Purpose: To report a case of posttraumatic glaucoma with spontaneous cystic bleb formation after penetrating ocular injury and its treatment.

Methods: Case report

Case Report: A 20-year-old male patient presented with swelling and pain in the left eyelid. 1 year prior to presentation, he had a history of penetrating ocular injury and undergone primary suturation, lensectomy and anterior segment reconstruction procedure. Visual acuity was 20/200 and intraocular pressure (IOP) was 40 mm Hg despite maximally tolerated medical therapy. Biomicroscopic examination revealed a giant conjonctival cyst formation with thickened wall, located inferiorly. A 25-gauge needling combined with 5-fluorouracil (FU) injection was performed. On postoperative 1st day, IOP was measured as 18 mm Hg with complete resolution of cystic bleb. IOP was 13 mm Hg with fixed combination theraphy in 1-year follow-up visit. Recurrence of the cystic bleb and any other ocular complications were not encountered.

Conclusions: Spontaneous cystic bleb formation with increased IOP is a rare complication of penetrating ocular injury leading to posttraumatic glaucoma. Bleb needling with 5-FU is a safe and effective surgical method for the treatment of this situation.