34TH ANNUAL MEETING

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NASBS
North American Skull Base Society

CASE REPORT: PAPILLARY TUMOR OF THE PINEAL REGION (PTRP)

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INTRODUCTION

Papillary tumors of the pineal gland (PTPG) are rare, slow-growing neoplasms that can cause significant neurological symptoms due to their location. Diagnosis is based on imaging exams and histopathological confirmation. Treatment includes surgery, radiotherapy, and continuous follow-up.

OBJECTIVE

Report of Two Cases of PTPG, Emphasizing Diagnosis, Treatment, and Clinical Evolution

CASE REPORT 1

Male patient, 29 years old, with intense and progressive headache for 9 months. Imaging exams revealed an expansive formation in the pineal region (2.2 x 1.9 cm), with obstruction of the cerebral aqueduct and moderate to severe hydrocephalus.

Figure 1 – Magnetic Resonance Imaging (MRI) of the brain revealed a solid expansive formation located in the pineal region, measuring approximately 2.2 x 1.9 cm.

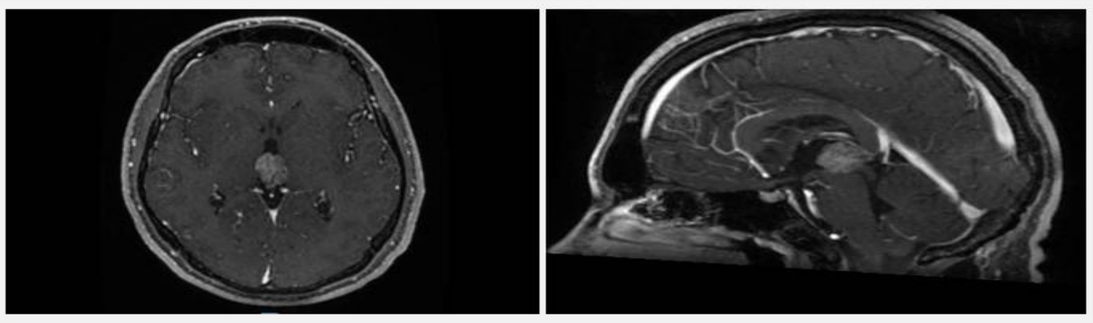


Figure 2 - The patient underwent a median suboccipital craniotomy, with biopsy of the lesion and decompression of the cerebral aqueduct.

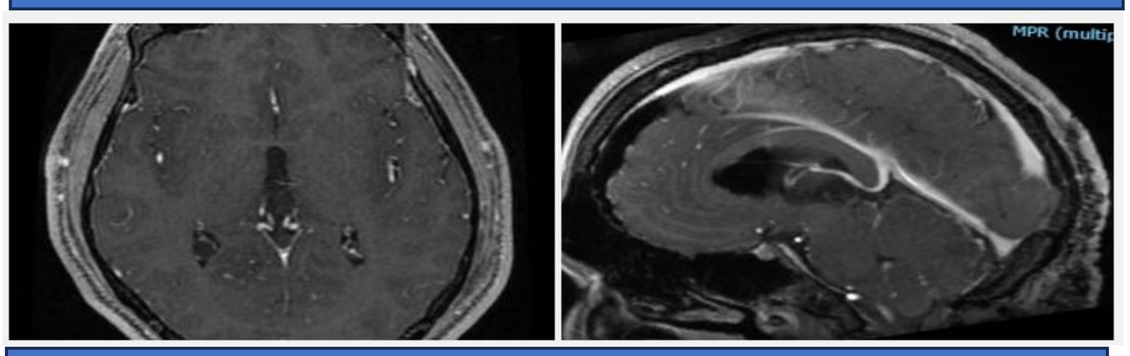


Figure 3 - The patient was kept under observation for four years, and recurrence was observed. A new surgical approach was considered, but the patient chose to undergo radiotherapy. After radiotherapy, the lesion progressed, and the patient required reoperation.

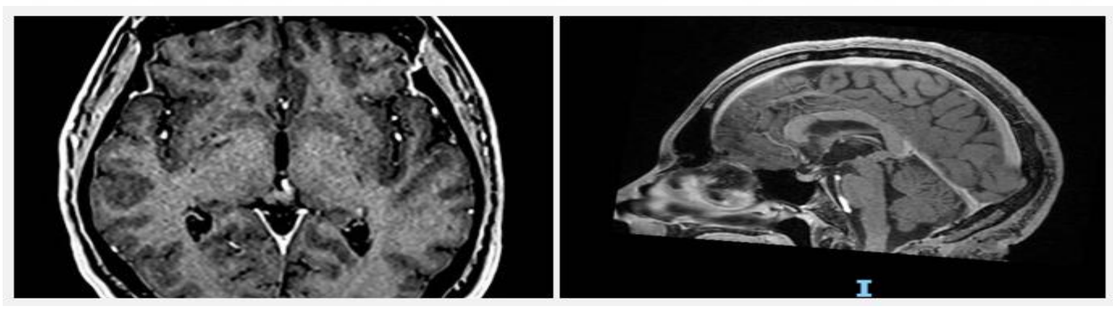


Figure 4 – Post - radiotherapy and pre - operative, 2022.

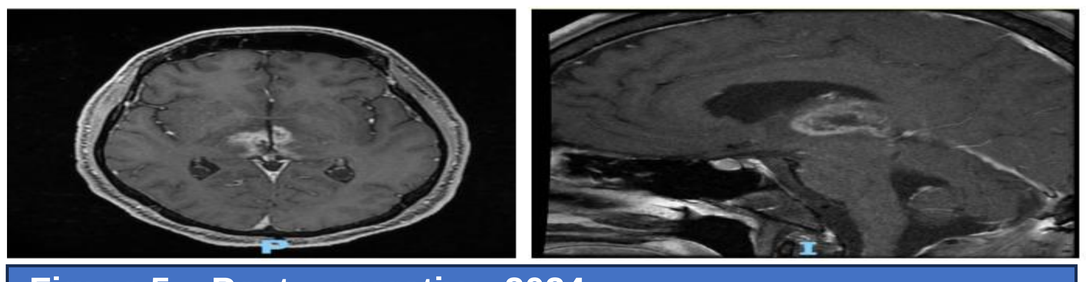
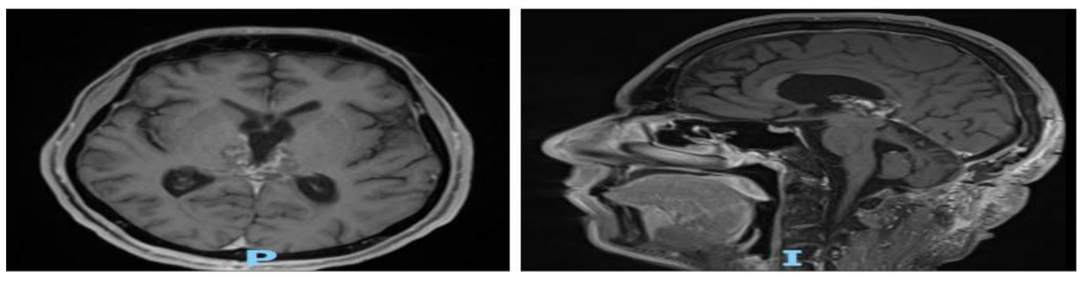


Figure 5 – Post - operative, 2024.



CASE REPORT 2

Female patient, 16 years old, In 2013, the patient presented with a headache due to a tumor in the pineal region, which was resected in the same year. Since then, the patient has been asymptomatic, undergoing routine follow-up exams. However, in 2017 and 2023, tumor recurrence was identified, and the patient underwent surgical procedures for tumor resection.

Figure 6 - In August 2013, the patient developed headache and episodes of vomiting. The condition evolved into hydrocephalus. The patient underwent biopsy with ventriculoperitoneal shunt (VPD) at another service and was subsequently referred to our neurosurgery service.

Figure 6.1- Pre - operative

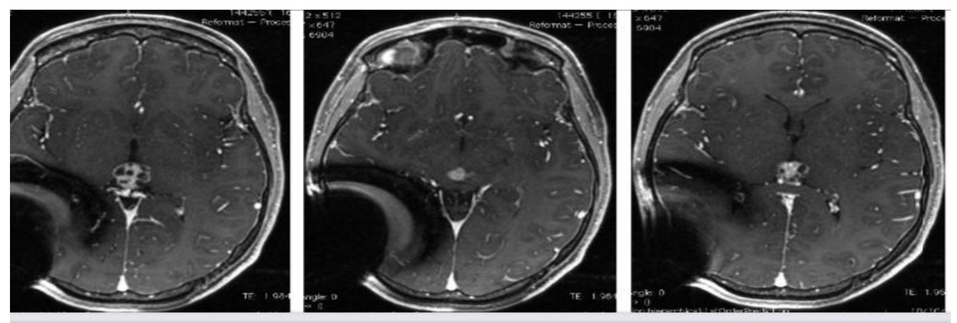


Figure 6.2- Post - operative

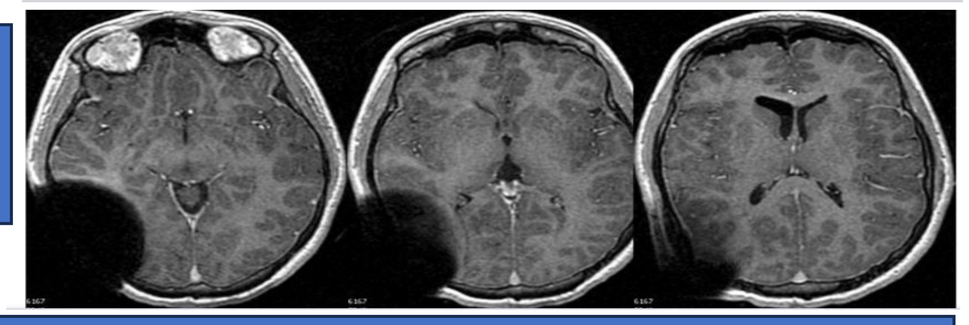


Figure 7 – Tumor recurrence, pre and post - operative, 2024.

Figure 7.1- Pre - operative

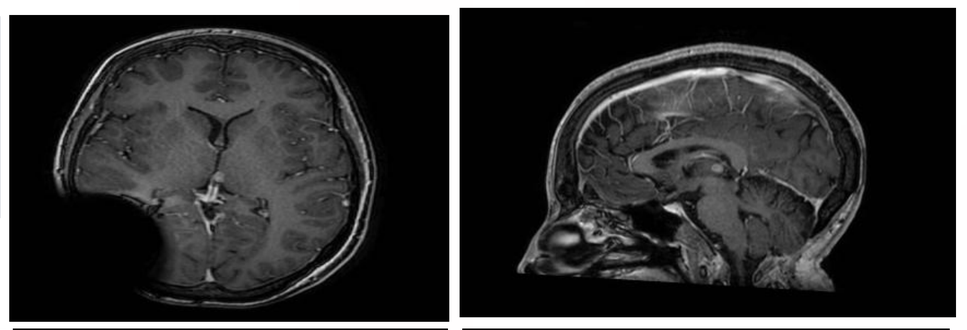


Figure 7.2 - Pre - operative

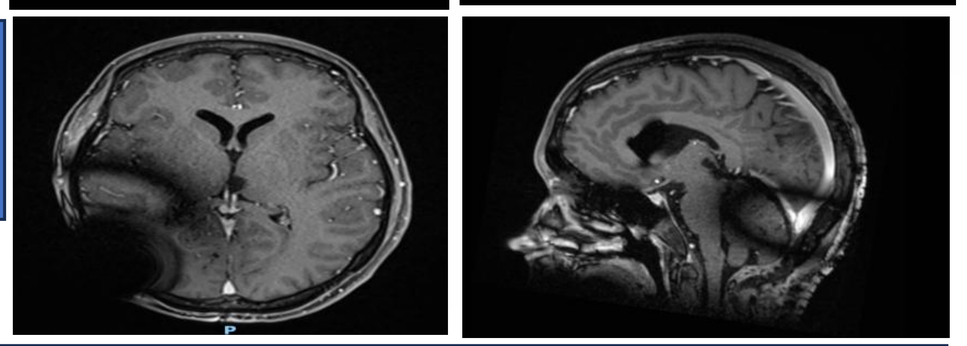


Figure 8 - Surgical specimen.

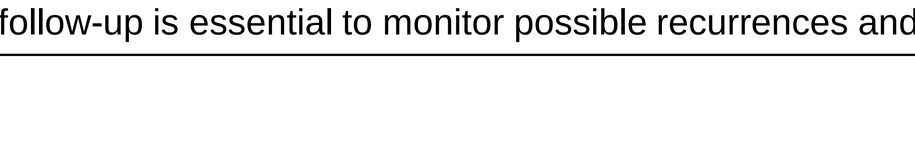
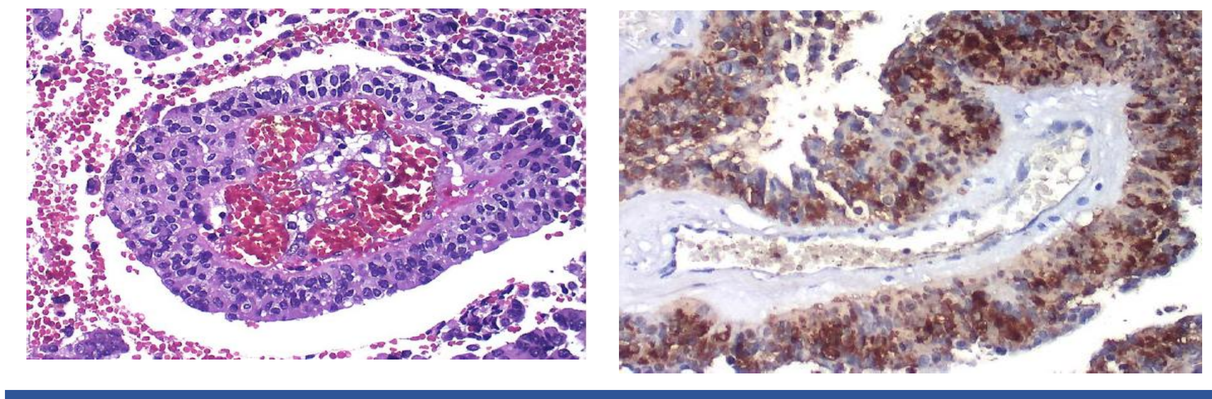


Figure 9 – A tumor with an epithelial appearance, featuring papillary structures and more densely cellular areas, often showing ependymal-like differentiation (true rosettes and tubes).



CONCLUSION

Early identification and surgical management of TPRP are essential for disease control and patient clinical improvement. Continuous neurological follow-up is essential to monitor possible recurrences and complications.