(International Print/Online Journal)

SJIF IMPACT FACTOR: 5.565 PUBMED-National Library of Medicine ID-101739732

ISSN (Print): 2209-2870 ISSN (Online): 2209-2862





International Journal of Medical Science and Current Research (IJMSCR)

Available online at: www.ijmscr.com Volume 4, Issue 3, Page No: 68-70

May-June 2021

A Rare Case of Papillary Glioneural Tumor: A Case Report

Tushar Soni¹ Mahendra Patel²*, Vikrant Pawar³ ¹Professor, ^{2,3}Resident

Department of Neurosurgery, Smt. NHL Municipal Medical College & S.V.P. Hospital, Ahmedabad, Gujarat, India

*Corresponding Author: Mahendra Patel

Department of Neurosurgery, Smt. NHL Municipal Medical College & S.V.P. Hospital, Ahmedabad, Gujarat, India

Type of Publication: Case Report

Conflicts of Interest: Nil

ABSTRACT Introduction:

Brain papillary glioneural tumor is a rare tumor ususally occurs in adolescent and young adults. Male and female are equally affected. These tumor usually have biphasic morphology, it includes glial component and neuronal component. The glial component includes astrocytic cells and neural component include neurocyte and ganglionic cells.

Aims and objectives: To study to have proper pre-operative surgically planning of tumor excision, intra operative complete excision of tumor, post operative patient should come out without any neurological deficit. Case report: we report a case of 18 year healthy lady come to our opd with history of headache since 2 months, vomiting and left upper limb weakness since 2 days. On examination she was conscious oriented and vitally stable with left sided upper limb weakness was present. Her MRI Brain s/o right side fronto parietal region tumor. After all necessary work up surgery was planned. Right side fronto temporo parietal craniotomy and excision of tumor was done, patient was discharged without any neurological defecit.

Conclusion: brain papillary glioneural tumor is a rare tumor. Usually seen in young age group. If after proper pre-operative work up surgery is planned, these patient ususally have good prognosis and post operatively do not have neurological deficit. The long term disease free survival is reported to be 20 years. Regular follow up is advised to these patient to watch for any recurrence of tumor.

Keywords: papillary glioneural tumour, rare tumour, paediatric malignancies

INTRODUCTION

Papillary glioneural tumor is rare brain tumor usually present in adolescent and yound adults (early 20's). Male and female are equally affected. These tumors usually have biphasic morphology. It includes glial component and neuronal component and rarely mini gemistocyte like cells. The glial component include astrocytic cells and neuronal componenet includes neurocytes and ganglion cells. Fibroblast growth factor receptor mutation is also some time seen in these tumors.

CASE REPORT

We reported a case of a 18 year young healthy lady come to our opd with headache since 2 months vomiting since 2 days left side upper limb weakness since 1 day on clinical examination : she was conscious, oriented, obeying command and vitally stable On neurological examination: left side upper limb power was 4-, all other limb power was 4+. Her both eye fundus examination was done which shows papilledema of both eyes. MRI brain s/o well

defined, heterogeneous space occupying lesion in right fronto parietal region of size approximately 71mm*46mm*38mm with few areas of internal calcification with moderate perilesional edema was Present.

After all necessary pre-operative work up surgery was planned. Right side fronto temporo parietal craniotomy and excision of tumor was done. HPR came out to be papillary glioneural tumor. Post-operative on 10th day sutures were removed and patient was discharged without any neurological deficit.

Conclusion

PGNT is a rare tumor in early 20's age group, rarely seen in middle age and elderly age group. It mostly occur in supratentorial region adjacent to the lateral ventricles. PGNT is considered as a low grade neoplasm described under category of who grade 1 in who classification. A biphasic pattern is the hallmark of this tumor. If proper therapy is planned these patient usually have a favorable prognosis without any neurological deficit. The long time disease free survival is reported to be around 20 years.

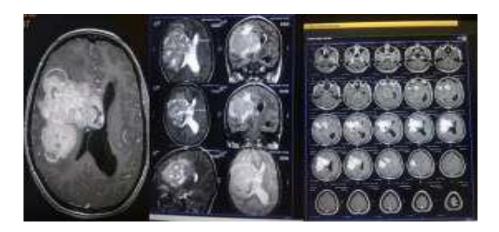


Figure 1: Preoperative MRI Brain

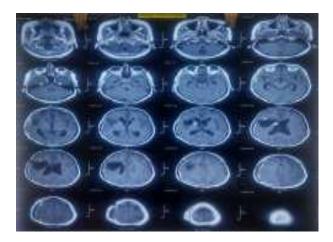


Figure 2: Postoperative CT scan Brain

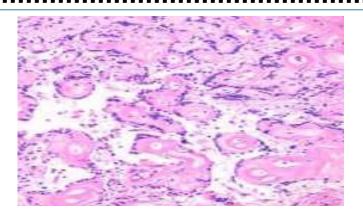


Figure 3: Histopathology



Figure 4: Postoperative photograph

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