

Treatment of Recurrent Corneal Erosions

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Recurrent corneal erosion syndrome (RCES) is common clinical disorder involving the detachment of the corneal epithelium from the underlying epithelial basement membrane. Characterized by the repeated breakdown of epithelium, RCES can cause moderate to severe eye pain, photophobia, lacrimation, and corneal scarring leading to visual deficits. Patients are often debilitated by the resulting pain and visual deficits and are frustrated by the condition's lack of response to common therapies. Due to the recurrent nature of this condition and resistance to commonly use therapies, patients often make repeated visits to their ophthalmologists hoping to receive an immediate fix. There are many therapies for RCES, each with varying degrees of efficacy. Patients must be assessed on a case-by-case basis so that treatment regimens are individualized. This review presents a spectrum of treatments for RCES, ranging from simple medical management to complex surgical interventions. Patient outcomes from previous cases in the outpatient clinic at the Mass Eye and Ear Infirmary and past national studies were collected, quantified, and qualified. Based on the efficacy of various medical and surgical treatments, a treatment algorithm was formulated. The stepladder approach will guide ophthalmologists to individualize treatment, minimize iatrogenic risks, and improve long-term outcomes.