

Acquired capillary hemangioma of the eyelid in a 49-year-old woman from Turkey

Sertaç Argun Kıvanç, Osman Okan Olcaysu¹,
Ibrahim Gelincik²

A 49-year-old woman developed a dark brown nodular mass in the lower eyelid. The lesion had grown fast for 2 months and then had remained stable in size. Excisional biopsy was performed. Histopathological examination of an excisional biopsy specimen pointed to proliferative vessels lined by increased endothelial cells without nuclear atypism. The nodular mass evaluated as a capillary hemangioma.

Key words: Capillary, eyelid, hemangioma, surgical excision

Congenital capillary hemangiomas are usually seen in females and typically appear at birth or within the first 2 months of life. They generally locate to the superior orbit and lids.^[1] But acquired capillary hemangioma (ACH) of the periorcular region is very rare.

Till date, only four cases of acquired capillary hemangioma of the eyelid have been reported. Three of these (two were male, and one was a pregnant woman) were reported in adults. One was reported in a child.^[2-5] To the best of our knowledge, this is the first case of a woman who was not pregnant.

Case Report

A 49-year-old woman visited our clinic with a complaint of a left upper-eyelid mass. The lesion first appeared 2 months earlier and had gradually increased in size. The patient did not have any history of other cutaneous lesions or antecedent trauma.

On examination, the unaided visual acuities were 20/20 for each eye. Appearance of the mass was with a smooth surface and dark brown, violet color. The mass was sessile and well demarcated. A vein had drained the mass from the right side. There were telangiectatic vessels around the periorbital region. Under the eyelid skin, vessels were appeared sharp-cut and

at dark purple color. The rest of the ophthalmic and orbital examination was normal. We clinically diagnosed the lesion as pyogenic granuloma and planned an excisional biopsy. Unfortunately, we didn't have a photo-documentation facility at that time in the hospital so we could not present preoperative photo.

Excisional biopsy of the mass was performed and hemostasis maintained. The wound was repaired primer suturing with 6-0 Vicryl. On the macroscopic examination, size and characteristic of the mass was 0.6 × 0.4 × 0.2 cm and at soft temper nodular structure. Histopathological examination of the mass showed with numerous capillary lumina lined by endothelial cells, without nuclear atypism [Fig. 1].

The patient was assessed at postoperative 1st week. The wound had healed and the sutures were removed. The previously noted under-skin vessels were still clinically evident at postoperative 1st week. These vessels became less obvious and got light violet color at postoperative 6th month control, and mass had not recurred again. Postoperative cosmetic result was very good. After histopathological diagnoses, we realized that it was a rare case, and we sent the patient to the Education and Research Hospital for photo-documentation and advanced systemic examination [Figs. 2 and 3].

Discussion

The most common congenital vascular tumors of the periorbital region are capillary hemangiomas; and involution of this entity usually occur in the first decade.^[1,6] Acquired capillary hemangioma of the eyelid and periorcular region is a very rare conditions. Six cases have been reported in the literature. Four of these six were acquired capillary hemangioma of the eyelid. Two cases were in the lacrimal sac region.^[7] Both genders have been affected by ACH of the eyelid. Two of four cases were in the female gender. One was in a pregnant woman, and the other was in a 12-year-old girl. Hormonal changes during puberty and pregnancy can cause the development of vascular lesions and also trauma, and irritative agents may cause inciting factors for capillary hemangiomas.^[4,5,8] But these were absent in our case.

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/0301-4738.143955

Departments of Ophthalmology, Oltu Public Hospital, Oltu, ¹Ophthalmology and ²Pathology, Erzurum Region Education and Research Hospital, Erzurum, Turkey

Correspondence to: Dr. Sertaç Argun Kıvanç, Department of Ophthalmology, School of Medicine, Uludag University, Bursa, Turkey. E-mail: sakivanc@gmail.com

Manuscript received: 22.06.13; Revision accepted: 16.09.13

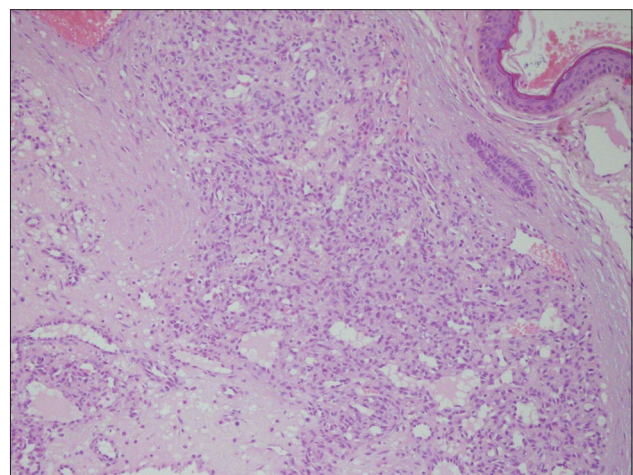


Figure 1: Histopathologic features of proliferative vessels lined by increased endothelial cells without nuclear atypism of patient with capillary hemangioma of the left upper eyelid (H and E, ×200)



Figure 2: Postoperative 1st week, with dark purple under-skin vessels (arrow) and healing of the wound (asterisk)



Figure 3: Postoperative 6th month, excellent wound healing (asterisk) and getting lighter on vessels colors (arrow)

The acquired form of capillary hemangioma looks like a mature type of congenital capillary hemangioma. In immature stages of the lesion, there are numerous newly formed capillaries with narrow lumina. When immature lesion getting mature, the vascular lumina becomes dilated the endothelial cells get more flattened, stroma becomes edematous and hyalinized, and blood flow establishes.^[9,10]

The main differential diagnoses for ACH are, pyogenic granuloma, angiosarcoma, and acquired tufted angioma of the eyelids.^[10,11] Acquired tufted angioma of the eyelid is also a rare entity. A recent report about tufted angioma of the eyelid was published in two patients. Clinically, tenderness, hypertrichosis, and induration are useful signs in differentiating tufted angioma from hemangioma.^[12] Histopathologically, angiomatous lobules of tufted angioma are composed of relatively bloodless and poorly canalized capillaries which are lined by plump endothelial cells.^[11] Tufted angioma in childhood needs differentiation from juvenile hemangioma. Angiomatous lobules of juvenile hemangiomas are more massive, and lesions tend to have involvement of deeper periocular structures at later stages.^[13]

Congenital capillary hemangiomas usually regress spontaneously, especially immunohistochemically bcl-2 negative lesions more prone to spontaneous involution. Bcl-2 positivity is inversely correlated with the regression in infantile hemangiomas.^[14,15] However, in ACH, results of surgical excision were excellent. In our case, we performed total excision. After resection, a venule which had drained the capillary hemangioma became indistinct. The vessels around the mass which were obvious became less manifest at postoperative 6th month [Figs. 2 and 3].

To the best of our knowledge, this is the first ACH of the eyelid case whose age was over 40, and the first case of a woman who was not pregnant.

References

1. Haik BG, Jakobiec FA, Ellsworth RM, Jones IS. Capillary hemangioma of the lids and orbit: An analysis of the clinical features and therapeutic results in 101 cases. *Ophthalmology* 1979;86:760-92.

2. Murphy BA, Dawood GS, Margo CE. Acquired capillary hemangioma of the eyelid in an adult. *Am J Ophthalmol* 1997;124:403-4.
3. Brannan S, Reuser TQ, Crocker J. Acquired capillary haemangioma of the eyelid in an adult treated with cutting diathermy. *Br J Ophthalmol* 2000;84:1322.
4. Pushker N, Bajaj MS, Kashyap S, Balasubramanya R. Acquired capillary haemangioma of the eyelid during pregnancy. *Clin Experiment Ophthalmol* 2003;31:368-9.
5. Garg R, Gupta N, Sharma A, Jain R, Beri S, D'Souza P. Acquired capillary hemangioma of the eyelid in a child. *J Pediatr Ophthalmol Strabismus* 2009;46:118-9.
6. Margileth AM, Museles M. Cutaneous hemangiomas in children. Diagnosis and conservative management. *JAMA* 1965;194:523-6.
7. Leroux K, den Bakker MA, Paridaens D. Acquired capillary hemangioma in the lacrimal sac region. *Am J Ophthalmol* 2006;142:873-5.
8. Barter RH, Letterman GS, Schurter M. Hemangiomas in pregnancy. *Am J Obstet Gynecol* 1963;87:625-35.
9. Font RL. Eyelids and lacrimal drainage system. In: Spencer WH, editor. *Ophthalmic Pathology: An Atlas and Textbook*. 4th ed. Philadelphia, Pennsylvania: W.B. Saunders Company; 1996. p. 2322-6.
10. Shields JA, Shields CL. Vascular tumors of the eyelid. In: Shields JA, Shields CL, editors. *Eyelid, Conjunctival, and Orbital Tumors: An Atlas and Textbook*. 2nd ed. Philadelphia, PA: Lippincott Williams and Wilkins Co.; 2008. p. 131-58.
11. Mittal R, Tripathy D. Tufted angioma (Angioblastoma) of eyelid in adults-report of two cases. *Diagn Pathol* 2013;8:153.
12. Wong SN, Tay YK. Tufted angioma: A report of five cases. *Pediatr Dermatol* 2002;19:388-93.
13. Jones EW, Orkin M. Tufted angioma (angioblastoma). A benign progressive angioma, not to be confused with Kaposi's sarcoma or low-grade angiosarcoma. *J Am Acad Dermatol* 1989;20:214-25.
14. Mancini AJ, Smoller BR. Proliferation and apoptosis within juvenile capillary hemangiomas. *Am J Dermatopathol* 1996;18:505-14.
15. Mabeta P. Decreased secretion of vascular endothelial growth factor is associated with increased apoptosis in vascular tumor derived endothelial cells. *J Physiol Pharmacol* 2013;64:473-7.

Cite this article as: Kivanc SA, Olcaysu OO, Gelincik I. Acquired capillary hemangioma of the eyelid in a 49-year-old woman from Turkey. *Indian J Ophthalmol* 2014;62:969-70.

Source of Support: Nil. **Conflict of Interest:** None declared.