

Adherent leukoma-the mystery remains

Dr. Anubhav Chauhan¹, Dr. Deepak Sharma², Dr. Pankaj Thakur³, Dr. Anchit Wapa⁴

¹ M.S Ophthalmology, Medical Officer (Specialist), Department of Ophthalmology, Shri Lal Bahadur Shastri Government Medical College and Hospital, Nerchowk, Distt. Mandi, Himachal Pradesh, India

² M.S Ophthalmology, Assistant Professor, Department of Ophthalmology, Shri Lal Bahadur Shastri Government Medical College and Hospital, Nerchowk, Distt. Mandi, Himachal Pradesh, India

³ M.S Ophthalmology, Senior Resident, Department of Ophthalmology, Shri Lal Bahadur Shastri Government Medical College and Hospital, Nerchowk, Distt. Mandi, Himachal Pradesh, India

⁴ M.S Ophthalmology, Senior Resident, Department of Ophthalmology, Shri Lal Bahadur Shastri Government Medical College and Hospital, Nerchowk, Distt. Mandi, Himachal Pradesh, India

Abstract

A 19-year-old male presented with a history of decrease vision in the left eye for many years. History and ocular examination revealed bilateral near symmetric, adherent leukoma without any previous history of trauma or systemic illness. We report the rare features of this case.

Keywords: Leucoma, ocular, illness

Introduction: Case

A 19-year-old male (FIGURE 1), labourer by occupation, presented with a history of decreased vision in the left eye for many years and wanted a spectacle correction. There were no other ocular complaints nor there was a history of any previous ophthalmic consultation. There was no other significant antenatal, postnatal, medical, surgical, family, traumatic or drug abuse history. Ocular examination was carried out and his visual acuity was 6/6 in the right eye and 6/60 in the left eye with no improvement on pinhole. Retinoscopy revealed an error of +6 diopter in both horizontal and vertical meridia in the left eye. Pupillary reactions, ocular movements, colour vision, and intraocular pressure were normal bilaterally. Slit lamp and torch examination revealed bilateral adherent leukoma nasally in the right and the left eye (FIGURE 2a and 2b) respectively. Seborrheic blepharitis was clearly evident on the lid margins of the right and left eye (FIGURE 3a and 3b). Fundus examination of the right eye was within normal limits while examination of the left fundus revealed a hypermetropic disc. Ultrasonography B-scan reporting showed no abnormalities in posterior segment of both the eyes. The systemic and laboratory findings revealed no abnormalities. A diagnosis of bilateral adherent leukoma with bilateral seborrheic blepharitis with amblyopia (left eye) was established. Cause of bilateral adherent leukoma could not be ascertained and prognosis plus nature of the disease was explained to the patient in detail.

Treatment for seborrheic blepharitis was initiated and the patient was advised a regular follow up.



Fig 1



Fig 2a

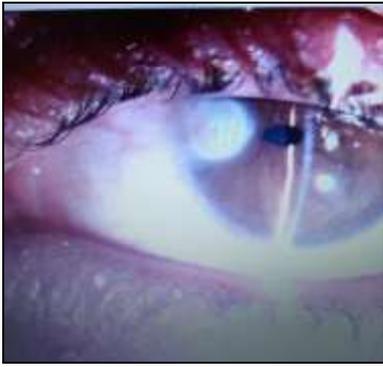


Fig 2b



Fig 3a



Fig 3b

Discussion

Cornea is an optically clear and transparent structure. Corneal disorders can lead to loss of corneal transparency resulting in a corneal opacity [1]. Adherent Leukoma is a corneal scar which has fibrous tissue adherent to its deeper surface. It always indicate a perforation unless an adherent leukoma of congenital origin is present [2]. A few rare cases of non-traumatic bilateral adherent leukoma have been described to occur in association with protein energy malnutrition, vitamin A deficiency, herpetic infections and measles [3, 4]. Differential diagnosis of congenital corneal opacities includes Sclerocornea, Tears in Descemet's Membrane, Ulcers, Metabolic Disorders, Peter's Anomaly, Endothelial dystrophy, and Dermoid [5]. Corneal tattoos and corneal transplantation have been used in treating corneal opacities with varying results [6].

The term blepharitis is used for eyelid inflammation. Seborrheic blepharitis patients have soft greasy scales along the lashes or lid margin. Management of seborrheic blepharitis usually involves treating any underlying dermatological condition, artificial tears, immunomodulatory agents, treating seborrhea of the scalp, warm compress, lid hygiene with diluted baby shampoo, and omega-3 fatty acids [7]. Amblyopia is a reduction of best corrected visual acuity that cannot be contributed to the

structural abnormality of the eye. The effect of treatment for amblyopia usually decreases after critical period which is thought to be 6 years of age and is thought attributing to decreased brain plasticity. The treatment for amblyopia includes refractive correction, occlusion, atropine penalization, behavioral treatments (perceptual learning, dichoptic training, and video game), levodopa-carbidopa combination, fluoxetine, and citicoline [8].

References

1. Singh KR, Duraipandi K. Corneal Opacity Management. *DOS Times*. 2015; 20(9):53-57.
2. Agrawal PK. The pathology of cornea (A histopathological study). *Indian J Ophthalmol*, 1983; 31:662-5.
3. Kwan A. Corneal adherent leukoma associated with measles. *Eye*, 2004; 18:849-850.
4. Koksai M, Kargi S, Ugurbas S. Corneal adherent leukoma associated with measles. *Eye*. 2003; 17(3):446-447.
5. Nayyar M, Sabnis M, Mohta A. A Rare Case of Peter's Anomaly in New Born. *J Adv Med Dent Scie Res*. 2018; 6(5):15-17.
6. Madhivanan NP, Aysha PA, Nishanth S, Madhivanan N. White to black: Keratopigmentation. *TNOA J Ophthalmic Sci Res*, 2019; 57:68-70.
7. Eltis M. Seborrheic Blepharitis. *Clinical & Refractive Optometry*. 2011; 22(10):229-23.
8. Yen MY. Therapy for Amblyopia: A newer perspective. *Taiwan J Ophthalmol*. 2017; 7(2):59-61.