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Short communication

Corneal melting after cataract surgery in a patient with autoimmune disease☆

G. García de Oteyza, A. Gómez, M. de la Paz*

Servicio de Superficie Ocular y Córnea, Centro de Oftalmología Barraquer, Barcelona, Spain

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ABSTRACT

Case report: A 78-year-old woman with rheumatoid arthritis and secondary Sjögren's syndrome presented with corneal melting three days after cataract extraction that required penetrating keratoplasty. By the fourth month, a second corneal transplant was needed due to a new descemetocele associated with her systemic disease.

Discussion: The underlying disease, together with the surgical history, was responsible for the complication presented. The correct anamnesis prior to cataract surgery, a refined technique, and a close post-operative follow-up can avoid such a serious complication. Immunomodulatory treatments are essential in this type of patient.

Queratolisis tras cirugía de catarata en paciente con enfermedad autoinmune

Palabras clave:
Queratolisis posquirúrgica
Cirugía de catarata
Artritis reumatoide
Queratoplastia tectónica
Enfermedad autoinmune

RESUMEN

Caso clínico: Mujer de 78 años con artritis reumatoide y síndrome de Sjögren secundario presentó una lisis estromal corneal 3 días después de la extracción de cataratas requiriendo queratoplastia penetrante. Al cuarto mes, necesitó un segundo trasplante de córnea debido a un nuevo descematocele asociado a su enfermedad sistémica.

Discusión: La enfermedad de base junto con el antecedente quirúrgico fueron responsables del cuadro que presentamos. La correcta anamnesis previa a la cirugía de cataratas, el tratamiento preoperatorio de la enfermedad de base de la superficie ocular, una técnica depurada y un estrecho control postoperatorio pueden evitar una complicación tan grave. Los tratamientos inmunomoduladores son fundamentales en este tipo de pacientes.

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* *Corresponding author.*
E-mail address: gonzalo_gdeoteyza@hotmail.com (G. García de Oteyza).

Introduction

Rheumatoid arthritis (RA) is a self-immune systemic inflammatory disease that typically compromises the small joints of hands and feet. Due to its immunological basis, RA could affect the entire body.

Ocular complications derived from rheumatoid arthritis include episcleritis, scleritis, anterior uveitis, corneal compromise and retinal vasculitis. However, the most prevalent ocular expression is dry eye, frequently associated (11–31% of cases) with secondary Sjögren syndrome.[1] Accordingly, corneal lesions are severe and include marginal thinning, keratolysis, stromal opacities, peripheral vascularization and even perforation.

Clinic case

Female, 78, who visited the emergency Dept. due to discomfort, red eye and diminished vision in the right eye (RE) with 2 days evolution, referring cataract surgery 3 days earlier comprising phacoemulsification and intraocular lens implant with incisions at the surgical limbus level. The record confirmed surgery without complications and treatment with tobramycin and dexamethasone eyedrops 3 times a day. Prior to surgery, the patient was in treatment with preservative-free artificial tears 3 times a day and the records indicated the absence of anterior segment alterations. The patient was hypertensive, had diabetes type II and was diagnosed with RA.

Visual acuity was 0.09 in RE without exhibiting improvement with correction, and 0.75 with correction in left eye (LE). Biomicroscopy revealed stromal lysis compromising the lower half of the cornea (Fig. 1A and B) with descematocele measuring 1 × 3 mm (Fig. 2), without hypopion and negative Tyndall. Palpebral anatomy was normal, without blinking alterations. LE did not exhibit anterior segment alterations (Fig. 1C and D).

Considering the severity of the condition and the possibility of imminent perforation, it was decided to perform 8.5 mm tectonic keratoplasty (TKP) and temporal tarsorrhaphy. Anatomopathological analysis of the receiving cornea reported stromal infiltration of lymphocytes and polymorphonuclears.

General analyses after emergency surgery confirmed RA and secondary Sjögren syndrome (ANA, anti-SSa [Ro] and anti-SSb [La] positive). Post-surgery treatment included tobramycin and dexamethasone 3 times a day, medroxyprogesterone 5 times a day, chloramphenicol 5 times a day, cycloplegic 3 times a day, timolol 0.5% twice a day and 0.15% hyaluronic acid and

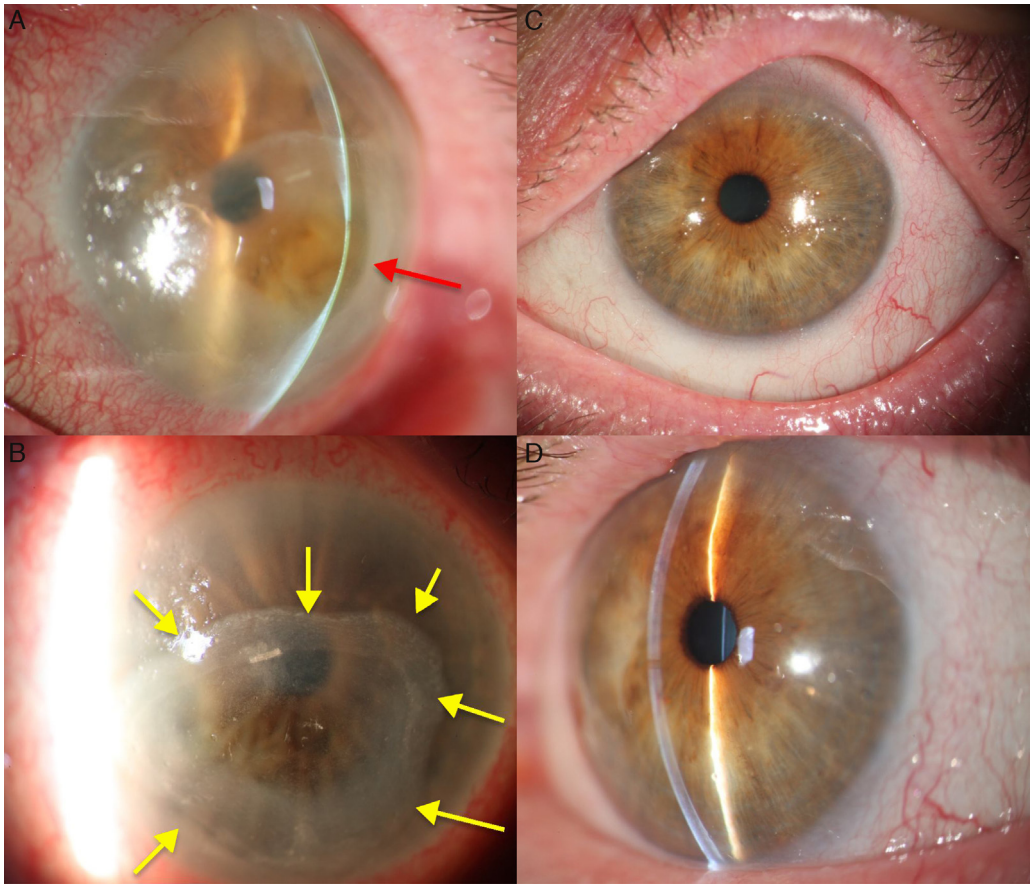

Fig. 1 – Biomicroscopic appearance of RE (A and B) and LE (C and D). (A) Thin slit section showing thinning inferior to the pupil of 1 × 3 mm (red arrow). (B) Indirect lighting through the limbus showing over-shaped area of whitish corneal infiltrate surrounding descematocele (yellow arrows). (C) General appearance of LE showing thickening and telangiectasia in palpebral edge. (D) Thin slit showing absence of thinning in LE.