### SHORT COMMUNICATION

#### Case report

# Ocular complication of intralesional corticosteroid injection of a chalazion

B.M. HOŞAL, G. ZILELIOĞLU

Ankara University Department of Ophthalmology, Ankara - Turkey

PURPOSE. To report a major complication of intralesional corticosteroid injection for the treatment of a chalazion.

METHODS. A 28-year-old woman presented with a 4-day history of decreased vision in her left eye that developed after corticosteroid injection to her upper eyelid for the treatment of chalazion. The visual acuity was 20/20 in her right and finger counting in her left eye. Anterior segment examination showed an inferior corneal opacity with positive Seidel test and cataract. RESULTS. A soft contact lens was applied to cornea and antibiotic therapy was given to prevent endophthalmitis. Cataract was removed by lens aspiration and a posterior chamber intraocular lens was implanted. After surgery, the visual acuity increased to 20/20 in her left eye.

CONCLUSIONS. Inadvertent corneal penetration and traumatic cataract are possible and serious complications of intralesional corticosteroid injection. (Eur J Ophthalmol 2003; 13: 798-9)

Key Words. Corneal penetration, Intralesional corticosteroid injection, Traumatic cataract

Accepted: June 30, 2003

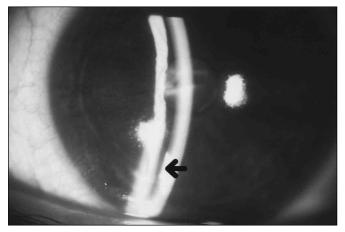
# INTRODUCTION

Chalazion is a chronic, focal, lipogranulomatous inflammation of the eyelid due to secretions of obstructed meibomian glands that extravasate into the tarsus and the surrounding tissues (1, 2). Chalazia resistant to conservative medical treatment usually require surgical incision and curettage of the lesion.

Intralesional corticosteroid therapy is a safe, convenient, and effective alternative to chalazion surgery (1, 2). In this article, we report a patient with corneal penetration and traumatic cataract due to intralesional corticosteroid injection for the treatment of a chalazion. To our knowledge, this complication has not been previously reported.

#### **Case report**

A 28-year-old woman presented with a 4-day history of decreased vision in her left eye. Her medical history revealed that she had a steroid injection to her left upper eyelid for the treatment of chalazion four days previously. Her upper eyelid was inverted and the injection was performed to the conjunctival site. During the injection, she felt a sudden pain in her left eye, and her visual acuity decreased after several minutes. External examination revealed bilateral chalazion in her upper eyelids. The visual acuity was 20/20 in her right eye and finger counting at 10 cm in her left eye. Anterior segment examination showed a corneal opacity at the inferior segment with anterior



**Fig. 1** - Anterior segment examination showed a corneal opacity (arrow) and cataract.

lens capsule perforation and cataract (Fig. 1). The Seidel test was positive in her left eye.

# RESULTS

A bandage soft contact lens was applied to cornea and cycloplegic, systemic, and topical antibiotic therapy was given in order to prevent endophthalmitis. During the follow-up period, 5 days after therapy the lens particles released into the anterior chamber and increased the intraocular pressure. After the development of lens particle glaucoma the patient had lens aspiration using a phacohandpiece and underwent posterior chamber intraocular lens implantation. Visual acuity increased to 20/20 in her left eye and intraocular pressure decreased to normal after surgery.

# DISCUSSION

Intralesional corticosteroid injection is a safe method of chalazion therapy. Usually, no major complications are encountered (1, 2). Although rare, possible complications due to local steroid injections are yellow deposits and skin depigmentation at the injection sites. There are few reports of serious complications due to intralesional corticosteroid injections. Thomas et al reported an 8-year-old boy who developed ipsilateral microembolization and infarction of retinal and choroidal vasculature (3). In another report, a patient who had accidental intraocular steroid injection for the treatment of a chalazion was described. The patient developed macular pucker and optic nerve atrophy after being treated by pars plana vitrectomy (4).

Although intralesional corticosteroid injection is a safe and effective method of chalazion therapy, it may have major complications. Eyelid injection must be performed carefully by the ophthalmologist to prevent this complication.

Reprint requests to: Banu M Hoşal, MD Cinnah caddesi 57 / 8 Mihcioglu apt. Cankaya Ankara 06680, Turkey e-mail: shosal@ada.net.tr

# REFERENCES

- Khurana AK, Ahluwalia BK, Rajan C. Chalazion therapy. Intralesional steroids versus incision and curettage. Acta Ophthalmol 1988; 66: 352-4.
- Castren J, Stenborg T. Corticosteroid injection of chalazia. Acta Ophthalmol 1983; 61: 938-42.
- Thomas EL, Laborde RP. Retinal and choroidal vascular occlusion following intralesional corticosteroid injection of a chalazion. Ophthalmology 1986; 93: 405-7.
- Nawrocki J, Swietliczko I, Nawrocka Z. Pars plana vitrectomy following accidental injection of depot steroids into the vitreous body. Klin Monatsbl Augenheilkd 1990; 197: 519-21.