AIM: To report the clinical course, management and visual outcome in patients with topical anesthetic keratopathy.

MATERIALS AND METHODS: Eight patients were using Alcaine (proparacaine hydrochloride 0.05%) to corneal symptoms were evaluated. Complete ophthalmic examination, patient occupation, psychiatric status, initial and final visual acuity were noted.

RESULTS: Thirteen eyes of 8 male patients were evaluated. Patients’ age was between 17-32 (mean: 28) years. Patients’ occupation was metal worker (5 patients), unskilled worker (2 patients) and factory hand (one patient). All the patients’ Alcaine abuse was discovered through attention to details and special efforts. Large corneal epithelial defect, stromal infiltration, ring-shaped keratitis and anterior chamber reactions were common characteristics. Seven (53.8%) of 13 eyes were treated with medical intervention, 5 (38.5%) eyes treated with amniotic membrane transfer (AMT) and one (7.7%) eye underwent keratoplasty.

CONCLUSION: In the cases of corneal epithelial defects to resistant properly treatment, ophthalmologist should be on the alert for the purposes of topical anesthetic keratopathy. Early recognize is important for visual outcome. AMT and autologous serum are useful treatment modalities.