Abstract

Review   Article

Keratoconus: Latest Approaches to Treatment

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Abstract

Background: Keratoconus is a degenerative disease entity characterized by conical shape ectasia of the cornea. The progressive conical deformation of the cornea leads to substantial astigmatism. Patients who are at an advanced stage of ectasia are often led to corneal transplant or other treatments, which essentially aim at correcting the refractive error and not in treating the ectasia. Lately, the corneal collagen interface is

Objectives: The purpose of this review is to investigate the parameters of the disease, namely the pathogenesis, causes and treatments so far and the analysis of the new therapy aimed to treat the disease.

Methods: An advanced search in the literature was carried out using the Pubmed database, Scopus and Google scholar, from 2009 until today. Keywords and combinations of Keratoconus, cross linking, riboflavin, collagen, corneal topography, UVA were used.

Results: The cuckold in early stages is treated conservatively by wearing contact lenses, which are designed to flatten the cornea and hamper further development. In advanced stages of keratoconus a surgical treatment is recommended, with corneal transplantation being the main choice. A newer approach to the treatment of the disease is corneal collagen interface using riboflavin and ultraviolet light, aimed to the stability and rigidity of the cornea. The nurse plays a key role in the treatment of keratoconus in all stages of treatment. The main nursing interventions include medical history, ocular examination by the review, psychosocial assessment, preoperative and postoperative care and teaching the patient the treatment parameters.

Conclusion: The keratoplasty and collagen interface are the main approaches to treatment of extensive disease of the cornea.

Key words: Keratoconus, cross linking, riboflavin, collagen, corneal topography, UVA