Corneal edema in xeroderma pigmentosa

Xeroderma pigmentosa is an autosomal recessive disorder characterized by a defect in the DNA repair mechanism because of which there is a damaging effect on the sun-exposed areas of the body.^[1,2] The various corneal changes in these patients include haze, scar, vascularization, edema, and stromal thinning.^[3] Stromal edema on clinical examination is indicative of poor endothelial function in these eyes.[4,5] A 25-year-old male with xeroderma pigmentosa presented with gradually decreasing vision in the right eye. The right eye revealed stromal haze and significant corneal edema distributed more in inferior cornea [Fig. 1a]. The left eye had minimal stromal haze inferiorly [Fig. 1b]. Descemet membrane endothelial keratoplasty was performed in the right eye [Fig. 1c]. The visual acuity improved from 20/125 preoperatively to 20/25 postoperatively in the right eye at 1-month postoperative period. Specular microscopy of the left eye revealed a low endothelial cell density and increased mean cell area [Fig. 1d], as has been reported in an earlier study.^[4]

This case supports that endothelial cell loss and corneal edema occurs in ceroderma pigmentosa and can be managed with Descemet membrane endothelial keratoplasty when seen at the stage of minimal stromal scarring.

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



Figure 1: (a) Slit lamp photograph of the right eye showing corneal edema and mild stromal haze. (b) Slit lamp photograph of the left eye showing scarring inferiorly. (c) Slit lamp photograph of the right eye 1 month after Descemet membrane endothelial keratoplasty. (d) Specular microscopy of the left eye showing reduced endothelial cell density and increased cell area

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 The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.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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