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Upper lid dermatochalasis and transcutaneous blepharoplasty

Ritu Agarwal[1,*], Anil Chauhan[2]

[1]Resident, [2]Assistant Professor, Dept. of Ophthalmology, SPMC, Bikaner, Rajasthan

***Corresponding Author:**
Email: agarwal.dr.ritu.09@gmail.com

Abstract

Redundant and lax eyelid skin and muscle is known as dermatochalasis. It is a degenerative disease of skin and muscles of lids and is commonly seen in elderly persons and occasionally in young adults. Gravity, loss of elastic tissue in the skin and weakening of the connective tissues of the eyelid frequently contribute to this laxicity. We report a case of upper lid dermatochalasis with the symptoms of eye strain and drooping of upper lid. This case was treated with transcutaneous blepharoplasty with acceptable cosmetic results.

Keywords: Blepharoplasty, Dermatochalasis

Introduction

Dermatochalasis is a rare degenerative disease unique to the skin of the lids, clinically characterized by primary bilateral swelling followed by progressive loss of subcutaneous tissue resulting in fine wrinkling and the skin of the upper lid hangs in thin folds. It is also termed *ptosis atonia, ptosis adipose* and *dermatolysispalpebrum*.[(1)] Blepharoplasty is the treatment of choice with good cosmetic results.

Case Report

A 35-year-old female presented with history of eye strain and heaviness and drooping of upper lid of both eyes due to skin laxity since 6 years. She had several attacks of lid oedema at the interval of 4-6 months which persisted for one day each time since the age of 29 years. For the past 4 years she did not experience lid oedema but developed laxity of skin of upper eyelids. There was no history of trauma and any dermatological disease. On examination of both eyes redundant skin folds noticed extended over the margins of the eyelids. Interpalpebral fissure height was 10 mm and marginal reflex distance1 (MRD1) was 4mm[(2)] (Fig. 1). Rest ophthalmic examination was within normal limits. Thyroid profile, renal function tests and all haematological investigations were within normal limits

Treatment: Upper eyelid blepharoplasty was done. For this preoperative markings were made on upper lid. The lower limit of excision was made along the eyelid crease, and the lateral extent of the marking was limited by an imaginary line joining the lateral end of the brow to the lateral canthus. Upper border of the incision was 8 mm from the brow. The upper eyelid was anaesthetized with 2% lignocaine and with the help of a radiofrequency cautery incision was made along the skin markings, strip of preseptal orbicularis and medial and central fat pad was excised along with skin and closed with 7-0 absorbable sutures

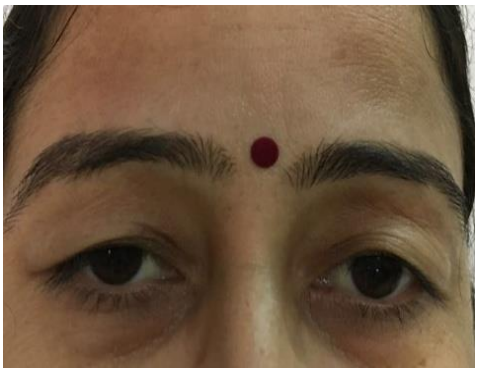

Fig. 1: Upper lid dermatochalasis

Discussion

Periocular dermatochalasis stands for excessive loose skin and eye bags. It's a common finding seen in elderly persons and occasionally in young adults. The pathophysiology of dermatochalasis is consistent with the normal aging changes seen in the skin. This includes loss of elastic fibers, thinning of the epidermis, and redundancy of the skin. Histopathologic studies have shown that the orbicularis oculi remains morphologically intact as patients age and that the predominant findings were located in the epidermis and dermis.[(3)]

Dermatochalasis is caused by either recurrent episodes of swelling (blepharochalasis) or more commonly by involutional changes with age and for hereditary reasons. Medical causes of dermatochalasis, include thyroid eye disease, renal failure, trauma, Ehlers-Danlos syndrome, amyloidosis, hereditary angioneurotic edema and xanthelasma.[(4)]

The common difficulties encountered with dermatochalasis include loss of the superior visual field, eye strain, difficulty in reading, loss of peripheral vision when driving and cosmetically in acceptable condition.

The only effective treatment is correction by blepharoplasty. 'Blepharos' in Greek means eyelid, while plastic is derived from Greek word 'plastikos'

means to mould. The term 'blepharoplasty' was first coined by Von Graefe in 1815.[5] Preoperative patient evaluation for blepharoplasty should document medical and ophthalmologic history. It can be performed under local anesthesia. For upper eyelid blepharoplasty, preoperative markings should be made with the patient sitting upright in neutral gaze with the brow properly positioned. The lower limit of excision should be along the eyelid crease, and the lateral extent of the marking should be limited by an imaginary line joining the lateral end of the brow to the lateral canthus (Fig. 2). A minimum of 20 mm of vertical lid height should be preserved for normal eye closure. The location of fat should be determined and marked preoperatively. The upper lids should be injected superficially, with 2% lidocaine with 1:100,000 epinephrine. Skin incision can be made either with a No 15 Bard Parker blade or the empire tip of radiofrequency monopolar cautery. 2- to 3-mm strip of preseptal orbicularis and medial and central fat pad is also excised along with skin (Fig. 3). The skin incision can be closed using running or interrupted sutures with various absorbable or permanent material. The advantage of transcutaneous approach is that it corrects excess skin and muscle laxity.[6] (Fig. 4)

Fig. 2: Markings in upper lid

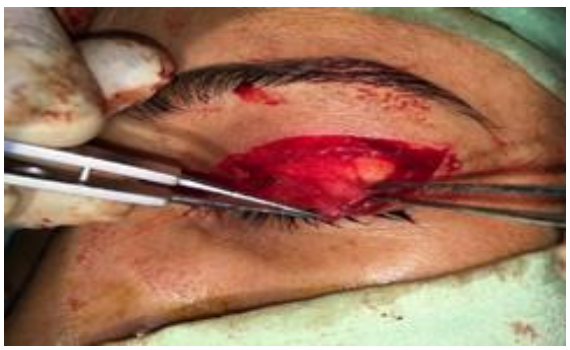

Fig. 3: Excision of skin

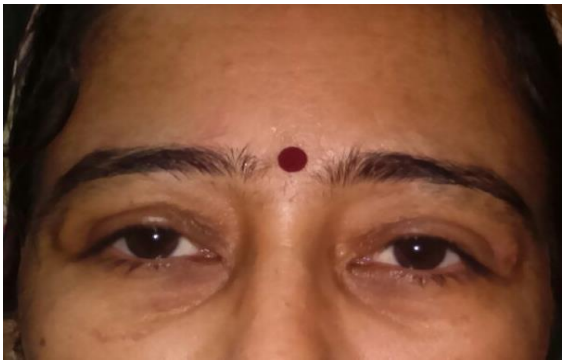

Fig. 4: At 1 month follow up

Conclusion

Dermatochalasis is a degenerative disease of skin and muscles of lids that can be treated by surgical excision of skin and fat known as 'Blepharoplasty'. Significant improvement in the patient's cosmetic appearance and quality of life is obtained with blepharoplasty surgery

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