



CONJUNCTIVAL DERMOLIPOMA: A CASE REPORT AND LITERATURE REVIEW

Ophthalmology

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ABSTRACT

A 42 years old female patient presented with chief complaints of painless swelling on the lateral canthus of left eye of 06 months duration and progressively increasing in size. Clinical, radiological and histological assays were performed. A solitary 6 mm × 4 mm × 4mm, pinkish, soft, rounded non-tender, mobile mass at the lateral canthus was seen. The mass was excised and sent for histo-pathological evaluation and it confirmed the diagnosis of Dermolipoma. The patient has been kept on follow-up. Dermolipoma is a congenital choristomatous tumor containing dermis-like connective tissue and adipose tissue. Correct diagnosis and surgical excision with follow-up is vital.

KEYWORDS

Ocular Choristomas, Dermolipoma, Excision, Graft Complications

Case report

A 42 year old non-diabetic, non-hypertensive female patient presented with chief complaints of painless swelling on the lateral canthus of left eye of six (06) months duration and progressively increasing in size. There was a solitary 6mm × 4 mm, pinkish, soft, rounded non-tender, mobile mass. The patient did not mention any other ocular problems and had no past history of medical or ocular lesions. There were no known allergies or drug use. The patient did not present with any other congenital abnormalities. There were no pre-auricular appendages, facial or palatal clefts, or postural abnormalities. The patient was free of any systemic symptoms. Patient was examined to look for coloboma, Goldenhar syndrome or epidermal nevus syndromes, but none were associated. On examination, the extra-ocular muscle motility was normal. Pupils were round, equal and normal reacting. On slit-lamp examination, the corneas were clear, anterior chambers were normal in depth with no cells or flare and the lenses were clear. A detailed fundus examination revealed clear media, a normal optic disc with normal maculae and peripheral fundi. Pre-contrast axial CT scan demonstrated a Crescent-shaped fatty mass at the superotemporal aspect of the right epibulbar area anterior to the insertion of the lateral rectus muscle and medial to the lacrimal gland and had no connection to the intraconal fat.

2% lidocaine with 1:100 000 epinephrine was injected under the bulbar conjunctiva around the mass. Very meticulous and careful dissection of the conjunctiva was performed to preserve healthy conjunctiva. The conjunctival tissue densely adherent to the underlying solid mass was excised together with the dermolipoma. Using sharp scissors and hot-wire cautery subtotal excision of the mass was performed. It was ensured that lateral rectus muscle sheath, the levator and Müller's muscle complex, or the lacrimal ductules were not damaged. Posteriorly, only the mass anterior to the lateral orbital rim was removed. The specimen of size 6mm × 4 mm × 4 mm was sent for pathologic examination. After resection of the visible part of tumour, including the overlying thick surface conjunctiva, the conjunctival defects were reconstructed with free conjunctival autograft harvested from the contralateral superior bulbar area. The histo-pathological examination revealed dense fibrous tissue lined by stratified columnar epithelium containing goblet cells characteristic of conjunctival epithelium with deeper dermal elements including dense collagen, abundant adipose tissue and hair follicles. The histologic diagnosis was consistent with conjunctival dermolipoma. After surgery, a combination of antibiotic-steroid eye drops was used for 04 weeks. The epithelial defects in the donor site healed by 1-3 weeks without any significant complications. After 03 months of follow-up post-excision there has been no recurrence of the mass, symblepharon or scar formation.

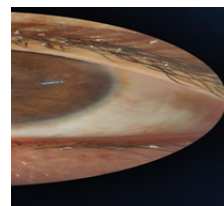
Table/Fig 1: Pre-operative appearance



Table/Fig 2: Histopathology Adipocyte clusters consistent with lipoma



Table/Fig 3: Post-op appearance



Discussion

Ocular choristomas are defined as congenital lesions which manifest as normal tissue at an abnormal site. Limbal dermoid, lipodermoid, ectopic lacrimal gland, and episcleral osseous choristoma are all kinds of ocular choristomas¹. Lipodermoids and dermoids are the most common orbital and epibulbar tumours in children. They can affect different areas of the eye, in particular the cornea, limbus and bulbar conjunctiva.²

Dermolipomas are solid choristomas presenting as sub-conjunctival and conjunctival masses in the supero-temporal fornix, near the lacrimal gland and lateral rectus muscle that is derived from an ectopia of the ectoderm to the conjunctiva, probably due to sequestration at the time of embryonic development of the eyelid.³ Their surface is lined by conjunctival epithelium, and the sub-epithelial tissue is composed of adipose tissue and collagenous connective tissue. Lipodermoids are generally located supero-temporally.⁴ Dermolipoma is believed to be a congenital solid. Although most lesions occur sporadically, the lesion may be associated with a congenital anomaly such as Goldenhar syndrome, especially when there is a positive family history.⁵ Squamous cell carcinoma, complex lacrimal corneal choristomas, epithelium or orbital fat herniation are lesions from which lipodermoids must be differentiated. There are two approaches for management of dermolipomas which includes Observation and Surgical removal. Surgical excision is usually carried out in cases where the mass is cosmetically unacceptable in the primary position or in medial gaze. Despite excision being a simple procedure to perform, complications such as blepharoptosis, extraocular disturbance with diplopia and kerato-conjunctivitis sicca have been reported.^{7,8,9} In this case the surgical excision was carried out as the size was increasing and was a cosmetic blemish. Ho-Seok Sa et al¹⁰ have described "Rotational conjunctival flap" as a useful technique of conjunctival reconstruction following excision of dermolipoma and the overlying epithelium. Few important principles need to be kept in mind during the surgical

excision. careful isolation of the surrounding structures including the lacrimal gland, the levator and Müller's muscle complex, and the lateral rectus muscle should be performed to avoid complications. Small dermolipomas need minimal resection of the overlying conjunctiva and primary conjunctival closure without using a flap. Extensive excision of an adequate portion of the tumour and the thickened overlying epithelium and subsequent reconstruction with a rotational conjunctival flap is required in cases of large dermolipomas which are adherent to the conjunctiva.¹¹

Conclusion: This study reports a dermolipoma in 42 years old female and its excision with conjunctival reconstruction with good results and no complications during follow-up.

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