Cerebellar Medulloblastoma in a 60 Years Old Male- A Case Report

Authors
Dr. Meena Mittal, MD¹, Prof. Dr. C.V. Kulkarni, MD², Dr. Roma Singh MD³

¹Associate Professor, Department of Pathology M.Y. Hospital, Indore (MP) 452001 India Mob: +91 9826388240
²Professor & Head of department of Pathology Department of Pathology M.Y. Hospital, Indore (MP) 452001 India Mob: +91 9303232486
³Chief Resident Department of Pathology M.Y. Hospital, Indore (MP.) 452001 India Mob: +91-7566702709
Email Id: meenamittal10@gmail.com, dr_chandrahaskulkarni@yahoo.com

Corresponding Author
Dr. Roma Singh MD
Chief Resident Department of Pathology
M.Y. Hospital, Indore (MP) 452001 India Mob: +91-7566702709

Abstract:
Medulloblastoma is a tumour of neuroepithelial origin. Although Medulloblastoma is the most common central nervous system malignancy in children, cases are much less common in adults. Moreover, in adulthood 80% of the Medulloblastoma arise in the 21-40 age groups. During intraoperative consultation, the pathologist should consider Medulloblastoma in the differential diagnosis of a cerebellar mass in the elderly because cytological features may overlap with metastatic small cell carcinoma or lymphoma. We present a case of Medulloblastoma in a 60-year-old man and review the literature on the subject.

Case report: Here is a case of 60 years old man who presented to our hospital with complains of pain over the scalp, occasional vomiting, giddiness, headache and weakness over a period of four months. Magnetic resonance imaging findings revealed a lesion measuring 4.2 X 3.6 X 2.5 cm in the right cerebellar region in the posterior paramedian region resulting in effacement of the underlying 4th ventricle. Features were suggestive of a high grade lesion/ glioma/ metastatic lesion. Oncologic staging for systemic tumours were negative.

Conclusion: Medulloblastoma is a rare cerebellar malignancy in elderly and tend to occur more so in a lateral position. One should always consider systemic tumours in the differential diagnosis in a cerebellar lesion.
INTRODUCTION
Cerebelloblastoma is the most common CNS malignancy in children. And accounts less then 1% of brain tumor in adults. Exceedingly rare in patients older than 60 years. Consider Medulloblastoma in the differential diagnosis.

CASE REPORT
A 60 years old man who presented to the clinician of M.Y hospital Indore with complains of pain over the scalp, occasional vomiting, giddiness, headache and weakness over a period of four months .He denied use of any medication. Systemic examination revealed no organomegaly or lymphadenopathy. Complete blood examination revealed leukocytosis (with neutrophilic predominance) and elevated erythrocyte sedimentation rate (44mm/ at the end of one hour).

MRI Findings: revealed a lesion measuring 4.2 X 3.6 X 2.5 cm in the right cerebellar region, with effacement of the underlying 4th ventricle. The lesion was homogenously hyperintense on T2 and hypointense on T1..No calcification was seen.Features suggested a high grade lesion/ glioma/ metastatic lesion. Oncologic staging for systemic tumours were negative.

Microscopic examination - Revealed small round tumour cells with hyperchromatic nuclei and scanty cytoplasm leading to moulding of cells. At places the tumours cells were forming perivascular pseudorossetes.

DISCUSSION
Medulloblastoma is a malignant invasive embryonal tumour of cerebellum. and arises from nests of germinal cells. It is a highly aggressive tumour.and corresponds to WHO grade IV. Laterality of the tumour increases with age. Seeding via CSF pathways is common Clinical manifestation mainly are truncal ataxia, disturbed gai, headache, morning vomiting, lethargy and photophobia.

The variants of medulloblastoma includes
- Classic variant :which microscopically shows densely packed round to oval cells ,densely hyperchromatic nuclei and scanty cytoplasm with occasional rosettes.
- Desmoplastic variant : which microscopically shows Nodular, reticulin free zones Surrounded by densely packed proliferative cells The nodules have reduced cellularity
- Medulloblastoma with extensive nodularity.
- Large cell medulloblastoma.
- Medullomyoblastoma.
- Melanotic medulloblastoma

MRI findings in both adults and children differ.Majority of cerebellar tumors are metastasis. (Rosenblum et al 2000) Few case reports for those over 45 years (Salvati and Cervoni 2000 ,Sarkar et al 2002, Malheiros et al 2002) Literature survey revealed few cases. 9
CONCLUSION
Medulloblastoma is a rare cerebellar malignancy in elderly and tend to occur more so in a lateral position. One should always consider systemic tumours in the differential diagnosis in a cerebellar lesion. Our patient was an elderly man and was diagnosed with medulloblastoma a rare tumour in this age group. The diagnosis was proved both by histology and immunohistochemistry Moreover the oncological staging for systemic tumours were negative which excluded any secondaries.

REFERENCES