THE RESULTS OF SIMULTANEOUS ON BOTH EYES CORNEAL COLLAGEN CROSSLINKING

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WE HAVE NO FINANCIAL INTERESTS
Introduction

Progressive increase in detection of patients with keratoconus determines the need to find crosslinking modifications in order to make procedure faster without losing its efficacy and safety.

CXL procedures in our clinic
(n=723)

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Purpose

To assess the results of corneal collagen crosslinking performed simultaneously on both eyes to treat progressive keratoconus.
The study included 18 patients (36 eyes) with primary keratoconus stage I-II.

- Amsler classification (Pentacam)
- Corneal cross-linking was performed using Russian UV-devices and riboflavin solution with dextran
- In the main group corneal crosslinking was provided simultaneously on both eyes, in the control group - consistently
“Device for cornea phototherapy”
(Moscow, Russia)

“Ufalink”
(Ufa, Russia)
Methods

- Epi-off
- 30 minutes riboflavin instillation
- 30 minutes UV
- $\lambda = 370\mu$
- Fluency - 5 mW/cm²
- Spot diameter – 8 mm
OCT Optovue

Demarcation line \(\leq 200\) microns
- No progression
- No differences in back elevation
- No increase of topography indices
Results

- There were no early or late complications
- Epithelization completed at 4,0±1,0 day
- In the main and control groups there were no differences between the severity of corneal syndrome, functional and refractive results and endothelial cells density
- Better fixation during simultaneous procedure
Simultaneous on both eyes corneal collagen crosslinking is effective method to treat keratoconus and significantly reduce the duration of the procedure.
Thank you!

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