

ISOLATED MIXED CONJUNCTIVAL HAEMANGIOMA IN A CHILD: A RARE CASE REPORT

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INTRODUCTION

Haemangioma is the most common benign vascular eyelid tumor in childhood.^[1] It is present in 1%–4% of all births,^[2] and is more common in premature infants and often following chorionic villus sampling.^[3] It is usually a cutaneous, subcutaneous, or deep orbital lesion and commonly presents a few weeks after birth and shows no gender predilection in children.^[3]

KEYWORDS: Isolated mixed conjunctival haemangioma, Capillary haemangioma, Cavernous haemangioma.

The usual clinical course of infantile cutaneous or subcutaneous hemangiomas includes an initial engorgement (age 6–12 months) followed by regression (age 1–7 years). It usually regresses spontaneously and hence is kept under close observation.^[4]

In orbital haemangiomas active intervention is performed only if the lesion is very extensive and causes amblyopia, mechanical ptosis, exposure keratopathy, or optic neuropathy.^[2,4]

Although conjunctiva may be involved as a part of

capillary hemangioma of the lid, Isolated conjunctival lesion is rare. There is not much data available stating the occurrence of isolated mixed conjunctival haemangioma in young age group in Indian population, so due to paucity of literature on it, makes the case furthermore rare.

We here by present a rare case of isolated mixed conjunctival haemangioma in right eye of a 9 year old male child who presented with periorbital swelling and proptosis.

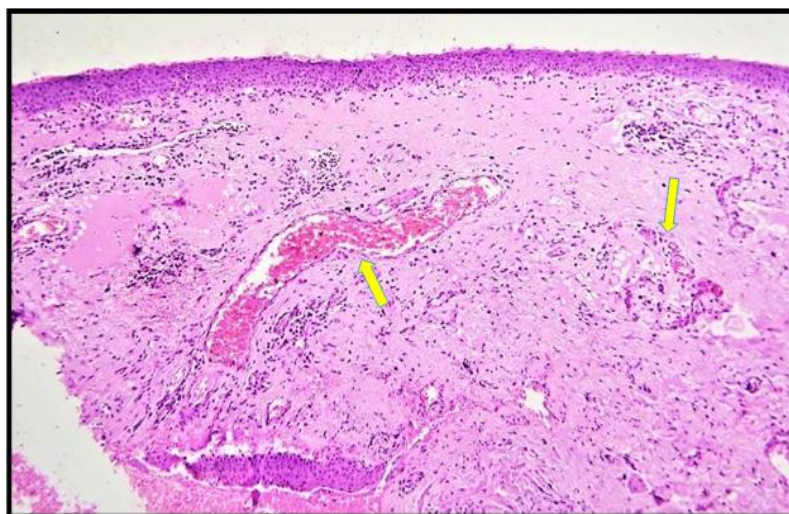


Fig.2(10x): Conjunctival epithelium underlying which are seen numerous dilated blood vessels of varying size() surrounded by fibrocollagenous tissue.

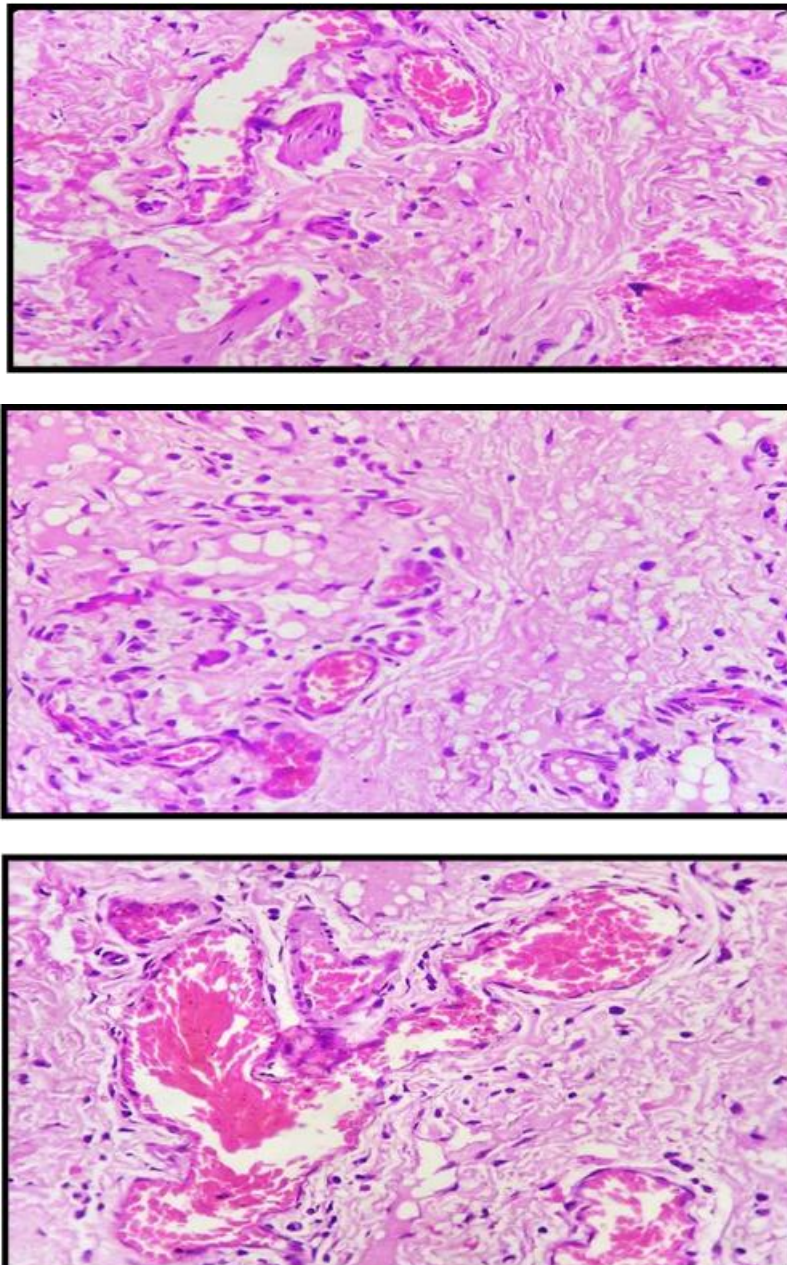


Fig. 3(40X): Numerous dilated blood vessels of varying size surrounded by fibrocollagenous tissue.

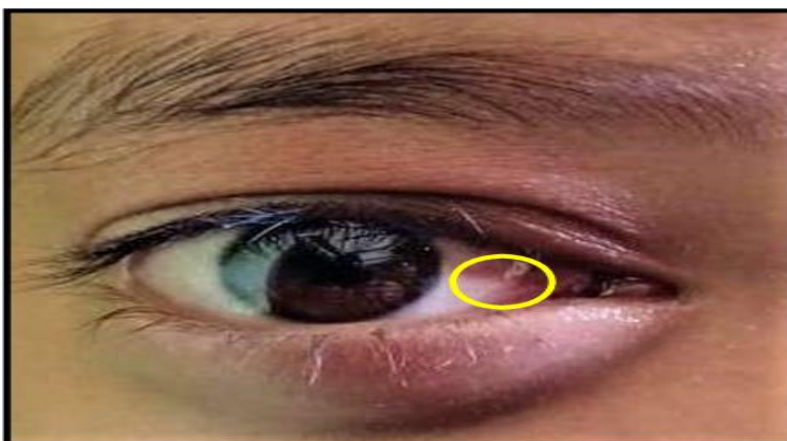


Fig. 1: Swelling of the right eye of the child with thin flat reddish appearing conjunctival lesion.

CASE REPORT

A 9 year old male child on ophthalmologic examination was found to have a flat red mass in the right nasal interpalpebral and bulbar conjunctiva with multiple large vessels with visible periorbital swelling and complaints of foreign body sensation. There was no history of any invasive intervention or any other illness and the opposite eye examined, was unremarkable.

The patient was operated upon and we received a single grey black soft tissue piece measuring 0.4x0.2x0.1cm for histopathological examination. Section examined revealed conjunctival tissue with sub epithelium showing numerous dilated blood vessels of varying size which was surrounded by loose stroma filled with blood(Fig.4&5).

The histological findings were correlated with the clinical features of the patient and a final diagnosis of mixed conjunctival hemangioma was given.

DISCUSSION

Conjunctival haemangioma is the benign proliferation of blood vessel endothelium that originates in either conjunctival epithelium or stroma. Most vascular tumors of the conjunctiva occur spontaneously.^[5]

Haemangiomas being the most common vascular tumours have further subtypes as capillary, cavernous, racemose and acquired sessile haemangiomas.^[7]

- Capillary hemangiomas present in infancy. They are either diffuse or circumscribed with a pink to red appearance. They can enlarge over several months but usually regress without treatment.^[5,8]
- Cavernous hemangiomas are red or blue, multiloculated lesions in conjunctival stroma. They can be small and circumscribed or large and diffuse. There is generally a solitary lesion. Diffuse hemangiomatosis of palpebral conjunctiva is indicative of orbital cavernous hemangioma.^[5,8]
- Racemose hemangioma is a prominent arteriovenous communication in the conjunctiva. The lesions are red and multilobular.^[5,8]
- Acquired sessile hemangioma is a recently described sessile mass of curvilinear blood vessels with an associated feeding artery and draining vein. They can regress spontaneously.^[5,8]

Ocular Capillary hemangioma is more common in pediatric age group and presents in early life with features of proptosis. Cavernous hemangioma on the other hand is seen commonly in adults (4th–5th decades) with a higher female preponderance and also presents commonly as proptosis involving the extraconal orbital space, there had been data on existence of isolated cavernous haemangioma of conjunctiva, which is itself a rare entity.^[8]

Our case report documents the presence of features of

both capillary and cavernous haemangiomas in the same lesion with no regression of size over the years. Also, the literature states that conjunctival haemangiomas tend to regress by the age of 7years of a child and thus does not requires any intervention, but in our case the lesion persisted even when the child had crossed 9 years of age thus required excision of the lesion.^[8]

Since, there is lack of data on stating the existence of isolated mixed conjunctival haemangioma in young age group in the literature to the best of our knowledge, making this one of the rare case reported by our institution thus adding a source of information in the literature.

CONCLUSION

Isolated mixed conjunctival haemangioma in childhood is very rare to the best of our knowledge. This requires more attention since they are not just a cosmetic blemish but can cause severe ocular discomfort and may lead to vision-threatening complications. The main stay of treatment in majority of cases is surgical excision followed by a thorough histopathological examination for correct categorization of this benign vascular tumour.

REFERENCES

1. Albert DM, Jakobiec FA. Principles and Practice of Ophthalmology. W. B. Saunders, 2000; 2(5): 4436.
2. Sethuraman G, Yenamandra VK, Gupta V. Management of infantile hemangiomas: Current trends. J Cutan Aesthet Surg, 2014; 7: 75–85.
3. Missoi TG, Lueder GT, Gilbertson K, Bayliss SJ. Oral propranolol for treatment of periorbital infantile hemangiomas. Arch Ophthalmol, 2011; 129: 899–903.
4. Drolet BA, Esterly NB, Frieden IJ. Hemangiomas in children. N Engl J Med, 1999; 341: 173–81.
5. Shields JA, Shields CL. Eyelid, Conjunctival and Ocular Tumors: An Atlas and Textbook. Lippincott Williams Wilkins, 2008; 2: 250–445.
6. Brad B. Kanski's Clinical Ophthalmology. Elsevier, 2016; 8: 101.
7. Malik A, Bhala S, Arya SK, Narang S, Punia RP, Sood S, et al. Isolated cavernous hemangioma of conjunctiva. Ophthal Plast Reconstr Surg, 2010; 26: 385-6.
8. Goel J, Prasad S, Dokania A. A Clinicopathological Study of Various Conjunctival Lesions in Children. Int J Adv Integ Med Sci., 2016; 1(4): 143-147.