Precipitation of herpetic stromal keratitis after collagen cross-linking for keratoconus

A 22-year-old-male in whom collagen cross-linking (CXL) was done elsewhere 3 years ago for keratoconus presented with 4 × 3 mm deep corneal neovascularization [Fig. 1a] in arborizing pattern [confirmed with corneal fluorescein angiography (Fig. 1c and d)] involving midstroma [confirmed with anterior-segment optical coherence tomography (OCT) (Fig. 1b)] with feeder vessels from 5 o'clock limbus in left eye. A presumptive diagnosis of chronic herpetic stromal keratitis was made and treated with oral acyclovir and topical low-dose steroids, causing partial regression of neovascularization with appearance of ghost vessels [Fig. 1e and f].

Ultraviolet-A (UVA) light, epithelial/stromal trauma, or actual damage to corneal nerves during Collagen cross-linking (CXL) could trigger reactivation of latent Herpes infections even in patients with no previous history.^[1,2]

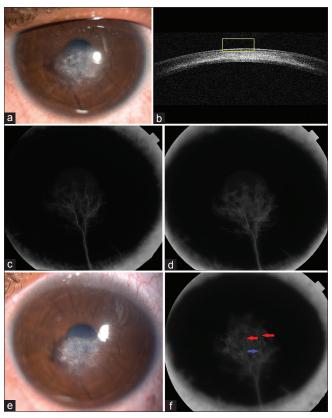


Figure 1: (a) Cornea of left eye showing 4×3 mm deep corneal neovascularization. (b) Anterior segment OCT showing involvement of midstroma (c) Corneal fluorescein angiography showing an arborizing network of neovasularization. (d) Late phase corneal fluorescein angiography showing leakage from the new vessels. (e) Cornea of left eye showing decrease in neovascularization with appearance of ghost vessels and stromal scarring after treatment. (f) Corneal fluorescein angiography showing ghost vessels (red arrows) and patchy stromal scarring (blue arrow) and decreased leakage after treatment

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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