

Sir,

Lacrimal gland prolapse in blepharochalasis
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Blepharochalasis is an uncommon disorder that sometimes requires surgical management in the form of blepharoplasty. We present such a case with an unexpected perioperative finding of lacrimal gland prolapse.

Case report

A 23-year-old female presented with a 16-year history of bilateral recurrent upper lid oedema. The episodes of oedema recurred every 2 weeks and lasted for up to 2 days. There was no dermatological history or other medical history of note. The condition was not exacerbated by the use of nonsteroidal anti-inflammatory drugs, but previous use of oral steroids in the past had provided some relief. An urticarial screen and C1 esterase inhibitor level were normal. A clinical diagnosis of blepharochalasis was made. At presentation, she had 1 mm of blepharoptosis bilaterally with marked redundancy of upper lid skin (Figure 1). She underwent bilateral upper lid blepharoplasty under local anaesthesia. Perioperatively, abnormal looking tissue was seen to be prolapsing through the orbital septum bilaterally (Figure 2, top). The anatomical origin of the tissue was difficult to ascertain, but it was appreciated that two differing types were present and presumed to be both hypertrophic orbital fat and lacrimal gland tissue. The preaponeurotic fat pads were removed with a clamp/cautery technique and a tissue biopsy was performed of the presumed lacrimal gland. The prolapsing masses were fixed to the orbital rim with



Figure 1 Preoperative appearance with eyes open (top) and eyes closed (bottom).

compression sutures using 5.0 ethilon (Figure 2, bottom) prior to skin closure with a continuous subcutaneous 6.0 prolene suture. The biopsy showed lacrimal gland tissue with chronic inflammatory infiltration. The postoperative result is shown in Figure 3.

Comment

Blepharochalasis is an uncommon disorder seen predominantly in young people characterised by recurrent intermittent oedema of the eyelids. It was first described early in the 19th century by Beers¹ and termed blepharochalasis by Fuchs² at the end of the same century. A hypertrophic form with orbital fat herniation and an atrophic form with atrophy of orbital fat have been described.^{3,4} It is usually bilateral but unilateral cases although rare have been described.⁵ The condition results in excessive, wrinkled, and atrophic lid skin with laxity of the canthal tendons. It has been postulated that blepharochalasis represents a localised form of angioedema⁶ although others have suggested that it may be part of a more generalised disorder.⁷ Nonsteroidal and other drug-induced urticaria and angioedema should be

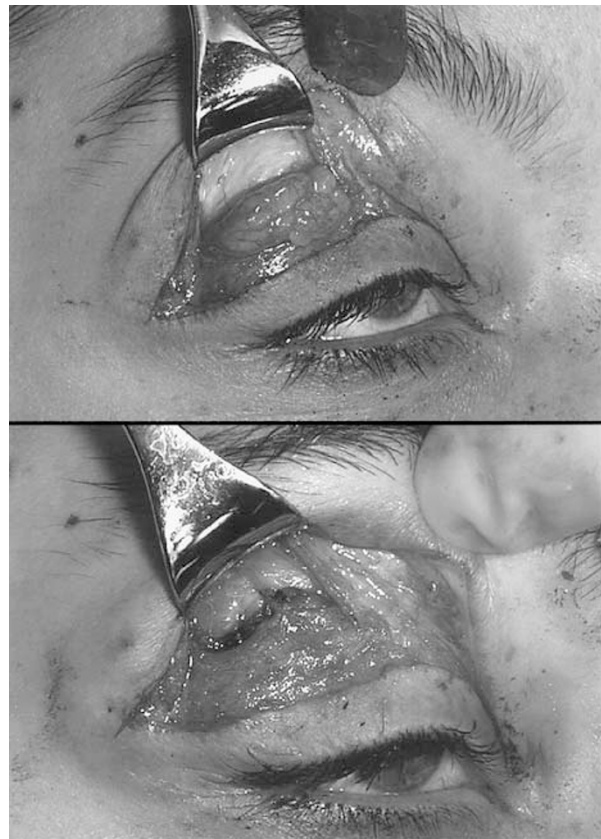


Figure 2 Perioperative view of prolapsing orbital tissue (top) and following fixation of prolapsing tissue to orbital rim and closure of orbital septum (bottom).

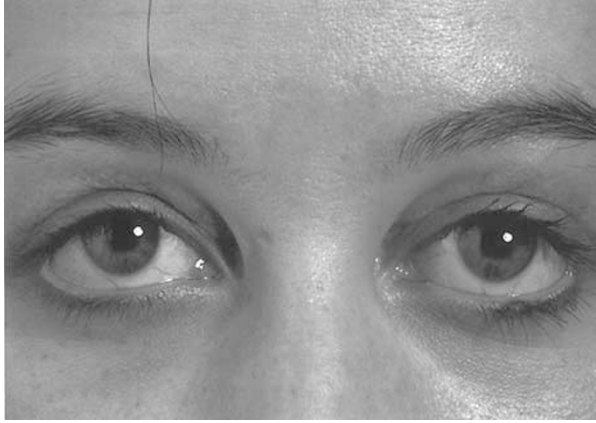


Figure 3 Postoperative appearance.

excluded before a final diagnosis of blepharochalasis is reached.⁸

The surgical management of blepharochalasis includes blepharoplasty for redundant upper lid skin, a relatively simple procedure commonly performed by plastic surgeons and ophthalmologists. It is usual to wait until the condition is quiescent before performing the surgery. We agreed to perform the surgery before the quiescent phase in our case because the patient was both extremely distressed by the appearance of her eyelids and also suffered from impaired vision during exacerbations owing to increased blepharoptosis.

This case illustrates an unexpected perioperative finding, which, importantly, requires the differentiation of prolapsing lacrimal gland tissue from orbital fat or dermolipomas. A relatively simple oculoplastic procedure can thus become a much more complex one that necessitates accurate identification of the anatomy of the upper lid, levator complex, orbital septum, and fat pad. This can be difficult even for experienced oculoplastic surgeons, especially in the context of chronic inflammatory conditions. It is not inconceivable therefore that the unsuspecting surgeon could inadvertently excise prolapsing lacrimal gland tissue that may resemble hypertrophic fat with a resultant risk of causing subsequent chronic ocular surface disease associated with aqueous tear deficiency.

In suspected cases of lacrimal gland prolapse, the surgeon should consider the option of performing a tissue biopsy with subsequent fixation of the tissue to the orbital wall, using a technique similar to that described by Petrelli^{9,10} prior to skin closure. The highly vascular nature of the lacrimal glands must be borne in mind and so any biopsy should be performed with care. In conclusion, it is important to consider the possibility of lacrimal gland prolapse during blepharoplasty in blepharochalasis and be suitably experienced to manage this scenario appropriately.

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References

- 1 Beer IJ. *Lehre von den Augenkrankheiten, als Leitfaden, zu Seinen offentlichen Vorlesungen entworfen*, Huebner und Wolke: Vienna, 1807, 109pp.
- 2 Fuchs E. Ueber Blepharochalasis (Erschlaffung der Lidhaut). *Wien Klin Wochenschr* 1896; **9**: 109–110.
- 3 Collin JRO, Beard C, Stern WH, Shoengarth D. Blepharochalasis. *Br J Ophthalmol* 1979; **63**: 542–546.
- 4 Cluster PL, Tenzel RR, Kowalczyk AP. Blepharochalasis syndrome. *Am J Ophthalmol* 1985; **99**: 424–428.
- 5 Manners RM, Collin JRO. Localised unilateral blepharochalasis. *Br J Ophthalmol* 1994; **78**: 881–882.
- 6 Jordan DR. Blepharochalasis Syndrome: a proposed pathophysiologic mechanism. *Can J Ophthalmol* 1992; **27**: 10–15.
- 7 Ghose S, Kalra BR, Dayal Y. Blepharochalasis with multiple system involvement. *Br J Ophthalmol* 1984; **68**: 529–532.
- 8 Nettis E, Marcandrea M, Maggio GD, Ferrannini A, Tursi A. Retrospective analysis of drug-induced uricaria and angiodema: a survey of 2287 patients. *Immunopharmacol Immunotoxicol* 2001; **23**(4): 585–595.
- 9 Smith B, Petrelli R. Surgical repair of prolapsed lacrimal glands. *Arch Ophthalmol* 1978; **96**: 113–114.
- 10 Smith B, Petrelli R. Herniation of the lacrimal glands. *Trans Am Acad Ophthalmol Otolaryngol.* 1977; **84**: 988–990.

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