

Pt. Name:	إبراهيم علي إبراهيم علي العاقل		Lab Number:	0244-2026	
Pt. Age:	11 years.	Gender:	Male	Received date:	2026-01-13
Referred By:	د/ محمد الخيشني		Reported date:	2026-01-17	

PATHOLOGY REPORT

Clinical Information.	Rt temporal brain tumor. ?
Nature of specimen.	Total resection

GROSS:

Soft tissue fragments collectively measured 3x2x1.2 cm, totally embedded.

MICROSCOPIC:

The examined sections show an astrocytic tumor composed of strikingly pleomorphic tumor cells, including large bizarre astrocytes with irregular, often hyperchromatic nuclei and abundant cytoplasm, many showing xanthomatous change. Occasional multinucleated cells are identified. Eosinophilic granular bodies are scattered within the tumor, and a chronic inflammatory background with lipid-laden macrophages is present. Frequent areas of calcification and areas of old hemorrhage with hemosiderin deposition are also noted. Mitotic activity is low, and there is no evidence of necrosis or microvascular proliferation in the sections examined.

For further confirmation and proper classification of the tumor, immunohistochemical studies are recommended. These include GFAP to support astrocytic differentiation and CD34 to evaluate for the characteristic staining pattern often seen in pleomorphic xanthoastrocytoma. OLIG2 is advised to help exclude a diffusely infiltrating glioma. Neuronal markers such as synaptophysin are recommended to rule out a mixed neuronal–glial tumor, particularly ganglioglioma. Assessment of the proliferative index using Ki-67 will assist in grading and in identifying any anaplastic features.

DIAGNOSIS:

Rt. Brain tumor, total resection:

- Consistent with pleomorphic xanthoastrocytoma, CNS WHO grade 2.
- Recommended for confirmatory immunohistochemical studies (GFAP, CD34, OLIG2, Synaptophysin and Ki-67).

Pathologist

Prof. Dr. Neveen Tahoun, MD, PhD
17-01-2026

Nerveen Tahoun