CHOROIDECTOMY IN CHOROIDAL MELANOCYTOMA. CLINICAL AND HISTOPATHOLOGIC CHARACTERISTICS

COCOROIDECTOMÍA EN MELANOCITOMA COROIDEO. CARACTERÍSTICAS CLÍNICAS E HISTOPATOLÓGICAS

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ABSTRACT

Purpose/methods: To report a rare case of melanocytoma in a choroidal location. The clinical and echographic characteristics were similar to those of a melanoma. The treatment selected in our case was a choroidectomy. Tissue was stained with hematoxylin-eosin, periodic acid-Schiff, Masson’s trichromic and immunohistochemistry was performed.

Results/conclusions: The clinical and histopathologic features of choroidal melanocytoma are similar to the characteristics of a melanocytoma located in other parts of the eye. The differential diagnosis between choroidal melanoma and melanocytoma is very difficult without histopathologic correlation (Arch Soc Esp Oftalmol 2006; 81: 341-344).

Key words: Melanocytoma, choroidectomy, local resection, choroid, immunohistochemistry.

RESUMEN

Objetivo/método: Se presenta el caso de un tumor infrecuente, el melanocitoma de localización coroide. Las características clínicas, y ecográficas son similares al melanoma coroideo. Se realizó como tratamiento una coroidectomía. Se exponen las características histopatológicas utilizando hematoxilina y eosina, PAS, tricrómico de Masson e inmunohistoquímica.

Resultados/conclusiones: Se presentan las características clínicas e histopatológicas del melanocitoma coroideo, cuyas características clínicas son similares al melanoma coroideo y las histopatológicas iguales a los melanocitomas de otras partes del ojo. Es muy difícil diferenciar ambos tumores sin correlaciones histopatológicas.

Palabras claves: Melanocitoma, coroidectomía, resección local, coroides, inmunohistoquímica.
INTRODUCTION

Described by Zimmerman in 1962 (1), uveal melanocytoma is a variant of magnocellular nevus. Its typical location is in the papilla or close to it, but it can also be located in any section of the uveal tract as the ciliar body, iris and rarely in the choroids. This melanocytoma is a benign, congenital and non-hereditary tumor which is intensely pigmented and appears with greater frequency in African ethnic groups. Very rarely does it become malign. Visual acuity is maintained, but in a third of cases an afferent pupillar defect was described.

The typical location of this entity does not entail in most cases a diagnostic and therapeutic problem as it usually consists of annual echographic clinical control and eventually photographing the lesion. However, we don’t know if we can extrapolate the aforementioned characteristics to the choroidal localization, and this hinders the certainty of the diagnosis in this location with choroidal melanoma (2,3).

This communication presents a case of choroidal melanoma treated with choroidectomy.

CASE REPORT

A female patient, 59 years old, referred for enucleating the left eye (LE) with presumed choroidal melanoma diagnostic located at the superior temporal level. The patient did not refer any relevant personal or hereditary pathology.

The visual acuity in the right eye (RE) of 1 and LE bulges, the anterior segment without any particularies, ocular pressure: RE 15 and LE 23 mmHg. The posterior segment exhibits a hyper-pigmented tumor, located at the superior temporal level, with variable coloring from orange to dark brown, with hemorrhage areas on the surface, surrounding sub-retinal liquid and slight hemovitreous (fig. 1).

The supplementary assessments carried out were: retinofluorosceinography (AFG) showing: new vessels on surface (fig. 2) and delayed coloring leak at the base of the lesion, echography showing a solid tumor, 10.16 mm high and 6.25 mm base, apparently fungical, low mean reflectiveness and choroidal excavation (fig. 3).

Clinical and oncological assessments were negative, thus discarding primary or metastasic oncological source.

With the data obtained from the assessments, we presumed a choroidal melanoma clinical-echographic diagnostic. The patient opted for a conservative treatment, and we performed a choroidectomy (partial lamellar sclerouvectomy) under general hypotensive anesthesia.

The patient exhibited a positive evolution postop. No local or systemic relapses were observed in the 9-month follow-up.

The surgical item was studied with Hematoxiline–Eosine, Masson Trichromic, PAS and immunohistochemistry (S-100 protein, vimentine, Melan-A and HMB45).
The histopathological assessment revealed the presence of an intensely pigmented tumor with the characteristics of choroid melanoma. Immunohistochemical studies gave positive results for S-100 protein and vimentine (fig. 4), and negative for Melan-A and HMB45. After pigmentation with 5% oxygenated water in different sections to apply the solution in different periods (24, 48 and 72 h), we clearly observed the typical clear cytoplasm cells with typical and regular nuclei, showing the fundamental characteristics of melanocytoma (figs. 5 and 6).

DISCUSSION

The typical localization of this tumor does not present a diagnostic or therapeutic problem in most cases. However, the cases which evidence growth and reduction of visual acuity may suggest malign changes (4). We don’t know if these characteristics could be extrapolated to the choroidal location. As this is the least frequent location, we were not certain about its biological development.

In the queried references (MedLine) we didn’t find any similar characteristics at the clinical or echographical level or in the AFG, allowing us to clearly differentiate choroidal melanoma from a melanocytoma in the same location. In fact, in this case and as in previous articles, the echographic and clinical characteristics are similar to melanoma, while retinofluorosceinography does not exhibit the
typical blockage described in papillar locations due to it being located in the choroids.

In the majority of published cases of choroidal melanocytoma, treatment was enucleation with one exception which opted for local resection (5) which was the only case reported with this surgical technique until now when we communicate the second case with the above described treatment.

In summary, even though it is a relatively infrequent tumor, extra-papillar localizations are an important diagnostic challenge due to their clinical and echographic similarity with choroidal melanoma.

We did not find sufficient evidence in the literature to provide an adequate treatment guideline in the presence of choroidal melanocytoma. Conservative treatments could be an option in doubtful cases, or eventually obtain a cytological diagnostic for radical treatments (aspiration puncture with fine needle could be an option to be considered).

This entity will be better known only with new cases describing the clinical and pathological correlations.

REFERENCES