

Q2. Did your physician advise you to consult an ophthalmologist?

(1) Yes, (2) No, (3) Uncertain

Q3. Are you aware that your eyes can be damaged by diabetes?

(1) Yes, (2) No, (3) Uncertain

Q4. Do you feel anxiety about your eyes?

(1) Yes, (2) No, (3) Uncertain

Q5. Do you currently have eye symptoms?

(1) Yes, (2) No, (3) Uncertain

Q6. Do you think that you have eye disease due to diabetes?

(1) Yes, (2) No, (3) Uncertain

Q7. Are you so busy that it is difficult to find time to visit this hospital?

(1) Yes, (2) No, (3) Uncertain

Bilateral Corneal Neovascularization and Opacification Associated With Unmonitored Contact Lens Wear

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PURPOSE: To report a case of severe bilateral deep stromal neovascularization and opacification associated with unmonitored contact lens wear.

DESIGN: Observational case report.

METHODS: A 46-year-old woman who had been using hydrogel contact lenses bought on the Internet without a prescription for 5 years was found to have dense, bilateral corneal opacities with deep stromal neovascularization.

RESULTS: The patient's contact lenses were found to be tight-fitting. Medical history and serological studies were negative for infectious or rheumatologic causes of interstitial keratitis.

CONCLUSIONS: The deep stromal neovascularization and the associated corneal opacification are most likely related to the unmonitored contact lens use and the lack of routine eye examinations. We believe it is critical that all contact lens wearers receive professional eye care on a regular basis regardless of where they obtain their contact lens supplies. (Am J Ophthalmol 2003;136:957-958. © 2003 by Elsevier Inc. All rights reserved.)

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SUPERFICIAL CORNEAL NEOVASCULARIZATION IS A RELATIVELY common complication of contact lens wear. It is usually reversible and not visually threatening. Deep stromal neovascularization, in contrast, is a less common complication and can threaten vision. It has been reported in relation to both aphakic and cosmetic contact lens use.^{1,2}

We herein report a case of deep corneal stromal neovascularization with bilateral, dense, opacities in association with unmonitored, extended wear of tight-fitting hydrogel contact lenses. This patient's course was complicated by her practice of ordering her contact lenses without a prescription for an extensive period of time. We believe such self-care led to a significant delay in the recognition and therefore treatment of her corneal complications.

A 46-year-old woman was referred for consideration of corneal transplantation. She had noticed a white opacity in her left eye for 10 months and in her right eye for 3 months. There was no eye pain or irritation. She reported a history of successful use of contact lenses to correct her myopia (right eye, $-3.00 -4.75 \times 069$ and left eye, $-5.50 -1.00 \times 060$) for 30 years. At presentation, she reported use of hydrogel contact lenses on an extended-wear basis in both eyes for more than 5 years with weekly removal and replacement but without use of care solutions. Her last previous professional evaluation for contact lens care had been 5 to 6 years earlier. She maintained her supply of contact lenses by ordering them on the Internet without a doctor's prescription. Her medical history was otherwise unremarkable.

Visual acuities on presentation with her contact lenses were 20/50 in the right eye and 20/30 in the left eye with eccentric viewing. Mild conjunctival injection with small tarsal papillae were noted in the upper and lower lids of both eyes. We noted minimal movement of her hydrogel contact lenses on blinking and concluded that they were "tight-fitting." The corneal epithelium was intact in both eyes. There was diffuse superficial and deep stromal neovascularization associated with large, dense, white stromal opacities in both corneas, measuring 5.7 mm \times 5.1 mm in the right eye, and 4.6 mm \times 4.0 mm in the left eye (Figure 1). Anterior chambers, lenses, and vitreous were clear in both eyes. Dilated fundus examination was unremarkable.

Laboratory results of antinuclear antibody, rheumatoid factor, and fluorescent treponemal antibody tests were negative. The patient reported a history of negative purified protein derivative skin test and chest radiography.

We advised immediate discontinuation of all contact lens wear. Six months after the discontinuation of contact lens use, the patient noticed no change in vision. Visual acuities with spectacle correction were 20/50 in the right eye and 20/40 in the left eye with eccentric viewing. The conjunctiva was noninflamed in both eyes. The superficial and deep stromal neovascularization and opacities in both

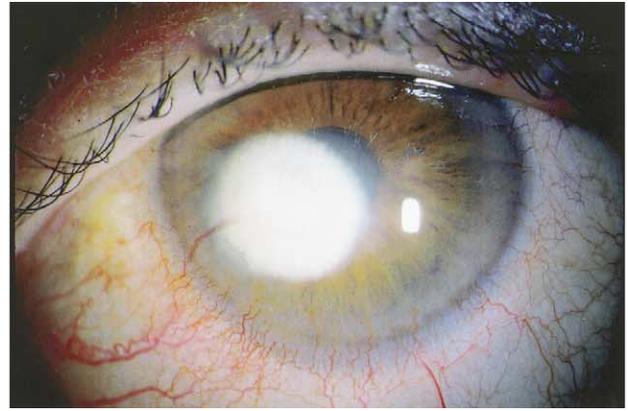
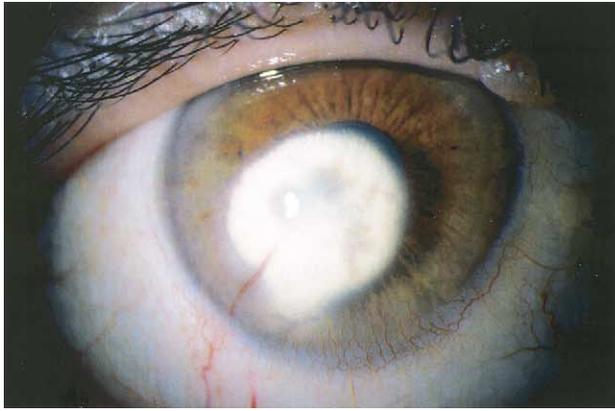


FIGURE 1. Slit-lamp photographs of patient's right eye (left panel) and left eye (right panel) at the time of initial presentation, showing superficial and deep stromal neovascularization and dense stromal opacities.

corneas were essentially unchanged. Both anterior chambers remained quiet.

Although deep stromal neovascularization in itself does not cause visual loss, it has been associated with sight-threatening complications. It can result in a circinate-pattern interstitial keratopathy and can be related to either aphakic or cosmetic contact lens wear.^{3,4} Most of the eyes with this complication had permanent corneal opacities, and some eventually required penetrating keratoplasty. Another vision-threatening complication is intracorneal hemorrhage of the fragile new vessels. Patients can either be asymptomatic or complain of acute discomfort with or without visual loss.⁵

Since both superficial and deep stromal neovascularization, as well as subsequent serious complications, often develop without symptoms until the central cornea is affected, we believe that contact lens wearers should seek routine eye care on a regular basis whether they obtain their replacement contact lenses from a practitioner's office or through "alternative" suppliers such as opticians, mail order suppliers, or the Internet. It is unfortunate that our patient continued to order contact lenses through the Internet without prescription or the benefit of a doctor's examination over an extensive period of time. Routine eye examinations would have led to both early diagnosis and appropriate intervention. For example, pannus that developed in association with hydrogel lens wear could be reversed when rigid gas permeable contact lenses were substituted.⁶

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Unilateral Uveitis Induced by a Nonionic Iodinated Contrast Agent

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PURPOSE: To report recurrent unilateral uveitis after computed tomography (CT) enhanced by the contrast agent iopamidol.

DESIGN: Observational case report.

METHODS: A 44-year-old man with a history of mixed-cellularity Hodgkin lymphoma, Stage I B (axillar, infraclavicular, subpectoral lymphomas) was under remission after chemotherapy and radiotherapy. The contrast-enhanced CT scans performed every 3 months were within hours followed by a marked unilateral anterior uveitis, vitritis, and retinal bleedings. Symptoms resolved with topical corticosteroid treatment within a week.

RESULTS: We observed recurrent unilateral uveitis after intravenously application of 150 ml of iopamidol for contrast-enhanced CT scans in a patient with lymphoma in remission.

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