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Corneal dermoid: A rare Case covering the whole Cornea

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Abstract: Dermoid cysts are relatively frequent in children. They can be orbital, limbal or corneal; however corneal dermoid are less common than the others. This case of huge cyst covering the whole cornea as well as the bulbur conjunctiva is uncommon.

Keywords: Dermoid cysts, children, cornea, corneal dermoid

INTRODUCTION

Ocular lipodermoid cysts and solid dermoid tumors are choristomas which are described as normal tissue growth in an abnormal location. Congenital epibulbar lipodermoid comprises adipose tissue that is covered by connective tissue. They are usually located superotemporally, and basically tend not to involve the peripheral cornea [1]. The most common dermoid is the limbal dermoid, in which the tumor straddles the limbus.

These are usually superficial lesions but may involve deeper ocular structures. The second type involves only the superficial cornea, sparing the limbus, the Descemet membrane, and the endothelium. The third type of dermoid involves the entire anterior segment, replacing the cornea with a dermolipoma that may involve the iris, the ciliary body, and the lens [2]. Dermoid or a lipodermoid may be associated with Goldenhar syndrome that appears as oculoauriculovertebral dysplasia [3].

Dermoids which are localized on the limbus and cornea are very unusual congenital tumors from the group of choristomas [4].

CASE REPORT

A 4-year-old female child brought to us for growth on the left eye since birth. No history of such condition was found in her family. Birth history was normal. The visual acuity was 6/6 in the right eye and light perception in the left eye. On biomicroscopic examination, the right eye was normal but the left eye presented a pinkish red mass covering both the cornea and the bulbar conjunctiva. Ultrabiomicroscopy revealed invasion of the deeper tissue; so we performed an excision of the entire mass along with the eyeball and sent them for histopathology. The pathologist confirmed the diagnosis of corneal dermoid.



Fig-1: Photograph of the child with left eye corneal dermoid

DISCUSSION

Corneal dermoids occur more commonly as single lesions but may be multiple and they may be unilateral or bilateral, the former being the most common [5]. Dermoids are solid benign congenital tumors that frequently arise at the inferotemporal corneoscleral junction [6].

Mostly, dermoid cysts arise from keratinized squamous epithelium, but they may occasionally originate from the nonkeratinized conjunctival epithelium [7]. Dermoids are classified clinically into superficial or deep dermoids or exophyic and endophytic, according to their site of attachment in relation to the orbital rims [8]. Mostly, dermoid cysts arise from keratinized squamous epithelium, but they may occasionally originate from the nonkeratinized conjunctival epithelium. Treatment is complete surgical excision, which recurrences are rare [9].

CONCLUSION

Corneal dermoid covering the whole cornea is not very common. It may infringe the visual prognosis if diagnosed late; also in case it is diagnosed early but located in the deep tissue, the outcome may be poor.

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