Association of Abdominal Tumors with Brain Tumors (About three differents situations)

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Introduction :

The occurrence of multiple primary cancers in the same individual was first described by Billroth in the late 19th century. Since that date some cases of multiple tumor sites have been reported. Currently, it is well known that these multiple tumor localizations are not exceptional and would be genetically determined.

We report 3 situations where abdominal tumors were associated with brain tumors in three different contexts:

• Double localization of a renal and cerebral teratoma
• Choroid plexus carcinoma and adrenal cortex
• Metastatic renal clear cell sarcoma at the cerebral level

Observations:

-Observation 1 :

this is the child E.Rayan addressed to the chop since the age of 2 years for a brain tumor diagnosed before a monoparesia of the lower right limb with the clinical examination the discovery of an abdominal mass . The child was operated with double cerebral and abdominal tumor resection and whose pathological examination was in favor of a teratoma with dual cerebral and abdominal localization

-Observation 2:

- this is the child B.zayid followed at chop since the age of 2 years for sarcoma with clear left metastatic renal cell to the bone treated according to protocol of nephroblastoma high risk by surgery (total nephrectomy with Latero-aortic node dissection and inter aorto-cave), postoperative chemotherapy and local radiotherapy. 3 years later appearance of a cerebral metastasis placed under radiotherapy with good evolution.

-Observation3:

- it is the child M.abir followed at chop since the age of 11 months for a cerebral tumor diagnosed before axial hypotonia with clinical examination the discovery of an abdominal mass. The child was operated with double cerebral and abdominal tumor resection and whose pathological examination was in favor of an association between choroid plexus tumor and corticosurrenaloma.

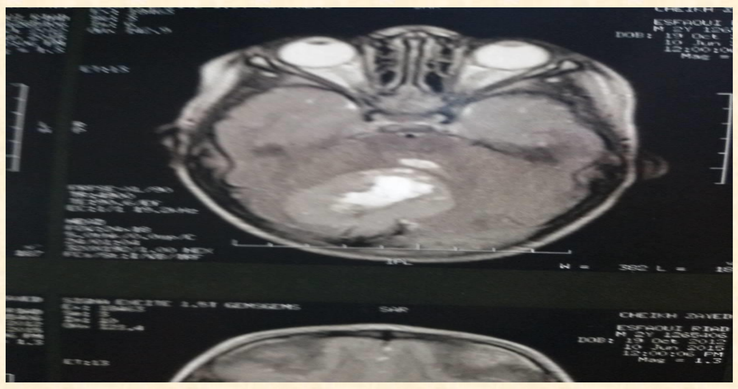

Figure 1 showing a vermic cerebellar tumor process

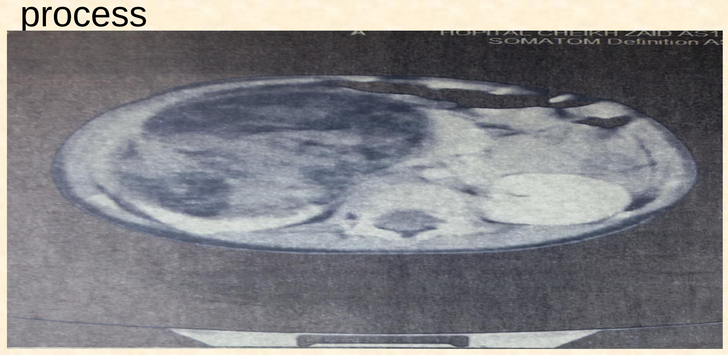

Image No. 1 showing a right renal tumor process

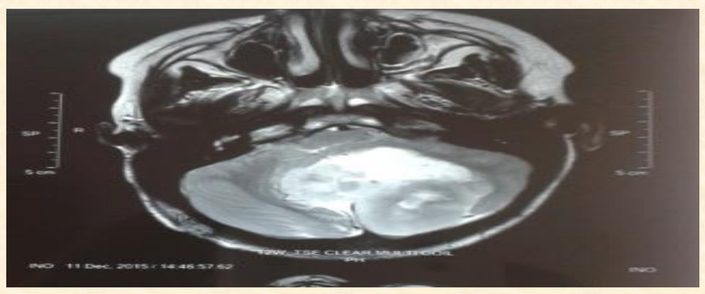

Figure n°2montrant le processus tumoral au niveau de la fosse cérébrale postérieure avec hydrocéphalie.

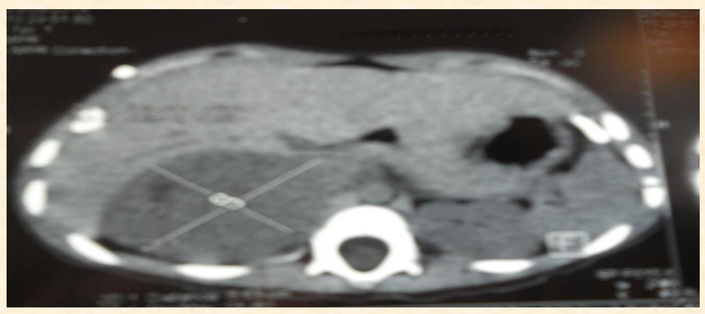

Figure n°3 montrant un processus tumoral surrénalien droit

Discussion:

The occurrence of multiple primary cancers in the same individual was first described by Billroth in the late 19th century [1].

Since that date some cases of multiple tumor sites have been reported. Currently, it is well known that these multiple tumor sites are not exceptional and are genetically determined.

Some genetic mutations are responsible for multiple cancers as for example in the syndrome of Li-Fraumeni (mutation of the P53 gene) [2]. Apart from these well-explained family cases, for which specialized management is defined, multiple primary cancers need to be systematically sought in order to reduce their morbidity and mortality.

Clear cell renal sarcoma accounts for about 4% of renal tumors in children and usually occurs in children aged 18 months to 5 years (30 months on average). It is exceptional in adults with a clear male predominance [1]. The abdominal mass summarizes all the clinical history and constitutes the essential reason for consultation.

The frequency of bone metastases at the time of diagnosis ranging from 18.6 to 70% of cases [3] and their poor prognosis led to the individualization of clear cell sarcoma outside the Wilms tumor group in 1978 [4].

Choroid plexus carcinoma is a very aggressive tumor in children [5], and the 5-year survival rate is 26-50% [5,6,7,8]. Sandrini et al reported a pediatric case of association between choroid plexus carcinoma and corticosurrenaloma on a series of 58 cases of corticosurrenaloma [6].

Congenital teratomas are observed in 1/4000 births [7, 8, 9]. They usually develop in the sacro-coccygeal and gonadal region (60%) [7]. The double renal and cerebral localization of a teratoma has never been described. No predominance of sex was noted for all teratomas of the head and neck. [7-8-9]. There is no familial heredity, no association with a gene or a gene family has been demonstrated [7].

Conclusion :

It is difficult to objectify a relationship, in particular genetic, between abdominal tumors and cerebral tumors on simple clinical cases. Additional studies on a larger number of patients are needed to confirm the link between the two tumors.

Références

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