



A CASE REPORT ON PAPILLARY MENINGIOMA AT RIMS, RANCHI

Dr. Ekta Kumari	JRA-III, Department of Pathology, RIMS, Ranchi.
Dr. Ajay Kumar Srivastava	HOD and Professor, Department of Pathology, RIMS, Ranchi.
Dr. Rabindra Kumar Singh	Associate Professor, Department of Pathology, RIMS, Ranchi.
Dr. Shikha Shalini Toppo*	JRA-III, Department of Pathology, RIMS, Ranchi. *Corresponding Author

ABSTRACT Papillary meningioma is a rare meningeal tumor classified as Grade III by the World Health Organization. This is a very rare malignant form of meningioma. These are associated with aggressive clinical courses as compared to other meningiomas. Here we report an unusual case of papillary meningioma in a 47 year male. Papillary meningioma has specific clinical and histopathological characteristics.

KEYWORDS : Papillary meningioma, histopathology, grade III meningioma

INTRODUCTION:

Meningiomas are mostly benign tumors originating from the arachnoid cap cells, representing 13-26% of all intracranial tumours.¹ Papillary meningioma is a rare, aggressive variant of meningioma. It accounts for less than 1% of all meningiomas.² Papillary meningioma is a rare subtype of malignant meningiomas, which is classified by the World Health Organization as Grade III.

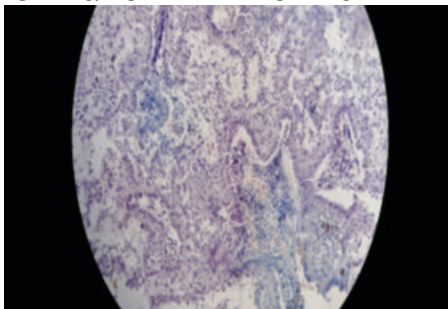
Because of the lack of large sample size case studies, many of the specific characteristics of papillary meningioma are unclear.³ Papillary meningioma has a tendency to present in middle-aged patients, and it has specific clinical and histopathological characteristics.⁴ Malignant meningioma incidence did not differ by sex for any age grouping.⁵ Papillary meningioma is an extremely rare malignant lesion with high degree of invasiveness, high recurrence rate, and perivascular pseudopapillary structure.⁶

MATERIAL AND METHODS:

It is a case study, performed in the Department of Pathology, RIMS, Ranchi. Study subject includes a 47 year old patient whose surgically excised specimen from the right occipital region of Brain was sent to the department of pathology in may 2022. Surgically excised mass was transferred to a jar containing 10% formaldehyde. Histopathological examination of all the specimens was done by routine paraffin wax sections and was stained by Haematoxylin and Eosin (H&E).

CASE REPORT:

A 47 year old male patient presented with complaints of headache, giddiness and episodic loss of consciousness since August 2021. Later he developed symptoms of weakness of left upper and lower limbs for 2 months for which he was brought to RIMS for further management. Hematological investigations showed no obvious abnormalities but CT Scan of brain showed space occupying lesion in right occipital region. Patient was operated for the same and an excised sample was sent to the pathology department for histopathological examination.



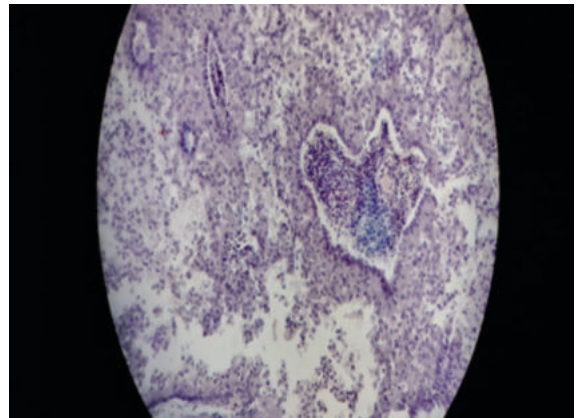
Microscopy (40X) Picture Of Papillary Meningioma

Gross Description:

Excised mass measuring 4cm×3cm×3cm, gray white in color and firm in consistency after being fixed in formalin. Cut surface showed a homogenous grey white appearance.

Microscopy:

Sections showed round to columnar epithelial cells with basally located round to oval nuclei arranged in papillary pattern having a vascular core and loose connective tissue core



Microscopy (10X) Of Papillary Meningioma

DISCUSSION:

Papillary meningioma is a malignant variant of meningioma and was first described in 1938 by Cushing and Eisenhardt [3], in which they reported a papillary pattern in a meningioma showing intracerebral recurrence and pulmonary metastasis.⁶ Papillary meningiomas are more commonly seen in male patients.⁸ In one of the largest series of PM reported, Ludwin et al [4] described the clinicopathological features of 17 cases and found that compared to other variants of meningiomas, PM were more frequent in children 8/17(47%). Mitoses were seen in 7/17(41%), local recurrences in 10/17(59%), brain invasion in 8/17(47%), and extracranial metastasis in 4/17(23.5%).⁹ Patients with papillary meningiomas usually manifest symptoms caused by intracranial hypertension such as severe headache, vomiting and blurred vision which are notably alleviated after resection of tumor.¹⁰ Exact tumor delineation, assessment of tumor growth, and pathophysiological parameters were recently addressed by "advanced" MRI and PET.¹¹

Postoperative Course:

The patient was diagnosed in March 2022 and in April 2022 CT Scan thorax showed involvement of left lung also by tumor mass but so far did not develop any respiratory symptom. The patient was operated in

April 2022 and remains asymptomatic after being operated till July 2022 with remission of all the complaints.

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