

Usefulness of Collagen Cross-linking (CXL) in reducing the time to healing of suppurative corneal ulcers in a South Indian tertiary care centre

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Abstract

Aim: The aim of this study was to assess the usefulness of Corneal Collagen Crosslinking (CXL) in reducing the time to healing of suppurative corneal ulcers in a South Indian tertiary care centre.

Methods: This was an Observational Cohort Study where in the prospective arm, 13 patients with suppurative corneal ulcers presented to the outpatient department. The surgical procedure was de-epithelialization of the affected corneas followed by UV-A riboflavin (B2) cross-linking. Local antimicrobial therapy was continued after the procedure. This was compared to a retrospective cohort which included 32 consecutive charts of patients who had been admitted and treated in our department in the last 1 year.

Results: The ulcers in the prospective arm had an average healing time of 21.6 days while the retrospective arm had an average healing time of 48.79 days. This reduction was not statistically significant ($P=0.06$), but was definitely greatly clinically significant.

Conclusion: Corneal Collagen Crosslinking reduced the time to healing of suppurative corneal ulcers less than 6mm in diameter. It may be used as an adjuvant to antimicrobial therapy.

Keywords: Corneal Ulcers, Collagen cross linking, Riboflavin (B2), UV-A