

or large lobules of monomorphic round cells that appear more differentiated than those observed in pineoblastoma. The index tumor on the contrary showed tumor cells arranged in papillae and sheets and exhibited PanCK positivity. The biologic behavior of PPTID tumor is variable and may correspond to WHO grade II or III. It has a potential for local recurrence and craniospinal dissemination, therefore, it is important to exclude this tumor among other possibilities.

This case had no areas resembling small blue round cell tumor composed of highly cellular, patternless sheets of densely packed small cells. No necrosis or high mitotic index was observed. Hence, pineoblastoma was not considered in the differentials. Metastatic carcinoma, choroid plexus papilloma and germ cell tumor were the other differential diagnosis that were considered. Low Ki67 with CK7 and CK20 negativity excludes metastatic papillary carcinoma of unknown primary.¹ Papillary ependymomas are GFAP positive, and the current case was negative for GFAP. Papillary meningioma was not a possibility as the index tumor was PanCK positive. Oct3/4 negativity ruled out the possibility of germ cell tumor.

CONCLUSION

Tumors of the pineal gland are rare and detailed histomorphologic and immunohistochemical analysis of these tumors is necessary to determine the correct diagnosis. The index case highlights the importance of identifying a papillary morphology and PanCK positivity in neuroepithelial tumor. Stereotactic biopsies usually have small tumor content hence a judicious use of immunohistochemical panel is recommended. The panel should include PanCK, CK18, synaptophysin, GFAP and Kir7.1. More information is required through larger series to determine the prognosis and standard treatment protocol of this rare entity.