

Case Report**Giant eccrine hidrocystoma of orbit**

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Abstract

A 14-year-old girl who had an upper eyelid mass for 3 months (without any pain or other symptoms) was referred to us. The orbital CT-scan revealed a superomedial orbital mass and excisional biopsy reported a giant eccrine hidrocystoma.

KEY WORDS: Eccrine, hidrocystoma, giant, orbit, eyelid.

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Eccrine hidrocystoma is a cutaneous lesion that occurs predominantly on the face^{1,2}. It manifests clinically as either the multiple³ or the solitary lesions⁴. Eccrine hidrocystoma is believed to represent a cystic dilatation of the intradermal sweat ducts rather than a neoplastic proliferation⁴. Although rare cases of sweat gland tumors of the eyelids have been reported previously⁵, limited information about the clinical features of eccrine hidrocystoma involving the orbit is available. In this report, we present the clinical features of a patient with a histopathologically proven giant eccrine hidrocystoma of the orbit.

Case report

A 14-year-old girl who had an upper eyelid mass for 3 months without any pain or any other symptoms, was referred to us. The examination showed a 1.5 by 1 cm firm and mobile, non-lobulated, and non-tender mass above the medial canthus without any skin changes (figure 1). There was not a history of trauma or upper respiratory tract infection.

The ophthalmologic exam findings included visual acuity of 10/10, red reflex of 10/10, negative afferent pupillary defect, normal extra-ocular movements, normal fundoscopy. There were no proptosis, ptosis and diplopia. The Slit lamp exam was also normal. Contrary to the ophthalmologic exam, the orbital CT-scan revealed an oval mass, superomedial to the right globe, which displaced the globe inferolaterally. The mass was extraconally located above the medial rectus muscle and showed a mild enhancement. Bony orbit, sclera, optic nerve and nasolacrimal duct were intact (figure 2). The mass was completely removed by a transcutaneous incision. The pathologic findings indicated a moderately firm, pink, gray mass with 1 by 1 by 2.5 cm in size. This mass had the microscopic features of the cystic and multilobulated structure and it was lined by the cuboidal epithelial cell supported by the fibro-connective tissue. The fibroconnective tissue was consistent with the giant eccrine hidrocystoma (figure 3).

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Discussion

Benign adnexal lesions of the eyelids are much more frequent than the malignant lesions⁶. The accuracy of the clinically suspecting a malignant eyelid tumor is reported at the range of 90%. However, no such figures are available when evaluating benign eyelid lesions. The differential diagnosis of the eccrine hidrocystoma includes other cystic lesions of the eyelid such as the follicular derived cysts, epidermal inclusion cyst, haemangioma, lymphangioma, apocrine hidrocystoma, and eccrine acrospiroma⁷. Eccrine hidrocystoma may be differentiated clinically from the apocrine hidrocystoma (cyst of Moll) by the location of the tumor in relation with the eyelid margin. In contrast to apocrine hidrocystoma, the eccrine hidrocystoma does not involve the eyelid margin. This is due to the fact that the eccrine sweat glands are distributed throughout the eyelid skin and unlike the apocrine glands they are not confined to the eyelid margin. In addition, the apocrine hidrocystoma tend to have a bluish color with yellow apical deposits⁷. The frequency of eccrine hidrocystoma is not known. In a series of 130 sweat gland lesions of the eyelids observed at The Armed Forces Institute of pathology, Washington, DC, hidrocystoma represented 22% of all the cases⁸. A clinicopathological series of 55 sweat gland tumors involving the eyelids did not include any case of eccrine hidrocystoma⁵. Although the cases with a simultaneous bilateral involvement have also been reported, typical eccrine hidrocystoma of the eyelid are manifested in adults as a solitary clear cystic lesion⁹. The tumor is usually located along the medial or the lateral part of the eyelid⁷. The eccrine hidrocystoma characteristically occurs close to but does not involve the eyelid margin. They are considered to be ductal retention cysts, and they often enlarge in conditions such as heat and increased humidity, which stimulate perspiration¹⁰. It is rare for eccrine hidrocystoma of the eyelid to be larger than 10 mm and on average they measure 4 mm at the

largest dimension⁷. Previously, there were no reports of eccrine hidrocystoma in the orbit. We report an atypical case of a giant eccrine hidrocystoma of the orbit with no functional complication. The originality of this case lies in its atypical size and location in a young patient.



Figure 1. Mass above the medial canthus.

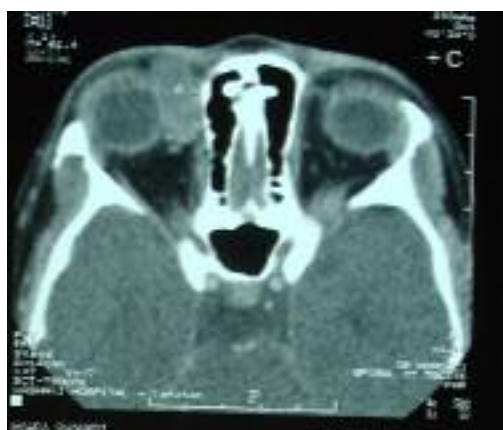


Figure 2. Axial CT-scan of orbit.

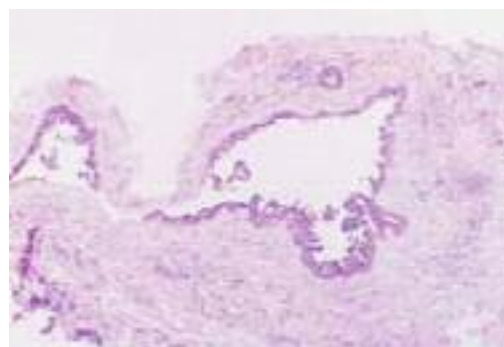


Figure 3. Histopathology of Eccrine hidrocystoma.

References

1. Alfadley A, Al Aboud K, Tulba A, Mourad MM. **Multiple eccrine hidrocystomas of the face.** *Int J Dermatol* 2001; 40(2):125-129.
2. Sperling LC, Sakas EL. **Eccrine hidrocystomas.** *J Am Acad Dermatol* 1982; 7(6):763-770.
3. Robinson A. **Hidrocystoma.** *J Cutan Genitourin Dis* 1893; 11:292-303.
4. Smith JD, Chernosky ME. **Hidrocystomas.** *Arch Dermatol* 1973; 108(5):676-679.
5. Ni C, Dryja TP, Albert DM. **Sweat gland tumors in the eyelids: a clinicopathological analysis of 55 cases.** *Int Ophthalmol Clin* 1982; 22(1):1-22.
6. Kersten RC, Ewing-Chow D, Kulwin DR, Gallon M. **Accuracy of clinical diagnosis of cutaneous eyelid lesions.** *Ophthalmology* 1997; 104(3):479-484.
7. Singh AD, McCloskey L, Parsons MA, Slater DN. **Eccrine hidrocystoma of the eyelid.** *Eye* 2005; 19(1):77-79.
8. Margo CE. **Eyelid tumors: accuracy of clinical diagnosis.** *Am J Ophthalmol* 1999; 128(5):635-636.
9. Yasaka N, Iozumi K, Nashiro K, Tsuchida T, Seki Y, Furue M et al. **Bilateral periorbital eccrine hidrocystoma.** *J Dermatol* 1994; 21(7):490-493.
10. Thomas J. **Classification and Management of Eyelid Disorders. Basic and clinical science course, Orbit, Eyelids, and Lacrimal System, section 7. USA.** *America academy of ophthalmology* 2004;167.