

Disciform herpetic endotheliitis: Appearance on anterior segment optical coherence tomography

Endotelite herpética disciforme: Aspecto na tomografia de coerência óptica do segmento anterior

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Herpes simplex virus can affect the epithelial, stromal, or endothelial layer of the cornea.⁽¹⁾ We present two cases of herpetic endotheliitis.

CASE REPORT

Case 1

A 12-year-old patient with herpetic keratitis. Slit lamp examination revealed central stromal edema (Figure 1A). Anterior segment optical coherence tomography (AS-OCT) showed stromal thickening with a diffuse hyper-reflective area in the anterior stroma. One keratic precipitate was found (Figure 2B). AS-OCT monitoring showed complete resorption of the edema and the keratic precipitate under antiviral treatment combined with local corticosteroids (Figure 2C).

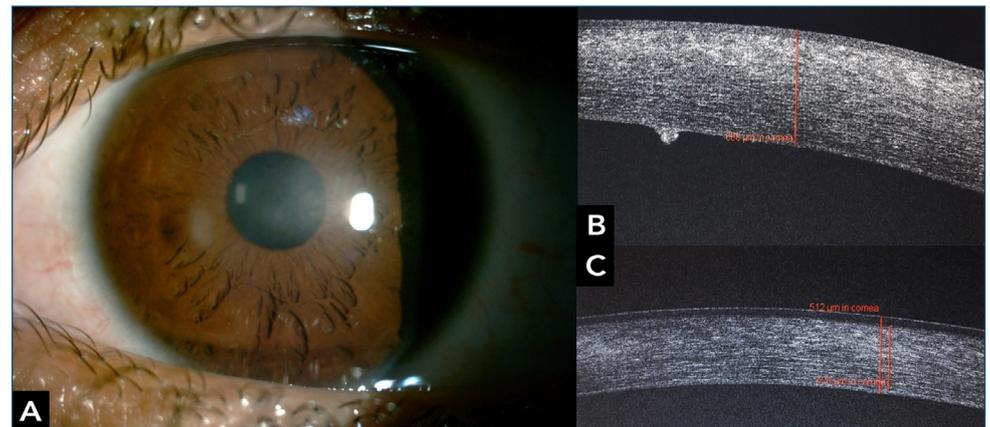


Figure 1. (A) Slit lamp examination showed stromal edema. (B) Anterior segment optical coherence tomography showed stromal thickening with a diffuse hyper-reflective area in the anterior stroma. A keratic precipitate was found. (C) Complete resolution of the stromal edema at the end of treatment.

Case 2

A 62-year-old patient with blurred vision and photophobia of the right eye. At evaluation, localized paracentral edema was observed on the stroma associated to multiple keratic precipitates (Figure 2). AS-OCT demonstrated the stromal thickening with the keratic precipitates (Figure 3). Oral valacyclovir and topical corticosteroides were initiated with complete resolution of signs and symptoms.

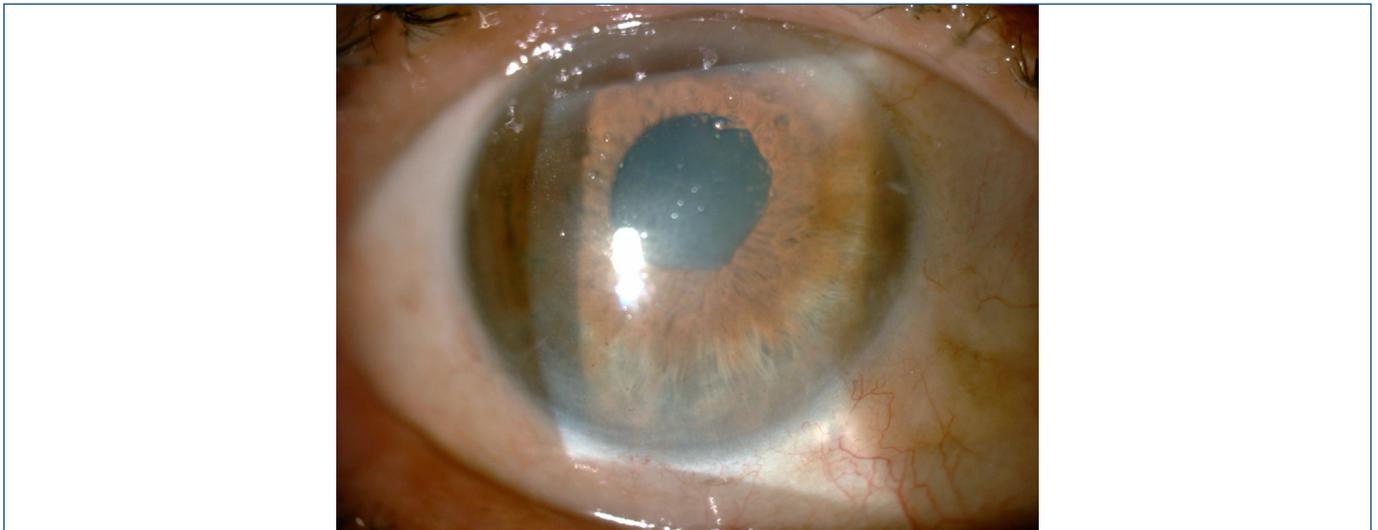


Figure 2. Discrete region of edema with multiple keratic precipitate consistent with disciform herpetic keratitis.

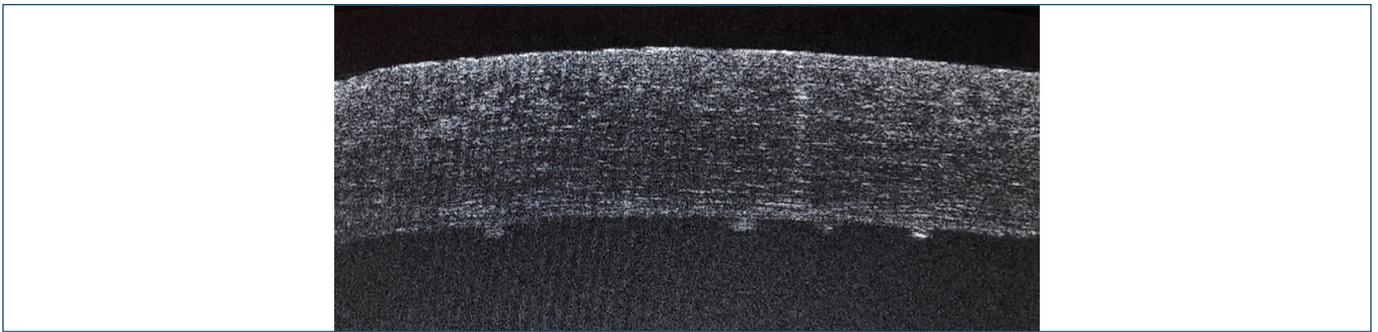


Figure 3. Anterior segment optical coherence tomography showing the stromal thickening with multiple hyper-reflective large polygonal lesions (keratic precipitates).

In this two cases, the AS-OCT images demonstrated different patterns depending on the form of the keratitis. The first case presented stromal non necrotic keratitis associated to disciform herpetic endotheliitis. The second case presented a disciform herpetic keratitis.

Diagnosis usually is made by the presence of specific clinical signs but sometimes the diagnosis is not obvious. These cases demonstrate that herpetic keratitis also has characteristic AS-OCT features, including stromal thickening, hyper-reflective area in the anterior stroma and keratic precipitate.⁽²⁾ These features are not unique to herpetic keratitis, but AS-OCT imaging may provide useful supplementary information for diagnosing and monitoring herpetic keratitis.

REFERENCES

1. Kalezic T, Mazen M, Kuklinski E, Asbell P. Herpetic eye disease study: Lessons learned. *Curr Opin Ophthalmol.* 2018;29:340-6
2. Hashida N, Asao K, Maruyama K, Nishida K. Cornea findings of spectral domain anterior segment optical coherence tomography in uveitic eyes of various etiologies. *Cornea.* 2019;38(10):1299-304.