J Clin Exp Ophthalmol 2016, 7:9(Suppl)
http://dx.doi.org/10.4172/2155-9570.C1.049

Clinical results of keratoconus patients treated with corneal collagen cross-linking alone versus corneal collagen cross-linking combined with intacs implantation

Indra Prasad Sharma[1], **Ramendra Bakshi**[2], **Monica Chaudhry**[3] and **Aparna Gupta**[3]
[1]Mongar Regional Referral Hospital, Bhutan
[2]Eye7 Chaudhry Eye Centre, India
[3]Amity University Gurgaon, India

Background: The study aims to compare the refractive and topographic outcomes of keratoconic eyes treated with Corneal Collagen cross-linking (CXL) alone versus corneal collagen cross-linking (CXL) combined with intacs implantation.

Design: A prospective comparative study.

Participants: The study recruited 38 eyes of 30 consecutive progressive keratoconus patients.

Methods: In Group-I, 24 eyes were treated with CXL alone and in Group-II, 14 eyes underwent CXL combined with simultaneous femtosecond-assisted intacs implantation. Visual acuity, refraction and corneal topography were assessed and compared between the two groups at baseline, three months and six months.

Result: The mean age of participants was 26.5±7.9 (range 15-51) years. The average of follow up was 6.66±0.68 (range 5.5-8). At the final follow up, Group II (CXL combined with intacs) resulted in an additional improvement of uncorrected distance visual acuity (UDVA) by 0.2 Log units ($p \leq 0.05$), spherical power by 0.80 dioptre ($p \leq 0.05$) and cylindrical by 2.10 D ($p \leq 0.05$). Flattening of 1.5D more both mean keratometry (Kmean) and steepest keratometry (Kmax) also flattened by 1.50 dioptre with the combined procedure. Corneal volume decreased in Group I whereas, there was an increase by 2.89 mm in the combined procedure.

Conclusion: Refractive and topographic outcomes improved post-operatively in both the groups; however, the simultaneously combined procedure provided significantly better results. The refractive outcomes in both groups were independent of gender, age and the eye involved.

indrapsharma@gmail.com

Ring-attached amniotic membrane application in persistent corneal epithelial defect

Altan A Ozcan and **Inan Harbiyeli**
Cukurova University, Turkey

Purpose: To evaluate the efficacy of ring-attached amniotic membrane application in persistent corneal epithelial defect.

Methods: 71-year-old woman who had experienced pain, vision loss and redness in her right eye for two months was admitted to our clinic. There was a persistent corneal epithelial defect which was resistant to medical treatment in her right eye. An amniotic membrane which was fixed all around to the symblepharon ring by using fibrin sealant was applied to the ocular surface.

Results: Corneal epithelial defect healed redness and pain disappeared after two weeks follow-up. Afterwards, multilayered amniotic membrane patch graft transplantation was applied and the patient was followed without complication.

Conclusions: The ring-attached amniotic membrane application is a useful, non- invasive and easy technique for treatment of persistent corneal epithelial defects in suitable conditions. This procedure may be considerable both for ensuring of preoperative ocular surface stability, reducing the ocular irritation and a good option for the patients in whom surgery is not applicable. Further studies are needed in large series with longer follow-up to evaluate the success and efficiency of this technique.

altanoz@gmail.com