

Novel approach for the treatment of corneal ectasia in a graft.

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Publication Date: 2014

Abstract:

PURPOSE:: The aim of this study was to report the use of novel masking agents during an anterior lamellar keratoplasty performed using a femtosecond laser in a patient with corneal ectasia that was consistent with recurrent keratoconus. **METHODS::** This is a case report. **RESULTS::** A 55-year-old man, with a 23-year status after penetrating keratoplasty for keratoconus, presented with a chief complaint of ocular discomfort in the right eye. On slit-lamp examination, the physician estimated 70% to 80% inferior thinning at the graft-host interface with inferior corneal neovascularization. Because of the high risk of developing corneal perforation and the patient's desire to minimize visual recovery time, anterior lamellar keratoplasty was chosen. To minimize the risk of perforation during femtosecond dissection of the anterior lamellar bed, gentian violet and cyanoacrylate glue were used in the area of thinning as masking agents. **CONCLUSIONS::** This represents the first documented use of gentian violet and cyanoacrylate glue as double masking agents to defocus the femtosecond laser raster pass during keratoplasty. Copyright © 2014 by Lippincott Williams & Wilkins.