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Distant Brain Metastasis from an Esthesioneuroblastoma, Case Report

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Resume :
Introduction: *Esthesioneuroblastoma (ENB), also called olfactory neuroblastoma, is a rare tumor whose origin is the olfactory neuroepithelium, these tumors often present a variable biological activity ranging from indolent growth to a very aggressive neoplasm with fast and extensive metastasis, and a survival limited to few months.*
Description: *The case we are reporting is of a young 30-year-old woman, with an esthesioneuroblastoma which previously undergone surgery on in the ENT department, followed by an adjuvant treatment "chemoradiotherapy",*
The patient presented in our consultation with rapid onset left hemiplegia, radiological exploration revealed a right rolandic lesion measuring 05cm in long axis which appears extra-axial with a mass effect on the cerebral parenchyma and significant peri-lesional edema.
Result and discussion: *The patient undergone surgery, finding a lesion very adherent to the dura mater, and infiltrating the cerebral parenchyma, The postoperative course was favorable with total recovery of the deficit, The post-surgery CT find no residual tumor, the anatomopathological study came back in favor of a metastasis of an esthesioneuroblastoma, the patient is thus referred for a possible adjuvant treatment.*
The review of the literature finds that distant metastasis of an esthesioneuroblastoma are very rare lesions with a poor prognosis and the average survival is for few months, the management is based mainly on maximum surgical excision and intensive chemotherapy.
Conclusion: *Distant brain metastases from esthesioneuroblastoma are rare but serious lesions with a poor prognosis and the average survival is for few months, Intensive surgery and chemotherapy are the only alternatives for a better prognosis.*
Key words: *Esthesioneuroblastoma; processing; surgery; radiotherapy; chemotherapy; metastasis*

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I. Introduction:

Esthesioneuroblastoma (ENB), also called olfactory neuroblastoma, is a rare tumor whose origin is the olfactory neuroepithelium, its incidence is 0.4 cases per million inhabitants, it is a tumor of the anterior skull base, its treatment is surgical, and followed by chemotherapy and radiotherapy to prevent local recurrences, these tumors often present a variable biological activity ranging from indolent growth to a very aggressive neoplasm with extensive metastasis, and the survival is limited to a few months(1-2).

II. Clinical Case :

We report the case of a young 31-year-old woman, housewife, with a history of hypertension under treatment, and an Esthesioneuroblastoma which undergone surgery 2 years ago with total excision followed by radiochemotherapy with a favorable radiological control.

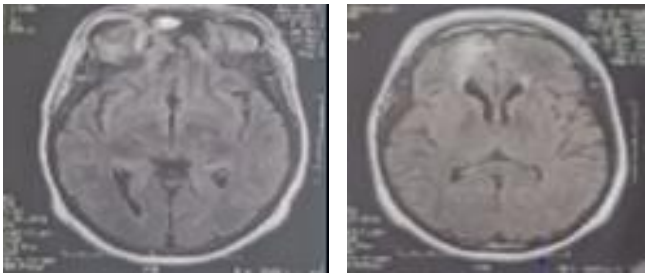

Figure 1 : Brain MRI 02 years after the intervention

The patient presented for 02 months a left hemiparesis, evolving rapidly, until a total and proportional hemiplegia, a cerebral CT then a cerebral MRI were performed and show a voluminous right rolandic lesion, with large edema and a mass effect on the neighboring structures, this lesion appears extradural, with infiltration of the parietal bone.

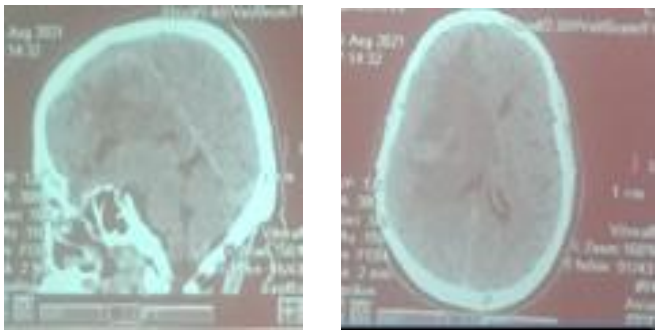

Figure 2: CT scan showing the tumor.

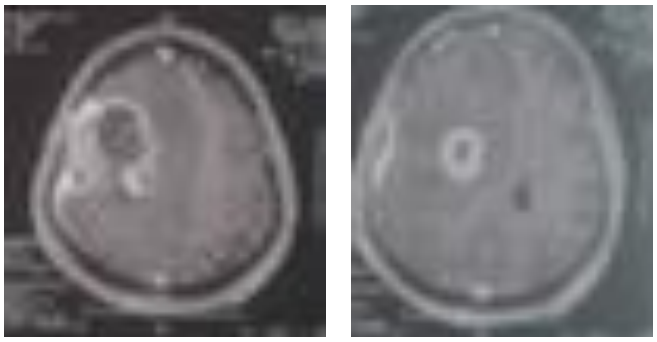

Figure3 : Brain MRI showing the tumor.

The patient undergone surgery; the lesion was adherent to the dura mater and infiltrates the bone, there was no obvious cleavage plane in depth, however the excision of the lesion was macroscopically total.

III. Results:

The patient recovered completely from the deficit after surgery, and began to ambulate after 24 hours.

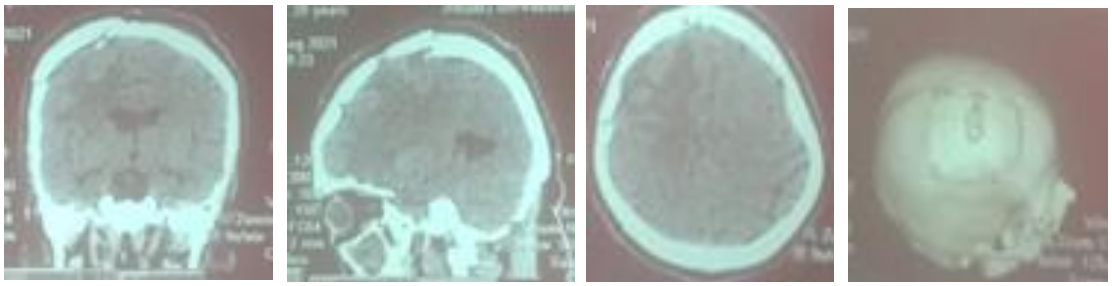

Figure 3 :post-operative CT scan

The anatomopathological study came back in favor of a metastasis of an Esthesioneuroblastoma
The patient was referred for functional rehabilitation.
After 02 months the patient presented partial seizures.
A brain CT scan found tumor recurrence, the patient was referred for adjuvant chemoradiotherapy.
A control MRI done 06 months later show a stabilization of the metastasis.

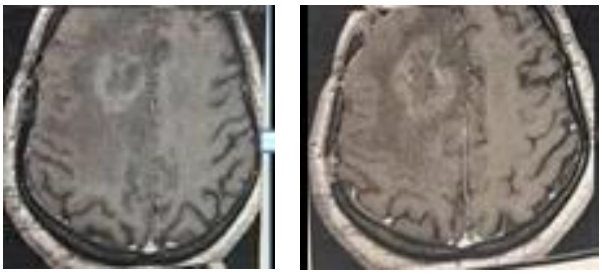

Figure 4: 06 months post-operative MRI

Clinically, the patient has a slight deficit in the left upper limb, but walks normally and is currently on antiepileptic treatment, with ongoing chemotherapy, and functional rehabilitation.

IV. Discussion:

Esthesioneuroblastoma (ENB), is a rare tumor with a great potential for malignancy, it is a lesion which despite chemo and radiotherapy can present recurrences, with metastasis, in the central nervous system, the cerebral or spinal cord, and more frequently in the ENT sphere. Neck, breast, bone, lung and the rest of the body have been reported in the literature(1-2).

Initially, our patient who does not seem to have a local recurrence, the expected diagnosis was a glioma or even an infiltrating meningioma, the anatomopathological result was therefore a surprise, the review of the literature finds only very rare cases of cerebral and remote secondary localization of the primary seat, despite an adjuvant treatment, made of chemo-radiotherapy, the prognosis for survival remains poor, especially in our patient, the recurrence after excision was after 02 months, and even after high-dose chemo-radiotherapy, the sequelae kept by the patient, make her socio-professional reintegration very difficult, despite several sessions with a psychologist and also functional rehabilitation sessions (3-4).

The prognosis of these lesions remains poor, however close care is necessary in order to improve the patient's quality of life, and thus act in the event of tumor recurrence, although in the literature, no patient has undergone a second surgery, exposing to a problem of management, especially since we know that the patient has benefited from all the therapeutic weapons available(1-3) .

V. Conclusion:

Although distant cerebral metastases from Esthesioneuroblastoma are rare lesions, they are also serious and require fast support and treatment.

The prognosis is poor and the average survival is for few months, so surgery and intensive chemotherapy as well as radiotherapy remain the only alternatives for a better prognosis.

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