuclear atypia and abundant eosinophilic cytoplasm, reminiscent of gemistocytic astrocytes. [B] Aberrant cell with numerous cytoplasmic vacuoles, possibly containing lipids. [C] Large areas of tumor formed by spindle cells in bundles, often with large hyperchromatic nuclei. [D] Masson's trichrome staining, revealing thick collagen fibers among the tumor cells. [E] Reticulin fibers distributed at sites similar to those of collagen fibers. [F] A xanthomatous three-nucleated tumor cell with cytoplasmic positivity for GFAP (glial fibrillary acidic protein), thus demonstrating its astrocytic lineage.

### XANTOASTROCITOMA PLEOMÓRFICO PERIVENTRICULAR: UM TUMOR INCOMUM EM LOCALIZAÇÃO ATÍPICA

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