

Novel therapeutic approach in the management of band keratopathy using amniotic membrane transplantation with fibrin glue.

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Abstract:

A 91-year-old man with advanced glaucoma, status post trabeculectomy, and pseudophakia had a symptomatic recurrent band and bullous keratopathy in his left eye. Three previous ethylenediaminetetraacetic acid chelations with immediate recurrence of the calcic band keratopathy with frequent breakdown produced recurrent painful corneal epithelial defects. The calcified lesions were removed surgically, resulting in a smooth ocular surface. An 8-mm, 100-micron trephination was performed and a 360degree corneal lamellar peripheral dissection pocket was created. After covering the denuded corneal surface, the edges of the amniotic membrane were introduced into the pocket and secured using fibrin sealant. Additional amniotic membrane was glued to the nasal and temporal corneal areas and a collagen shield was applied. Wound healing was completed in 10 days and a stable ocular surface was restored without pain or inflammation. During the follow-up period, no recurrence of the band keratopathy was observed. This combined approach is a safe and effective alternative method for removal of recalcitrant calcium plaque when conventional therapies have failed, allowing the recovery of a stable ocular surface.