Corneal Cross Linking After Iontophoresis For Keratoconus In Young Adults.
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The purpose of the study was to evaluate the effectiveness of corneal impregnation with riboflavin 0.1% by iontophoresis for cross-linking in young adults affected by keratoconus.

We included all consecutive patients with keratoconus and age between 16 and 20 years visited between January and June 2013 at the San Giovanni di Dio e Ruggi d’Aragona Hospital. Inclusion criterion was the topographical and functional progression of keratoconus over the last three months. The riboflavin solution was administered by iontophoresis for 10 min in total, after which standard surface UVA irradiation (370 nm, 3 mW/cm²) was performed for 30 min.

Fifteen patients (10 males, 5 females, mean age 18.2 ± 2.0 years, 15 eyes) were included in the study. After three months a stabilization of visual acuity (from 0.50 ± 0.1 to 0.50 ± 0.2 LogMAR) and keratometric values (from 46.1 ± 1.2 to 46.3 ± 1.1D) was observed in 10 patients, while non significant worsening occurred in 5 patients.

Corneal crosslinking by iontophoresis could become an effective method to reduce the duration of the procedure and increase comfort. Further long-term studies are needed to evaluate the efficacy and spectrum of risk.