

Case series of corneal perforation secondary to post-radiotherapy treatment in patients with sinonasal malignancies

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ABSTRACT

Corneal perforation is a known ocular complication following radiotherapy treatment. Radiation exposure may cause severe dry eyes that typically progresses towards erosion, persistent corneal epithelial defect and neurotrophic complications. We presented three case series of corneal perforation post radiotherapy in patients with sinonasal malignancies. Three patients were diagnosed with sinonasal malignancy. All of them presented with cornea perforated secondary to severe dry eyes. They had received radiation exposure prior to the presentation. Two cases had undergone lamellar keratoplasty while one case had undergone tectonic penetrating keratoplasty due to chronic perforation and flat anterior chamber. Final visual acuities achieved were ranging from 6/12 till hand movement. Corneal perforation is the most serious complication that can occur after high-dose radiation exposure in Sino-nasal tumour patient. To prevent adverse outcomes and maintain eye health in radiotherapy patients, it is critical to take preventive measures and closely monitor radiation exposure among susceptible patients.