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Unilateral Exophtamy Reveling A Rare Association of Multiple Tumors of Location and Different Nature: About A Case

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Abstract | **Case Report**

Exophthalmia is characterized by protrusion of the eyeball outside the bone orbit, in connection with the presence of a pathological tumor process intra-orbital; the association of multiple tumors of different location is a rare situation, through in this clinical case we report an association of intra-orbital hemangioma and intra-cerebral meningioma occurring in a 65-year-old female consultant for unilateral exophthalmos. The therapeutic management consisted of a surgical resection of the intra-orbital hemangioma and meningioma surveillance. Brain with good evolution.
Keywords: Exophthalmia, Hemangioma, Meningioma, MRI, Surgery.

Résumé

L'exophtalmie est caractérisée par une protrusion du globe oculaire en dehors de l'orbite osseuse, en relation avec la présence d'un processus tumoral pathologique intra-orbitaire, l'association de multiples tumeurs de localisation différente est une situation rare, a travers ce cas clinique nous rapportons une association d'un hémangiome intra orbitaire et un méningiome intra cérébral survenant chez une femme de 65 ans consultant pour exophtalmie unilatérale, la conduite thérapeutique a consisté en un exérèse chirurgicale de l'hémangiome intra orbitaire et une surveillance du méningiome cérébral avec bonne évolution.
Mots clés : Exophtalmie, Hémangiome, Méningiome, IRM, Chirurgie.

INTRODUCTION

Exophthalmia is the abnormal protrusion of the eyeball outside the orbital frame, it is a frequent symptom of the presence of a process occupying space inside the orbit pushing forward the eyeball. It can reveal various etiologies. For adults, it is the orbital tumors that predominate. The association of two tumors of localization and different histology revealed by an isolated exophthalmos is an exceptional situation, that we report a case of exophthalmia revealing an orbital carebral meningioma occurring in an elderly woman.

PATIENT AND OBSERVATION

In this case we represent a woman at age of 65, which has no particular pathological history who consulted for a left exophthalmia of progressive installation evolving since one year without other associated signs. Ophthalmological examination noted left axillary exophthalmitis, irreducible, painless, non-pulsatile and non-blowing on auscultation without inflammatory signs, without other associated signs including no headache or vomiting. The corrected visual acuity was 7/10 at the OG level and 8/10 at the OD level; ocular motility was preserved, the anterior segment examination found a beginner cataract in both eyes and the fundus examination was normal on the right and left (Figure 1). Orbito-encephalic CT showed an intraocular intra-orbital tissue process taking the contrast medium homogeneously responsible for exophthalmos grade I and an intracerebral mass of calcified hyperdense left temporal fossa of about 3 cm in diameter at a broad base. Meningeal implantation at the level of the sphenoid wings without bone lysis, without hyperostosis and without mass effect on median structures a priori meningioma (Figure 2). The MRI complement showed a well-defined tissue intraorbital lesion. In iso signal T1, hyper signal T2, strongly contrasting in favor of a cavernous hemangioma,

pushing the eyeball forward and determining an exophthalmos grade I and a temporal lesion… in favor of meningioma (Figure 3).

DISCUSSION

We present a case of unilateral exophthalmia revealing a combination of an orbital hemangioma and a cerebral meningioma; in the literature we do not find a case similar to this association of two tumors in this localization and of this histological nature.

Cavernous hemangiomas of the orbit represent between 4.5 and 7.4% of all orbital tumors [1].The average age of discovery is 42, with a female predominance (70%) [2].It is a congenital vascular malformation [3] composed of blood lakes localized in the intra-conical but able to develop in extra-conical and extra-orbital [4], it is manifested by a painless, progressive, non-axillary exophthalmos in more than 70% [5],cavernous haemangiomas may be complicated by compressive optic neuropathy responsible for reduced visual acuity [6,7],our patient was admitted for painless progressive unilateral exophthalmos without inflammatory signs and without loss of visual acuity.

The authors note an increase in the rate of discovery of asymptomatic meningiomas from 34.6% between 1989 and 1992 to 44% between 1993 and 1996 [8], These data were confirmed in 2006 by the Yano group. Of 1434 patients with meningiomas admitted between 1989 and 2003, 603 were asymptomatic, or 42% of the population studied [9], To determine the therapeutic or follow-up strategy of an asymptomatic meningioma, we must take into consideration the characteristics of the meningioma, its location,its size, its radiological characteristics. (Calcifications, hypointense T2-weighted MRI), perilesional edema and patient characteristics, age, general condition, history, life expectancy [10,11]. The therapeutic strategy of the meningioma of our patient was decided by the neurosurgeon, it consisted of a simple clinical and radiological monitoring, on a follow-up of 08 months the patient did not present any signs encouraging the surgical excision of her meningioma.

Fig-1: Left exophthalmia in a 65-year-old patient

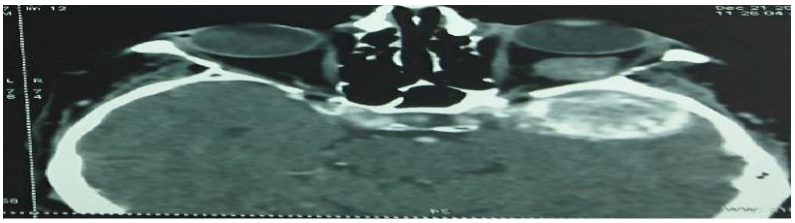

Fig-2: Orbito-encephalic TDM in sagittal reconstructions showing a intra-orbital intra-orbital tissue process, pushing the eyeball forward and taking the contrast medium heterogeneously and a cerebral process occupying the temporal fossa a priori meningioma of the sphenoidal wings

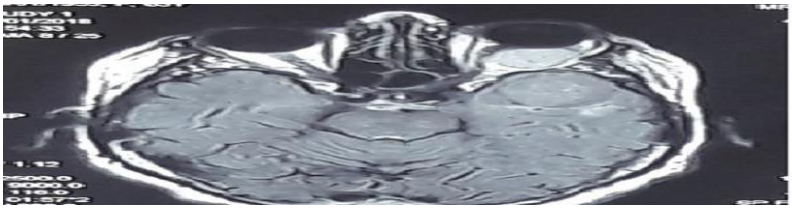

Fig-3: Orbito-encephalic MRI in T1 axial sections without (A) and with Gadolinium (B), shows a process of the left temporal fossa evoking a spheno-orbital meningioma with intra-orbital process of vascular appearance evoking an angioma

Fig-4: Macroscopic appearance of cavernous angioma removed en bloc

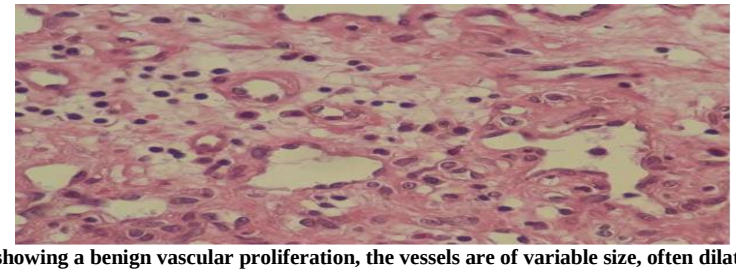

Fig-5: Histological section showing a benign vascular proliferation, the vessels are of variable size, often dilated congestive and lined by a monolayer of flat endothelial cells flattened

Fig-6: J7 postoperative: regression of exophthalmia with minimal phimosis

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