References

1 Sebag J. Age-related changes in human vitreous structure. *Graefes Arch Clin Exp Ophthalmol* 1987; **225**: 89–93.
2 Ondes F, Yilmaz G, Acar MA, Unlu N, Kocaoglan H, Arsan AK. Role of the vitreous in age-related macular degeneration. *Jpn J Ophthalmol* 2000; **44**: 91–93.
3 Weber-Krause B, Eckardt U. Häufigkeit einer hinteren Glaskörperabhebung bei Augen mit und ohne altersabhängiger Makuladegeneration. *Ophthalmologe* 1996; **93**: 660–665.
4 Meyer CH, Toth CA. Retinal pigment epithelial tear with vitreomacular attachment: a novel pathogenic feature. *Graefes Arch Clin Exp Ophthalmol* 2001; **239**: 325–333.
5 Walton KA, Meyer CH, Harkrider CJ, Cox TA, Toth CA. Age-related changes in vitreous mobility as measured by video B-scan ultrasound. *Exp Eye Res* 2002; **74**: 173–180.
6 Borgia L, Badala F. Subfoveal choroidal neovascularization in a patient with pre-existing pseudomacular hole. *Eur J Ophthalmol* 2003; **13**: 718–721.
7 Elsing SH, Postel EA, Gill MK, Jampol LM, Jaffe GJ. Management of eyes with both idiopathic macular hole and choroidal neovascularization. *Retina* 2001; **21**: 613–618.
8 Smith T, Magargal LE, Donoso LA, Magargal HO, Robb-Doyle E. Choroidal neovascularization in an eye with a macular hole. *Ann Ophthalmol* 1989; **21**: 331–332, 336.

CH Meyer and S Mennel

Department of Ophthalmology, Philipps-University Marburg, Robert-Koch-Strasse 4, 35037 Marburg, Germany

Correspondence: CH Meyer
Tel: +49 6421 286 2616;
Fax: +49 6421 286 5678.
E-mail: meyer_eye@yahoo.com

Financial support: None

Proprietary interest: None

Eye (2006) **20,** 1090–1092. doi:10.1038/sj.eye.6702121; published online 7 October 2005

Sir,

Neoadjuvant topical mitomycin C chemotherapy for conjunctival and corneal intraepithelial neoplasia

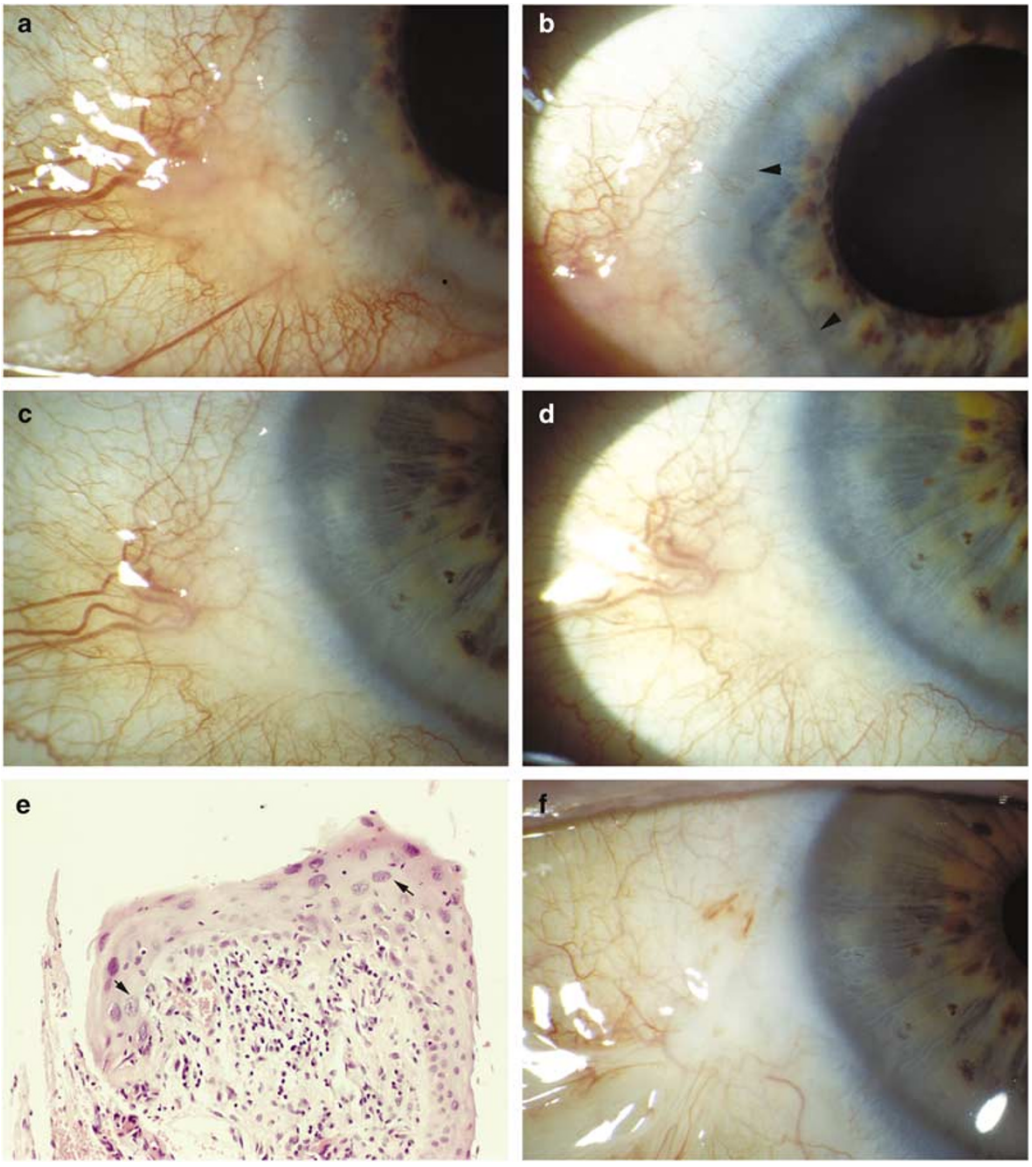
A 68-year-old male was evaluated for redness of the right eye, which had been present for 3 months. The visual acuity was 20/40 and 20/20. A nodular growth, $6 \times 5 \times 3$ mm in size, was observed at the temporal limbus overriding the cornea for about 2 mm (Figure 1a) with circumferential corneal extension for 120° from 0700 to 1100 hours (Figure 1b). Preoperative treatment with 0.04% mitomycin eye drops four times a day (1 week on 1 week off cycle) was initiated following insertion of punctal plugs. Marked reduction in size of the conjunctival tumour was observed by the end of two cycles (Figure 1c) with complete clearing of all corneal involvement and its replacement by normal epithelium (Figure 1d). The patient tolerated the therapy well. Following additional cycle of treatment, excision of the residual conjunctival tumour and double freeze thaw cryotherapy to the conjunctival margins was performed. Histopathology of the residual conjunctival lesion confirmed CCIN with mild dysplasia (Figure 1e). The margins were clear of dysplastic tissue. There was no evidence of tumour recurrence at 12-month visit (Figure 1f).

Comment

Conjunctival epithelial tumours represent a spectrum ranging from mild dysplasia to invasive squamous cell carcinoma involving the conjunctiva as well as the cornea, and are grouped as ocular surface squamous neoplasia (OSSN).[1–3] More than 20 years ago, Fraunfelder and Wingfield reported improved tumour control when excision was combined with cryotherapy as compared to excision or cryotherapy performed alone.[4,5] The limitation of surgical excision is a potential for partial excisions and possibility of stem cell failure when large areas of limbal epithelium are excised.

In recent years, topical chemotherapy with mitomycin has been advocated for postoperative usage in cases where tumour excision is incomplete, both for primary and recurrent tumours while accepting risk of reversible keratoconjunctivitis.[6–9] By using topical neoadjuvant chemotherapy the advantages of surgical excision and of chemotherapy can be exploited in the most effective way. The surgical excision is limited, histopathologic diagnosis can be confirmed, the risk of keratoconjunctivitis is minimized, and the risk of postoperative tumour recurrence may be reduced.[7]

Figure 1 (a) Fleshy nodular growth at the temporal limbus. (b) Circumferential corneal extension for 120° (arrowheads). (c) Appearance following two cycles of mitomycin C (MMC) therapy. Marked reduction in size of the conjunctival tumour was observed. (d) Appearance following two cycles of mytomycin C (MMC) therapy. Note complete clearing of all corneal involvement. (e) Histopathology of the residual conjunctival tumour reveals CCIN with mild dysplasia. Note large hyperchromatic nuclei containing nucleoli (arrows, hematoxylin and eosin). (f) Appearance at 12 months postoperative visit.



References

1 Lee GA, Hirst LW. Ocular surface squamous neoplasia. *Survey Ophthalmol* 1995; **39**: 429–450.
2 Grossniklaus HE, Green WR, Lukenbach M, Chan CC. Conjunctival lesions in adults: A clinical and histopathologic review. *Cornea* 1987; **6**: 78–116.
3 Erie JC, Campbell RJ, Liesegang TJ. Conjunctival and corneal intraepithelial and invasive neoplasia. *Ophthalmology* 1986; **93**: 176–183.
4 Fraunfelder FT, Wingfield D. Management of intraepithelial conjunctival tumors and squamous cell carcinomas. *Am J Ophthalmol* 1983; **95**: 359–363.
5 Singh AD. Excision and cryosurgery of conjunctival malignant epithelial tumours. *Eye* 2003; **17**: 125–126.
6 Finger PT, Milner MS, McCormick SA. Topical chemotherapy for conjunctival melanoma. *Br J Ophthalmol* 1993; **77**: 751–753.
7 Frucht-Pery J, Rozenman Y, Pe'er J. Topical mitomycin-C for partially excised conjunctival squamous cell carcinoma. *Ophthalmology* 2002; **109**: 548–552.
8 Frucht-Pery J, Sugar J, Baum J, Sutphin JE, Pe'er J, Savir H *et al*. Mitomycin C treatment for conjunctival-corneal intraepithelial neoplasia: a multicenter experience. *Ophthalmology* 1997; **104**: 2085–2093.
9 Wilson MW, Hungerford JL, George SM, Madreperla SA. Topical mitomycin C for the treatment of conjunctival and corneal epithelial neoplasia. *Am J Ophthalmol* 1997; **124**: 303–311.

AD Singh[1], R Jacques[2], PA Rundle[2], IG Rennie[2], HS Mudhar[3]
D Slater[3]

[1]Department of Ophthalmic Oncology, Cole Eye Institute, Cleveland Clinic Foundation, Cleveland, OH, USA

[2]Department of Ophthalmology, Royal Hallamshire Hospital, UK

[3]Department of Histopathology, Royal Hallamshire Hospital, UK

Correspondence: AD Singh, Department of Ophthalmic Oncology, Cole Eye Institute (i3-129), Cleveland Clinic Foundation, 9500 Eclid Avenue, Cleveland, OH 44195, USA
Tel: +1 216 445 9479;
Fax: +1 216 445 2226.
E-mail: Singha@CCF.org

Eye (2006) **20,** 1092–1094. doi:10.1038/sj.eye.6702126; published online 21 October 2005

Sir,

Severe inflammation following iris fixated anterior chamber phakic intraocular lens for myopia

Though studies have shown that there is no statistically significant endothelial cell loss after iris fixated phakic intraocular lens implantation,[1] complications encountered include pigment dispersion, lens deposits, pupil ovalization, pupil decentration, uveitis, and chronic inflammation.[2] We present a case where the patient developed severe inflammation confined to the intraocular lens.

Case report

A 26-year-old lady underwent iris fixated phakic intraocular lens implantation (Verisyse, AMO) under general anesthesia on 29th October 2004 for an error of –18 diopters in the right eye. She had a central corneal thickness of 412 μm in the right eye and the anterior chamber depth from the epithelium was 3.6 mm. Specular microscopy revealed a cell density of 2638 cells per sq. mm. The optic of the lens measured 5 mm and had a power of –17 diopters. The procedure was done with Healon GV.

On post-op day 1, she had an unaided visual acuity of 20/25 in the right eye. The lens was in place and the eye was quiet. She was started on Betamethasone 0.1% eye drops six times a day and 0.3% Ofloxacin eye drops four times a day. She presented 3 days after surgery with irritation in the right eye. She did not have any other symptoms. The visual acuity was 20/25 and showed 1+ flare with pigments over intraocular lens. There was no conjunctival injection or lid oedema noted. The steroids were changed to 1% prednisolone acetate eye drops 3 hourly. She was followed up closely over a period of one week during which the clinical features were stable. At 1 week after surgery, she complained of diminution of vision along with mild pain. Her visual acuity had dropped to 20/60. There was ciliary congestion and a fibrin coagulum (Figure 1a) on the intraocular lens, which was confined to the intraocular lens but was not involving the enclavated iris. There was a trace hypopyon. The Peripheral iridotomy was patent. The posterior pole of the fundus was normal. She was admitted and was prescribed 1% prednisolone acetate eye drops 1 hourly and 2% homatropine eye drops 8 hourly. On the next day, the anterior chamber showed 4+ cells and flare. The hypopyon had increased. She was prescribed 1% prednisolone acetate eye drops every 1/2 hourly, 0.3% ciprofloxacin eye drops 1/2 hourly along with 1% atropine eye drops three times a day. The next day, her vision had dropped

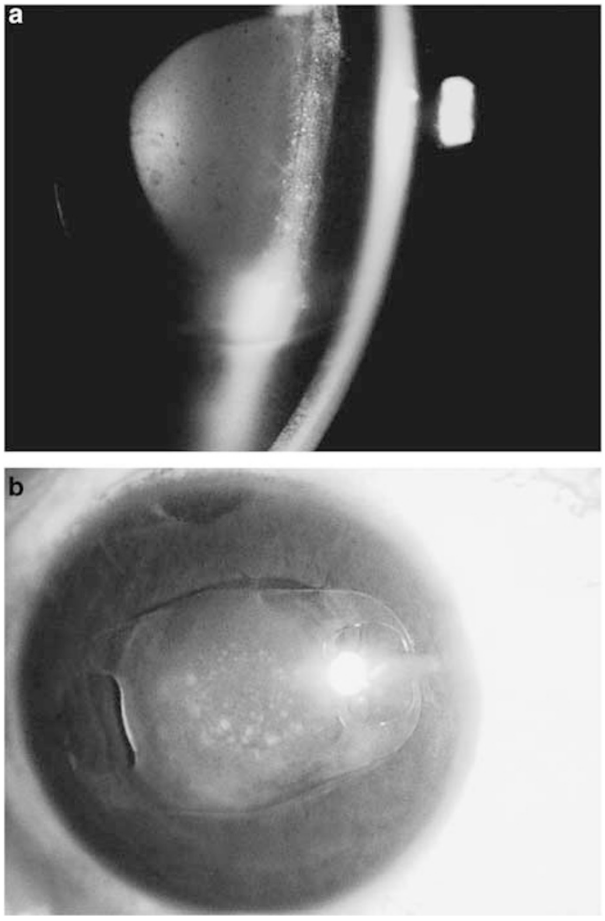


Figure 1 (a) Diffuse slit lamp view showing fibrin coagulum on the intraocular lens. (b) Diffuse slit lamp view after initiation of steroid therapy showing focal infiltrates.