

## Case Report

# Ocular Penetrating Injury as a Complication of Blepharoplasty: A Case Report

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### Abstract

**Purpose:** To report a rare case of ocular penetrating injury after blepharoplasty procedure.

**Case report:** Blepharoplasty is a frequent oculoplastic surgery with relatively infrequent complications. Penetrating injury of the eye due to blepharoplasty has been reported in few previous studies. Here we report a 35-year-old woman presenting with visual loss in her left eye as a complication of blepharoplasty. In fundusoscopic examination, prominent retinal folds were found and optical coherence tomography (OCT) findings were compatible with macular hypotony caused by a neglected penetrating injury during oculoplastic surgery. She was admitted and underwent the primary repair of the scleral and limbal laceration. Her visual acuity and other symptoms improved significantly one week after surgery. After six months, her visual acuity for the injured eye was 20/20 without any other complications.

**Conclusion:** Hypotonic maculopathy, disproportionate pain, and visual loss can be alarming signs after cosmetic blepharoplasty pointing to a probable penetrating eye injury.

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## Introduction

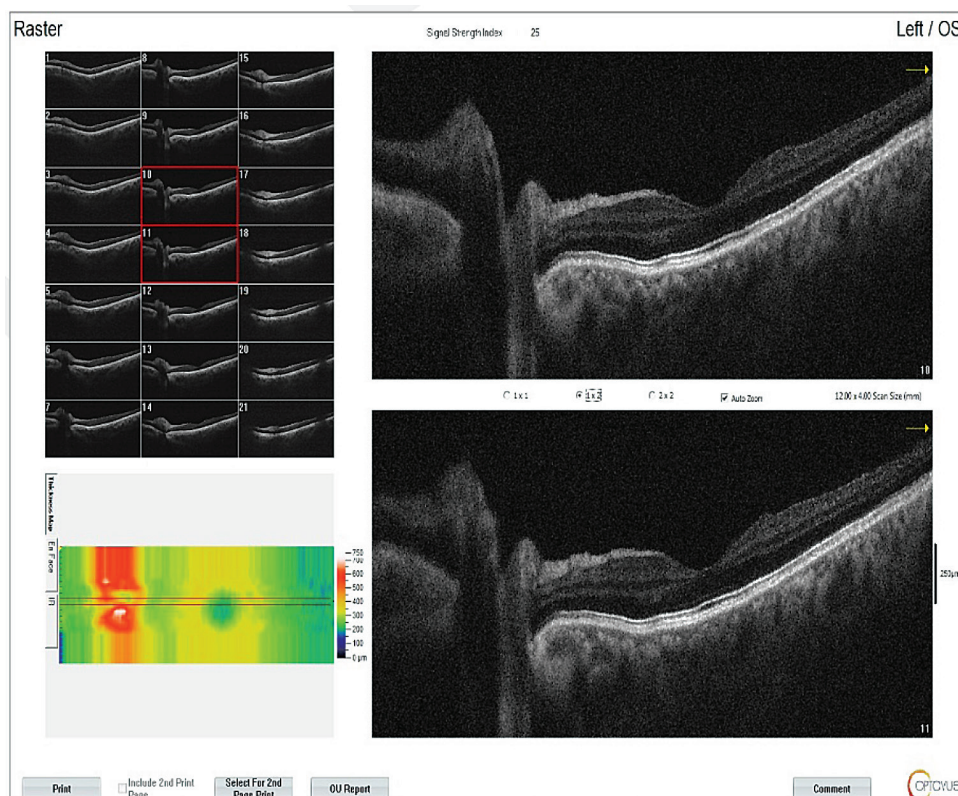
Blepharoplasty is one of the most common cosmetic operations in the field of oculoplastic surgery. It is considered a relatively safe procedure with uncommon complications; most of them mild and transient. However, some catastrophic complications have been reported such as retrobulbar hemorrhage, complete or partial visual loss due to occlusion of the central retinal artery or vein, ischemic optic neuropathy, angle closure glaucoma and perforation of the globe<sup>1-3</sup>.

Penetrating injury of the eye as a disastrous complication of blepharoplasty is a rare condition<sup>4-6</sup>. In this case report, we describe a patient with ocular penetrating injury caused by blepharoplasty surgery. This report was approved by the ethics committee of Tehran University of Medical Sciences and informed consent was obtained from the patient before

reporting the case.

## Case report

A 35-year-old woman presented with complaint of left eye pain and blurry vision since 3 days ago following bilateral upper lid blepharoplasty in another center. Her surgery was performed by a general surgeon. Her visual acuity was counting finger at 2 meters for the left eye and 20/20 for the right eye. All ophthalmologic exams for the right eye were normal. The slit-lamp biomicroscopy of the left eye revealed full thickness lacerations in the sclera and limbus with positive Seidel test. The anterior chamber was shallow and the eye was hypotonic. In the funduscopy, wrinkling of macula was apparent consistent with the diagnosis of hypotony maculopathy which was confirmed by ocular coherence tomography (OCT) (Figure 1). She was admitted and



**Figure 1: OCT of the left eye showing hypotony maculopathy**



**Figure 2: The scleral and limbal laceration one day after primary repair**

underwent the primary repair of the scleral and limbal lacerations (Figure 2). Her visual acuity and other symptoms improved significantly one week after surgery. After six months, her visual acuity was 20/20 in both eyes without any other complications.

### Discussion

In the present case report, we described a patient with penetrating injury of the eye as a very rare complication of blepharoplasty. Blepharoplasty is a common oculoplastic surgery with fairly low rate of complications. Most of these complications are minor and transitional such as chemosis, corneal erosion or blepharospasm. Some other more severe complications like ectropion, lagophthalmos, canalicular laceration and orbital inflammatory mass (lipogranuloma) may need an additional

intervention <sup>7</sup>. Furthermore, blepharoplasty can scarcely lead to devastating events such as retrobulbar hemorrhage and visual loss with estimated incidence of one in 2000 and one in 30000 respectively <sup>3</sup>.

Ocular penetrating injury due to blepharoplasty has been reported in a few previous studies <sup>4-6</sup>. Ibáñez et al., <sup>4</sup> reported a patient with scleral perforation in three areas of the eye presented one week after blepharoplasty surgery with severe persistent pain. Darlington et al., <sup>5</sup> described a 61-year-old woman with two corneal perforations as a complication of laser blepharoplasty. Parikh et al., <sup>6</sup> reported a complicated case of blepharoplasty due to inadvertent corneal perforation during lid anesthesia. Hence, although it is rare, the surgeon should be aware of the possibility of ocular penetrating injury as a complication of blepharoplasty and be concerned about its symptoms and signs such as disproportionate pain, visual loss, a hypotonic globe and corneal clouding.

### Conclusion

Hypotonic maculopathy, disproportionate pain, and visual loss can be alarming signs after cosmetic blepharoplasty pointing to a probable penetrating eye injury.

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#### Footnotes and Financial Disclosures

#### Conflict of interest:

The authors have no conflict of interest with the subject matter of the present study.