Accelerated corneal collagen crosslinking for keratoconus in pediatric patients: 1 year results

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Purpose

To evaluate the outcomes of accelerated corneal collagen cross-linking (CXL) in pediatric patients with keratoconus

Setting And Design

Beyoglu Eye Research and Training Hospital Cornea and refractive surgery subspecialty.

Prospective clinical trial.

Methods

The study was performed on 59 keratoconus eyes (54 participants: 38 M, 16 F, 9 to 18 years old) treated with accelerated collagen cross linking for corneal stabilization. Main outcome measures were best corrected visual acuity(BCVA), maximum K values (Kmax), and endothelial cell count.

Results

Preoperative and postoperative 3rd and 12th month visits were evaluated.

The best corrected visual acuity values were 0.48±0.34(Log MAR), 0.47±0.38 and 0.47±0.41 respectively.

Results

Mean Kmax values were 58.02±5.03, 57.34±4.41 and 57.22±4.8 respectively.(p=0.714)

Endothelial cell counts were 2494.4 \pm 82.3 and 2486.0 \pm 109.7 and 2403 \pm 119.7 respectively.

Conclusions

Preliminary data of pediatric patients with keratoconus Show safe treatment results by Accelerated CXL. No per or postoperative complications was seen over 1 year.