

CASE 081

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HIGHLIGHT OF THE CASE:

A 5-years-old boy with a pineal mass.

CLINICAL HISTORY AND IMAGING FINDINGS:

The magnetic resonance imaging of the brain revealed a 4.3 x 4.7 x 4.9 cm well-defined, heterogeneously enhancing, and solid and cystic mass in the pineal region. The solid enhancing part showed mild diffusion restriction. Anteriorly, this lesion was producing mass effect and compression of the midbrain, aqueduct, and third ventricle. Superiorly, the mass was causing mass effect on the fornix and indenting the lateral ventricle. Inferiorly it was compressing the 4th ventricle and causing mild mass effect on the cerebellum and brain stem. We received one paraffin block of the case for review.

PATHOLOGICAL AND IMMUNOHISTOCHEMICAL FEATURES:

The section examined showed a tumor arranged in lobules and sheets separated by fibrovascular septae. The tumor was moderately cellular. The constituent tumor cells had moderate eosinophilic cytoplasm, and round nuclei with stippled chromatin. Homer-Wright rosettes were seen. Mitotic count was in the range of 1-2/2.5 mm². No necrosis, microvascular proliferation, or nuclear atypia was observed.

On immunohistochemical evaluation, the tumor cells were positive for neuron specific enolase (NSE), neurofilament protein (NFP; focally), s100 and were negative for synaptophysin, chromogranin, glial fibrillary acid protein (GFAP), SALL4, OLIG2, epithelial membrane antigen (EMA), H3K27M, and pankeratin. INI1 and H3K27Me3 were retained in the neoplastic cells. The Ki-67 proliferation index is 12%.