

## Bilateral Glaucoma and Cataract Secondary to Long Term Unsupervised Use of Steroid Eye Drops

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### Case Report:

An 18-year-old male presented to the outpatient department with complains of ocular irritation since 3 years and diminution of vision since 1 year. He gave past history of consulting a local general practitioner with these complains and was prescribed antibiotic-steroid eye drops (Ciprofloxacin 0.3% with Dexamethasone 0.1%), twice daily in both eyes. As the duration of treatment and associated risks were not specified by the doctor, the patient kept using these drops continuously for the past 3 years, without undergoing any ophthalmic evaluation.

His BCVA was 6/36 and 6/24 Snellen, in the right and left eye. Anterior segment examination revealed giant papillae in the upper tarsal conjunctiva with bilateral limbal hypertrophy. Posterior subcapsular cataract was noted in both eyes, right more than left. IOP was 40mmHg right and 38mmHg left by GAT and 4 mirror gonioscopy revealed bilaterally open angles. Optic discs showed 0.7 cupping bilaterally.

### Legend to figure:

**Figure 1:** Fundus Photographs, (a) Right eye, (b) Left eye. Bilateral optic discs showing glaucomatous 0.7 cupping. (Source: By authors)

A diagnosis of bilateral steroid induced-secondary open angle glaucoma and cataract was made. Patient was advised to discontinue the said eye drops immediately and was started on 4% sodium cromoglycate eye drops twice daily with oral antihistaminics. He was also started on Tab. Acetazolamide 250mg twice daily for 3 days and Timolol 0.5% with Brimonidine 0.2% eye drops, twice daily, for IOP lowering.

Patient was reviewed for 4 months, till signs of allergic keratoconjunctivitis regressed and target IOP was achieved. He then underwent clear corneal phacoemulsification with PCIOL implantation, right followed by left. Postoperatively, he was started on Loteprednol 0.5% eye drops with rapid tapering and meticulous IOP monitoring and funduscopy was performed at each postoperative visit. At 6 weeks, BCVA was 6/12 Snellen and IOP was 12 mmHg by GAT, both eyes. Bilateral optic discs showed no evidence of progression in cupping. HFA revealed superior paracentral scotomas in both eyes.

**Keywords:** glaucoma; cataract; steroid induced.

### Discussion:

Steroid induced glaucoma is a type of secondary open angle glaucoma which is more commonly seen following long term use of local steroids prescribed as eye drops or ointments, whereas steroid induced cataracts generally occur after long term use of systemic steroids.[1],[2] This warrants regular ophthalmic checkup of patients on long term steroid medications.

As per our review of English literature, only one case of simultaneous bilateral glaucoma and cataract following long term use of steroid eye drops has been reported so far.[3] To the best of our knowledge, our case is the first such case, to be reported from India.

**Conclusion:**

Unsupervised and uncontrolled prescription of steroid eye drops, by general practitioners, should be strictly discouraged.

**Declaration of patient consent:**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published, and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

**Conflicts of interest:**

There are no conflicts of interest.

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