Short communication

De novo growth of a capillary hemangioma of the conjunctiva

L. Fernández-Vega Cueto a,⁎, F. Tresserra b, M.F. de la Paz a

a Centro de Oftalmología Barraquer, Barcelona, Spain
b Servicio de Anatomía Patológica, Institut Universitari Dexeus, Barcelona, Spain

ARTICLE INFO

Article history:
Received 13 September 2012
Accepted 29 October 2012
Available online 28 June 2014

Keywords:
Hemangioma
Capillary
Conjunctival tumor
Biopsy
De novo

ABSTRACT

Clinical case: A 22-year-old woman patient, diagnosed with an inclusion cyst of the conjunctiva in the nasal sector of the left eye, who after 2 shot/needle injections in the lesion came to our clinic with a dense subconjunctival hemorrhage in four quadrants and with severe pain. After excision biopsy, a capillary hemangioma of the conjunctiva was diagnosed.

Discussion: Conjunctival capillary hemangioma is mainly a benign lesion, asymptomatic and mostly congenital in origin, its progression or de novo growth is rare in adulthood.

© 2012 Sociedad Española de Oftalmología. Published by Elsevier España, S.L. All rights reserved.

Crecimiento de novo de un hemangioma capilar conjuntival

RESUMEN

Caso clínico: Mujer de 22 años, diagnosticada previamente de quiste de inclusión conjuntival en el sector nasal del ojo izquierdo y tratada mediante dos drenajes incisionales, que acude a nuestra consulta con hiposfagma universal acompañado de intenso dolor. Tras realizar una biopsia escisional, fue diagnosticada de hemangioma capilar conjuntival.

Discusión: El hemangioma capilar conjuntival es una lesión mayoritariamente benigna, asintomática y congénita, siendo raro pero posible su evolución o su aparición de novo en edades adultas.

© 2012 Sociedad Española de Oftalmología. Publicado por Elsevier España, S.L. Todos los derechos reservados.

⁎ Please cite this article as: Fernández-Vega Cueto L, Tresserra F, de la Paz M.F. Crecimiento de novo de un hemangioma capilar conjuntival. Arch Soc Esp Oftalmol. 2014;89:127–129.
⁎ Corresponding author.
E-mail address: lfdvezvega@gmail.com (L. Fernández-Vega Cueto).

2173-5794/$ – see front matter © 2012 Sociedad Española de Oftalmología. Published by Elsevier España, S.L. All rights reserved.
Introduction

Vascular conjunctival tumors are very infrequent. The best-known are lymphangioma, capillary hemangioma, cavernous hemangioma, Kaposi sarcoma and granuloma. Conjunctival capillary hemangioma is a generally symptom-free congenital injury consisting in benign vascular proliferation. In some cases it can invade the cornea and reach the visual axis, in which case surgical excrescence is indicated.\(^1\) The conjunctiva is an infrequent primary presentation area for these tumors, although it is involved in eyelid and arbitrary capillary hemangiomae.\(^2\) Said injuries generally appear in the first years of life and regress spontaneously in the course of the first decade.\(^3\) They may also appear in the Sturge–Weber syndromes.

Female patient, 22, with conjunctival lesions compatible with capillary hemangioma without other known systemic involvement.

Clinic case

A 22-year-old female patient, visited our hospital with left eye (LE) hypophagma in the 4 conjunctival quadrants (Fig. 1). She referred that since childhood she remembered a spot the size of a pinhead in the nasal conjunctiva of the LE which, 2 years ago, began to grow and change color to become yellowish, oval-shaped and bulky. In another hospital she was diagnosed to have cyst with conjunctival inclusion. She was punctured on 2 occasions 8 months and 5 days earlier. She did not exhibit diplopia or exophthalmos and the pupils were normal. After the second puncture she exhibited universal hypophagma. Since then she suffers intense ocular pain. She never noticed a regression of the cyst after the punctures. In addition, the patient referred occasional headaches since age 15. No other relevant antecedents were referred. Best corrected visual acuity was of 0.95 in both eyes.

Three months later said patient returned to our practice and in examination we observed a lobe-shaped conjunctival translucent yellowish tumor with liquid contents, poorly defined edges and with the appearance of a mobile cyst (Fig. 2). The clinical diagnostic was cyst with conjunctival epithelial involvement. Excision biopsy was performed with conjunctival self-graft attached with biological adhesive (Tissucol). In the surgery it was seen that the tumor did not have the typical transparent appearance of inclusion cysts and the capsule thereof could not be seen. It was bigger than it appeared to be under slit lamp, with hard consistency and reaching the nasal rectus insertion. The abundant bleeding was surprising and required numerous maneuvers for adequate hemostasia. In subsequent examinations it was seen that the self-graft was adequately positioned and that conjunctival epithelization improved with the passage of time. Hematic residues remained up to 45 days after surgery (Fig. 3).

The anatomopathological report provided a diagnostic of subconjunctival capillary hemangioma. Due to this unexpected result and patient antecedents, a histopathological study was carried out with special stains. The result was intense positive for vascular markers CD31 and CD34 defining the vascular clear areas (Fig. 4). AE1/AE3 is an antibody for broad-spectrum cytokeratins and there is positivity in the center of the specimen which could be a hydrocistoma due...
Fig. 4 – Anatomopathological results showing high positivity to markers CD31 and CD34.

Fig. 5 – Broad spectrum antibody for cytokeratins AE1/AE3 with positivity in the specimen center.

to the thin epithelium or a specimen orientation defect, in which case it could be surface epithelium (Fig. 5). No reaction was observed in the wall, making the conjunctival inclusion cyst unlikely. Nuclear magnetic resonance (NMR) with arbitrary area and sinus contrast was requested to discard arbitrary extension because during surgery it was not possible to appreciate the nasal edge of the lesion as it invaded the entire internal rectus area. In addition, the patient referred pain in the nasal area. The NMR produced normal results.

Discussion

Capillary hemangioma is a rare conjunctival lesion, and is even less frequent in adult patients. It must be differentiated from other conjunctival vascular lesions and generally does not have a relationship with other systemic processes. In the absence of complications or discomfort, the ideal management is observation as it will regress in time. Otherwise, surgical extirpation is possible with good results. It is a congenital lesion that appears in the first days of life and even though it may grow for a few months it regresses spontaneously. The patient of this case referred remembering a small spot since childhood which began to cause discomfort only in adolescence. The evolution of this type of conjunctival tumor is very unusual. In the case of this patient, this evolution is attributed to the punctures which in addition produced large hypophagmas with chemosis. This fact, added to the absence of coagulation difficulties in the history of our patient, brings us closer to the diagnostic. For this reason we insist in that, in the presence of any conjunctival lesion, observation is of the essence. Otherwise, if observation is not possible, resection of the lesion with biopsy would be indicated. Even so, we are aware that this case could involve 2 coinciding lesions (vascular and epithelial). The capillary hemangioma is not potentially malignant although NMR is recommended to discard involvement of the orbits or sinus together with detailed exploration of eyelids and anterior segment.

Conflict of interests

No conflict of interests has been declared by the authors.

REFERENCES