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CASE IMAGE

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A giant lobular capillary haemangioma of the caruncle

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Key Clinical Message

Caruncle lesions are uncommon, though it may be involved by a wide variety of lesions including tumors and cysts of the conjunctiva, skin, or lacrimal gland. Lobular capillary haemangioma of the caruncle is a rare occurrence but may mimic some primary or secondary malignant neoplasms. Excision and histopathological examination confirm the diagnosis.

Abstract

The caruncle lesions are uncommon. Lobular capillary haemangioma involving caruncle is a rare occurrence. We present a case of large lobular capillary haemangioma of caruncle in a 10-year-old boy, was treated successfully by surgical excision.

KEYWORDS

caruncle, lobular capillary haemangioma, polypoid lesion, pyogenic granuloma, vascular lesion

1 | CASE DESCRIPTION

A 10-year-old boy presented with a large dusky mass lesion emerging from the inner angle along the right lower eyelid for 2 weeks. The lesion started as a small, elevated pinkish mass and rapidly, progressively increased in size. There was no history of trauma, any ocular surgery, or cystic or nodular lesions. On examination, a pedunculated mass about 25 mm × 15 mm in size emerging from the caruncle was noticed. It was pinkish red near the caruncle and grayish brown towards the end. There was superficial conjunctival congestion and mucopurulent discharge. The rest of the ocular examination was within normal limits (Figure 1A). Clinical findings were suggestive of lobular capillary haemangioma. Topical moxifloxacin (0.05%) solution was administered three times a day, and an excisional biopsy was performed. A pinkish mass capped with brown crusted granulation tissue was surgically excised (Figure 1B).

Histopathological examination showed polypoidal fragments lined by stratified squamous epithelium. The surface showed ulceration with granulation tissue and crust formation. Subepithelium showed lobules of proliferating capillaries with intermixed lymphoplasmacytic inflammatory infiltration. Towards the centre, there were plump endothelial cells with fine chromatin, round to oval nuclei, focally grooved at places with scant cytoplasm. Numerous mitotic figures were noted (15–20/10hpf). Immunohistochemistry confirmed the diagnosis and ruled out cancer (CD31 highlights the proliferating capillaries; Pan-CK (cytokeratin) negative; Ki67 (Antigen Kiel 67) <1%; INI-1 (integrase interactor 1) retained). On review, 1 year after excision, there was no evidence of recurrence.

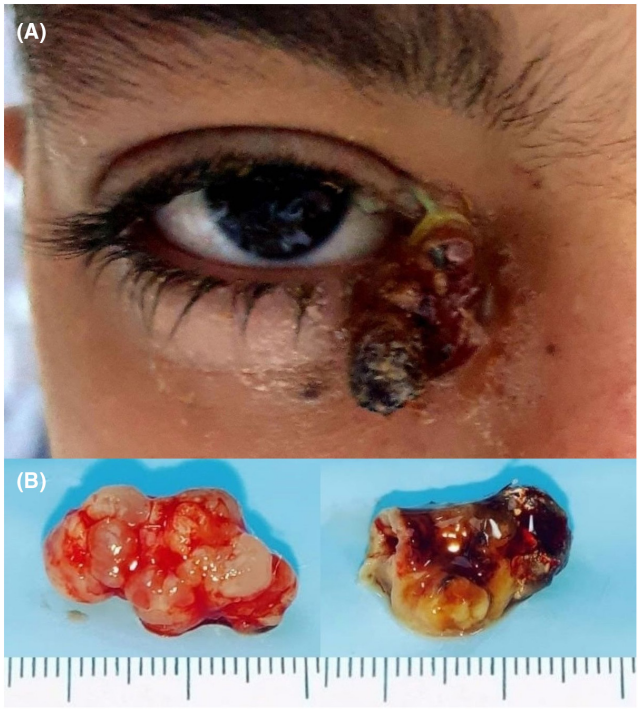

FIGURE 1 (A) A giant lobular capillary haemangioma of the caruncle, (B) excised pinkish mass capped with brown crusted granulation tissue.

Caruncle lesions are rare with a reported incidence of 0.3%–1.1% of all ophthalmic biopsies.[1] The caruncle is lined by a nonkeratinized epithelium similar to the conjunctival epithelium; it also contains accessory lacrimal glands and skin elements including hair follicles, sebaceous and sweat glands. Therefore, it can be the site for a wide variety of lesions, including tumors and cysts of the conjunctiva, skin, or lacrimal gland. Nevi and papilloma are the most frequently reported caruncle lesions.[1,2] Lobular capillary haemangioma of caruncle is relatively rare, reported between 1.7% and 8.8% of caruncle lesions.[2] It appears as a fleshy vascular mass pedunculated or sessile, usually after surgery or trauma to the caruncle or nearby structures, more commonly in young populations.[1] Usually smooth, glistening, or rough and polypoid lesions, but the surface may be ulcerated and covered by fibrinous exudate.[3] Lobular capillary haemangioma commonly known as pyogenic granuloma is a misnomer; it is neither infectious nor granulomatous. It is characterized by inflammatory cells and lobular capillary proliferation. Mitotic activity in endothelial cells may be conspicuous. They are often friable and prone to bleeding.[3] The differential diagnosis includes foreign body granuloma, squamous papilloma, and malignant tumors such as squamous-cell carcinoma, nodular Kaposi's sarcoma, amelanotic melanoma, and angiosarcoma. It is therefore important to make the correct diagnosis and manage appropriately.

Lobular capillary haemangioma can be treated with topical glucocorticoids, topical timolol, or surgical excision. Surgical excision is recommended for medically uncontrolled cases. Spontaneous involution may occur in small lesions. This case was presented with a giant blackish mass mimicking a pigmented lesion and without any predisposing factor; therefore, we preferred an excisional biopsy.

AUTHOR CONTRIBUTIONS

Suwarna Suman: Conceptualization; data curation; formal analysis; methodology; writing – original draft; writing – review and editing. **Arushi Kumar:** Writing – original draft; writing – review and editing.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

None.

ETHICS STATEMENT

None.

CONSENT

Written informed consent was obtained from the patient's parents to publish this report in accordance with the journal's patient consent policy.

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