A CASE OF LIMBAL DERMOID.

Abstract

Limbal Dermoids are benign, congenital tumors at the corneoscleral junction that are frequently linked to abnormalities of the ocular surface and possible deformity of the face. Depending on their position and extent, they might affect visual development and vary in size.In this case study, a young female presents with a mass growth in the left eye following a clinical examination, the presence of a limbal dermoid in the left eye was established. Both eye's unaided vision is 6/6. Anterior Segment Examination of the left eye revealed a 4 mm by 4mm enlargement with hair follicles in the inferotemporal region of the limbus. Dermoid Excision was done and HPE confirmed the swelling as Dermoid.

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Introduction:-

Limbal Dermoids are congenital, benign tumors that typically manifest as solid, white lumps close to the corneal-scleral junction. They are known as choristomas and are made up of ectopic tissues that are not normally visible in the eye, such as cartilage, sebaceous glands, and hair follicles.(1) Because limbal dermoids are visible and may be associated with other ocular or systemic conditions, despite their low prevalence, the bulk of instances are found in early childhood or infancy.(2) Limbal dermoids can cause visual anomalies such astigmatism, refractive errors, and, in more severe cases, amblyopia.(3) The most common site of the limbal dermoid is the inferotemporal quadrant. • Grading of the limbal dermoid is essential for the management of the case. (4)

Table 1: Grading of Limbal Dermoid

Item	0	1	2	3
Corneal involvement	None involved	≤outer 1/4th, not involving the visual axis, superficial lesion	Outer 1/4th -1/2, not involving the visual axis, upto corneal stroma	≥1/2, involving the visual axis, full thickness of cornea
Surface Shape	None involved	Slightly raised, cannot be observed when eye is closed	Moderately raised, observed when eye is closed	Highly raised, interferes with closing the eye
Conjucntival Involvement	None involved	≤50% of conjunctiva	>50% of conjunctiva	Conjunctiva, sclera and orbital tissue involved

Material and Methods:

This is a case report of a 29 years old female patient who came to Maharani Laxmi Bai Medical College, Jhansi, with limbal dermoid. Detailed ocular and systemic examination were done to rule out any other abnormalities, which included history, visual acuity using Snellen's chart, anterior segment examination using slit lamp, intra-ocular pressure using noncontact tonometer,

dilated fundoscopy using indirect ophthalmoscope, b-scan. Blood was sent for routine laboratory investigations. Patient is taken up for appropriate procedure. The excised tissue is sent for histopathological examination.

CASE

A 29 years old female presented with complaints of swelling in left eye since childhood, gradually progressive in size. No past history of pain, headache, watering, trauma, or redness. No prior history of wearing spectacles. No eye drops have ever been used. There is no known instance of ischemic heart disease, diabetes, asthma, chronic obstructive pulmonary disease [COPD], or hypertension.

Table 2:- Visual Acuity by Snellen's Chart

	Right Eye	Left Eye
Unaided Vision	6/6	6/6
Pinhole Improvement	6/6	6/6
Colour Vision	WNL	WNL

Extraocular Movements: All extra ocular movements are full and normal

Anterior segment examination of the patient is as follows:

Intra Ocular Pressure [Non-Contact Tonometry]:

Right Eye: 10 mm of hg

Left Eye: 12 mm of hg

Table 3:- Slit lamp Examination

Anterior Segment Examination	Right Eye	Left Eye
CONJUNCTIVA /SCLERA	WNL	WNL
CORNEA	CLEAR	**4mm*4mm swelling present with hair follicles at the inferotemporal quadrant of the limbus**
ANTERIOR CHAMBER	NORMAL DEPTH	NORMAL DEPTH
IRIS	NORMAL COLOR AND NORMAL PATTERN	NORMAL COLOR AND NORMAL PATTERN
PUPIL	ROUND REGULAR AND REACTING TO LIGHT	ROUND REGULAR AND REACTING TO LIGHT
LENS	GREYISH BLACK REFLEX	GREYISH BLACK REFLEX
FUNDAL GLOW	GOOD	GOOD

Dilated Fundoscopy Both eyes dilated with tropicamide with phenylephrine. After full dilation of pupil

Table 4:- Dilated Fundoscopy

	Right Eye	Left Eye
Media	CLEAR	CLEAR
Optic Disc	DISC MARGIN CLEAR , WITH CDR 0.3-0.4 , DISC SIZE WNL	DISC MARGIN CLEAR , WITH CDR 0.3-0.4 , DISC SIZE WNL
Macula	FR PRESENT	FR PRESENT
Blood Vessels	WNL	WNL
Background and Periphery	WNL	WNL

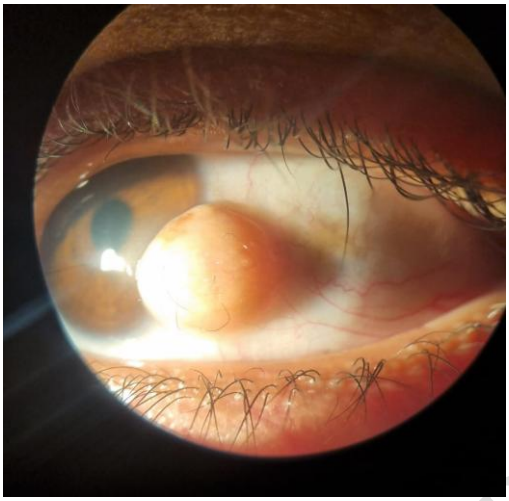

Figure 1: Left eye Limbal Dermoid

B-Scan:

No abnormality detected

NCCT Orbit:

Superficial soft tissue swelling at limbus in lower and outer quadrant of left eye likely benign etiology with no internal calcifications and deeper invasion

Provisional Diagnosis:

Left eye Limbal Dermoid

Plan of Treatment:

Mass excision was scheduled for the left eye's limbal dermoid, and the removed tissue was sent for Histopathological Examination.

All routine blood investigations, serology, ECG and chest x-ray were with in normal limit.

Procedure:

Under sterile aseptic precaution, Peribulbar block was given to left eye. Left eye was painted and draped. Since the lesion mainly involved the cornea, excision was done with keratectomy. After the eye was patched, the removed tissue was sent for pathological and microbiological analysis. Haematoxylin and eosin (H&E) was used to stain the tissue. A light microscope analysis of the stained section verified that it was dermoid.

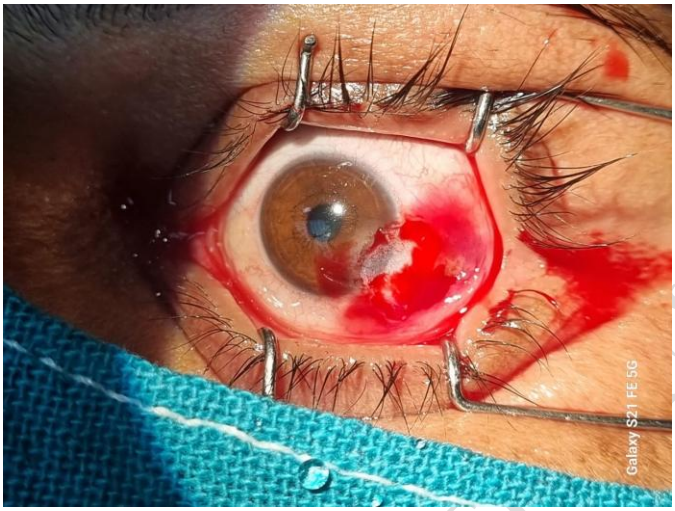

Figure 2: Intraoperative image after dermoid excision

Follow-up:

Post-operative day-1 was uneventful the patient is advised for follow-up every 3months

Figure 3: Follow up image

Financial support and sponsorship: Nil

Conflicts of Interest: Nil

References:

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