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## Efficacy of the tissue regenerating agent (RGTA) in the treatment of neurotrophic corneal ulcers and persistent epithelial defects

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## Abstract

**Purpose** : To report the results obtained in a series of 58 eyes with chronic corneal ulcers and persistent epithelial defects resistant to conventional therapy and treated with 0.01% poly-carboxymethylglucose sulfate (RGTA, Cacicol<sup>®</sup>).

**Methods** : A prospective study was made of 58 eyes of patients with corneal ulcers and persistent epithelial lesions secondary to neurotrophic disorders, caustic damage, ulcerated metaherpetic lesions, Stevens-Johnson syndrome, peripheral ulcerative

keratitis and severe dry eye, among other conditions. The ulcers were essentially chronic and slow-evolving, with mean vertical and horizontal diameters of 2.4 and 2.7 mm, respectively (range 1-5.5 mm). All patients had been previously treated with classical tear substitutes, and some had also received blood products, topical cyclosporine, corticosteroids, amniotic membrane coverings, therapeutic contact lenses and/or a vitamin-based eye ointment. The patients received an initial dose of one drop in the morning every 48 hours during 10 days. After evaluation of the effects of treatment, new dosing schemes were prescribed for those patients who had improved their clinical condition though without complete resolution of the disease.

**Results** : Important variation was observed in the time to recovery of corneal integrity, ranging from a few days to some weeks, depending on the severity and etiology of the case. Full healing was recorded in 50 patients. The patients with large neurotrophic ulcers showed improvement of the lesions, with a decrease in lesion size after 15 days of treatment. Eight eyes did not achieve complete healing. In the case of severe ulceration and when a positive effect was observed after one month, treatment was continued with spacing of the applications until complete healing was achieved. All patients reported subjective improvement. The drug showed immediate efficacy in 11 eyes with epithelialisation disorders following PRK or trauma, with recovery of tissue integrity after the first treatment period.

**Conclusions** : The tissue regenerating agent (RGTA, Cacicol<sup>®</sup>) is an interesting and effective topical adjuvant product for the treatment of severe and chronic corneal ulcers resistant to conventional treatment. Its efficacy remains to be confirmed in the context of double-blind, randomised clinical trials.

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Bilateral neurotrophic ulcers



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