

DIDACTIC IMAGE

DESCEMET MEMBRANE DETACHMENT AFTER ALKALI OCULAR SURFACE BURN

HUA M-T., BETZ P.

A 26-year-old man presented to our service in December 2009 with a bilateral ocular surface chemical burn. He received a splash of ammonia, an alkaline agent, during a criminal assault. On initial examination, his visual acuity was hand movements in the right eye and counting fingers in the left eye. Slit lamp examination revealed in the right eye a large corneal epithelial defect with two clock hours of limbus involvement and 15% conjunctival involvement (Figure 1). In the left eye, there was a corneal epithelial damage but neither the limbus nor the conjunctiva were involved. This corresponds respectively to a grade 2 (2/15%) and a grade 1 burn according to recent classification of ocular surface burns proposed by Dua *et al.* (1).

The patient rapidly developed an intumescent cataract in his right eye with the presence of an hyopion, but the intraocular pressure was under control. The left eye had a good evolution. A cataract extraction was scheduled for the right eye two months after the injury but the patient didn't show up for the surgery.

.....

Submitted: 21.03.2010
Accepted: 01.09.2010

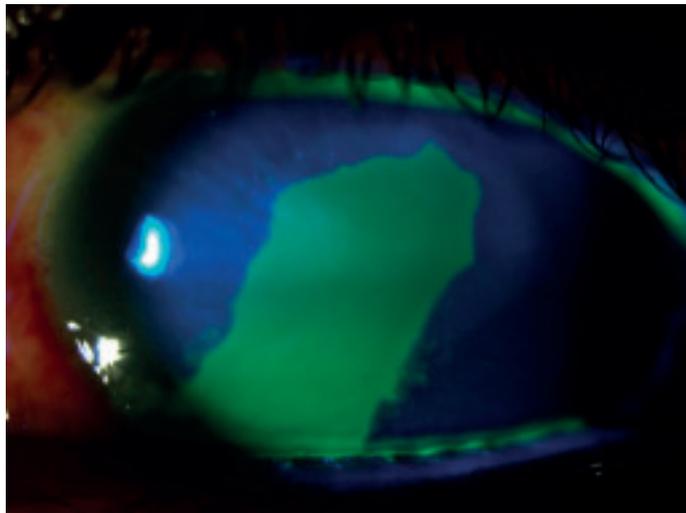


Fig. 1: Grade 2 (2/15%) ocular surface burn. Large corneal burn with two clock hours of limbus involvement and 15% conjunctival involvement

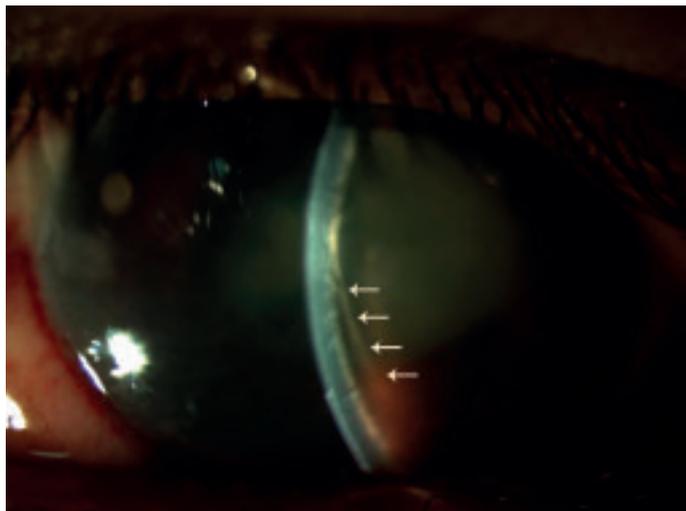


Fig. 2: Slit-lamp photo showing a detachment of the Descemet membrane (arrows)

A week later, he came back to the office with a Descemet membrane detachment accompanied by a hyphema (Figure 2). We performed a cataract extraction and left an air bubble in the anterior chamber to reattach the Descemet membrane. Unfortunately, the patient was lost for follow-up.

Detachment of Descemet membrane is a known complication of cataract surgery. It has also been described after nonpenetrating filtering surgeries as well as post sequential argon-neodymium:YAG laser peripheral iridotomies. Detachment of Descemet membrane has also been reported after hydrogen peroxyde injuries (2).

In 2004, Najjar *et al.* reported the first two cases of Descemet membrane detachment after alkali burns (3). Since then, no additional report has been published in the literature.

REFERENCES

- (1) Dua HS, King AJ, Joseph A – A new classification of ocular surface burns. *Br J Ophthalmol* 2001; 85: 1379-1383
- (2) Yuen HK, Yeung BY, Wong TH, Wu WK, Lam DS – Descemet membrane detachment caused by hydrogen peroxyde injury. *Cornea* 2004; 23: 409-411
- (3) Najjar DM, Rapuanco C.J., Cohen E.J. – Descemet membrane detachment with hemorrhage after alkali burn to the cornea. *Am J Ophthalmol* 2004; 137: 185-187

.....

Adress for correspondence:

Mr. Minh-Tri Hua

CHR Citadelle Liège

E-mail: minhtrihua@gmail.com