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Case Report

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MEDULLOBLASTOMA OF THE POSTERIOR CEREBRAL FOSSA IN ADULTS : A CASE REPORT WITH REVIEW OF THE LITERATURE

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SUMMARY

Medulloblastoma is a rare tumo,[1] especially in adults, it is a malignant primitive neuroectodermal tumor,[2] representing less than 1% of brain tumors. We report a clinical case of medulloblastoma in a 26-year-old woman. Through this, we want to emphasize that medulloblastoma is possible in adults, and that it should be part of the diagnoses to be considered.

KEYWORDS: Medulloblastoma, Adult.

INTRODUCTION

Medulloblastoma is a rare tumor[1] especially in adults, it is a malignant primitive neuroectodermal tumor,[2] representing less than 1% of brain tumors.

We report a clinical case of medulloblastoma in a 26-year-old woman.

Clinical case

A 26-year-old patient with no significant pathological history, who presents with dizziness, headache and vomiting evolving in a context of preservation of her general condition, whose evolution was marked by the installation of right hemiparesis, which motivated the patient went to the emergency room.

The patient underwent a cerebral scanner which found a tumoral process in the posterior cerebral fossa responsible for upstream hydrocephalus with signs of incipient transependymal resorption and onset of amygdala engagement.

Cerebral MRI in favor of an extension of a clearly malignant tumoral process of the right cerebellar hemispheric seat surrounded by a perilesional edema which is responsible for a mass effect on the 4th ventricle with triventricular dilation upstream and transepididymal resorption of the CSF, this process is responsible for tonsillar herniation through the Foramen magnum.

Operated with macroscopically total excision with ventriculoperitoneal diversion Anatomopathology in favor of a grade 4 medulloblastoma with immunohistochemistry a GAB1 positive medulloblastoma, P53 negative type SHH P53 wild type, grade 4 (WHO 2021).

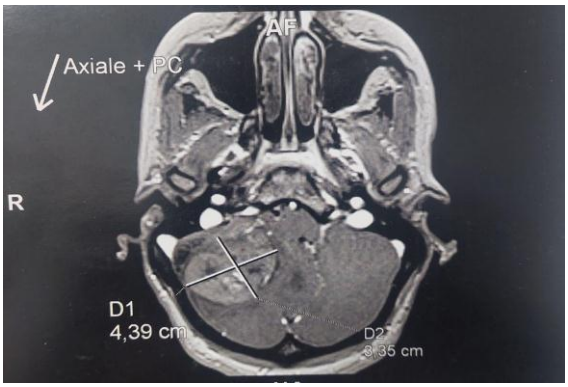

Figure 1: Axial section of a cerebral MRI showing a lesional process in the right cerebellar hemisphere.

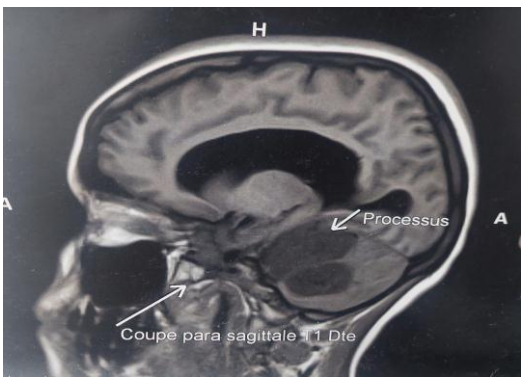

Figure 2: Cerebral MRI in parasagittal section T1-weighted sequence with gadolinium which shows a tumoral process of the right cerebellar hemisphere.

Spinal MRI is unremarkable

Postoperative evaluation MRI: Lesional process at the level of the right cerebellar hemisphere surrounded by a perilesional edema 42*25*50 mm and exerting a mass effect on the temporal lobe.

- Opinion surgery for possible recovery does not find the indication
- treated by radiotherapy on the thoracolumbar spine total dose 36 Gy, 1.80 Gy per fraction and On the posterior cerebral fossa with a total dose of 18 GY, 1.80 per fraction And on the brain total dose of 36 Gy, 1.80 Gy per fraction.
- Followed by adjuvant chemotherapy such as Vincristine Cisplatin D1 in hospital, vincristine D7, D14 -cyclophosphamide D21, D22 then rest for 21 days then resumed. protocol every 6 weeks.

DISCUSSION

Medulloblastoma is a rare tumor,[1] especially in adults, it is a malignant primitive neuroectodermal tumor,[2] representing less than 1% of brain tumors,[3]

The age of 26 is close to that of literature studies (between 26 and 31 years old).[4,5]

Clinically, medulloblastoma can result in an intracranial hypertension syndrome present in 60% to 93% of cases.[5,6]

Medulloblastoma is the intracerebral tumor which has the greatest propensity to give rise to primarily leptomeningeal and sometimes intraparenchymal metastases.

They are mainly observed in the brain in the form of nodular superficial lesions and can clinically result in general cognitive or focal disorders.[7] Spinal localizations can be manifested by medullary and/or radicular signs.

The main differential diagnosis to be considered is atypical rhabdoid and teratoid tumor, the prognosis of which is much worse.[8]

Magnetic resonance imaging is the reference examination to request for exploration of the posterior cerebral fossa; it shows a well-limited mass in T1 hyposignal and T2 hypersignal with moderate and heterogeneous enhancement after injection of gadolinium.

In comparison with the child, the desmoplastic variant is more frequent than the classic variant (30 to 40%).[9,10]

Adjuvant treatment with radiotherapy ± chemotherapy is essential. Neurological sequelae remain the most frequent, found in 13% of cases.[11]

CONCLUSION

Medulloblastoma in adults is rare, among the diagnoses to be considered before a tumor of the posterior cerebral fossa, although scientific progress has improved its management, a multidisciplinary collaboration between neurosurgeons, oncologists and radiotherapists is the only guarantor of improved prognosis.

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