

Post Operative (Cataract) Complications Associated with the Use of Nepafenac Ophthalmic Suspension (0.1%) in A 55 -Years-Old Patient - A Case Study

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Abstract

Purpose: To describe a case having post operative complications associated with the use of Nepafenac Ophthalmic suspension (0.1%).

Case Report: A 55-years-old man presented with 4 days history of blurring of vision in both eyes. Unaided Visual acuities in right and left eyes were 6/15 and 6/20 respectively. There was nuclear sclerosis of grade one in both eyes with Posterior Polar Cataract in right eye. Fundus examination was unremarkable. He was advised Phacoemulsification and IOL implantation in his left eye. He underwent routine phacoemulsification surgery. Next day, he was prescribed an antibiotic steroid combination, ocular lubricant, and Nepafenac 0.1% eye drops. On 3rd follow up, he presented complaints of headache, high blood pressure and double vision. He got rid of associated symptoms when he stopped Nepafenac 1 week before his 3rd follow up. He continued the lubricant and antibiotic-steroid combination

Conclusion: Diplopia can also occur as side effect of nepafenac (NSAID).

Keywords: Nepafenac; Sclerosis; Phacoemulsification; Diplopia; Blood Pressure

Introduction

The incidence of intraoperative and postoperative complications after cataract surgery is not uncommon [1]. The complications may occur at any stage of surgical procedure no matter how experienced the surgeon is. There are various factors associated with the intraoperative complications. Posterior Capsule rupture, vitreous loss, zonular dehiscence, dropped nucleus, suprachoroidal haemorrhage, haemorrhage, central corneal edema etc. are some of the intraoperative/post operative complications of cataract surgery [2]. The complications may also result due to the pharmacological effects administered post operatively. Antibiotics, Corticosteroids, Anti-inflammatory drugs, lubricants etc are routinely prescribed post operatively. One of the NSAIDs commonly used is Nepafenac. This medication is used to relieve eye pain, irritation, and redness following cataract [3]. In the present case report, we describe a case of a 55- years- old male patient with ocular and systemic complications associated with the use of Nepafenac resulting diplopia.

Case Report

A 55-years-old man presented at General OPD of our hospital with 4 days history of, headache, ocular pain, blurring of vision at distant and near in both of his eyes. His medical history revealed that he was suffering from type 2 Diabetes Mellitus since last 5 years. He was constantly wearing bifocal glasses. He had been using his present glass for last 4 months. He had no ocular history of any surgery, infections, trauma, allergy etc. Upon ophthalmic assessment, the patient's visual acuities were noted to be 6/15 and 6/20 which improved to 6/7.4 and 6/12 with pinhole in right and left eye respectively. Slit lamp examination revealed clear corneas, flat lids, quiet conjunctivas, deep and quiet anterior chambers and regular/round pupils in both of his eyes. However, the slit lamp examination revealed senile cataract in both of his eyes. The Applanation tonometry of both eyes revealed normal Intraocular Pressure. The Dry flash acceptances revealed -0.75DS/-0.50DC*60 degree (6/12) and -2.00DS (6/12) in right and left eye respectively. Both of

his eyes were dilated with Tropicamide plain and fundus examination was carried out. The Cup/Disc ratios in both eyes were regular and within normal limit. The Foveal reflexes and Peripheral retinas were ON in both eyes. However, fine Posterior Vitreous detachment (PVD) was diagnosed in his right eye. Senile cataracts in both of his eyes with grade1 nuclear sclerosis comparatively denser in left eye were diagnosed. The patient was recommended for left eye cataract surgery. Diagnostic procedures were carried out in a series. The diagnostic procedures included Biometry (IOL MASTER 700), Endothelial Cell Count, OCT, Syringing, and haematological investigations. The biometry revealed the dioptric power of IOL to be implanted as 23D. The endothelial cell density was 2415.4 cells per square millimetres with 41% hexagonality. The lacrimal passage was clear as the syringing revealed patency in both of his eyes. Optical Coherence Tomography (OCT) showed normal macula. The consent was obtained from the patient before carrying out the diagnostic procedures for the surgery. The surgery was scheduled after two days. The phacoemulsification was done and posterior chamber Intraocular lens was implanted in his left eye. There were no intraoperative complications while carrying out surgical procedure. The patient was followed up in the next day. The intraocular pressure was slightly raised. Slit lamp examination revealed normal anterior segment with minimal cellular reaction in AC. The antibiotic and steroid combination (Moxoft), NSAID (Nepafenac) and lubricating eye drop(Peg Tears) were prescribed. The patient was followed up after 2 days and prescribed the same medications. The patient was followed up after 15 days. On 3rd follow up, the patient presented with symptoms of headache, high blood pressure, double vision after 4th day of instilling the prescribed medications. The symptoms of headache, high blood pressure and double vision were experienced by the patient as soon as nepafenac was instilled. The symptoms resolved when nepafenac was stopped. The dry flash acceptances were -1.00DS/-0.75DC * 85 degree (6/12) and 0.00DS (6/6) in right eye and left eye respectively. Slit lamp examination revealed normal anterior segment. The lubricating eyedrop as well as antibiotic and steroid combination(Moxoft) were prescribed.

Discussion

Post-operative complications are not uncommon. Anti-inflammatory drug is commonly prescribed to treat pain and inflammation associated with cataract surgery. Nepafenac is a prodrug of Nepafenac, an inhibitor of COX-1 and COX-2 activity. It is converted by ocular tissue and hydrolyses after penetration via cornea and inhibits cyclooxygenase action. However, it has some side effects like headache, runny nose, pain or pressure in the face, nausea, vo-

miting and dry, itchy, sticky eyes, sensitivity to light [4]. The optimal doses is 3 drops per day in an adult and geriatric patient. This case report is primarily important as this case report deals with the incidence of diplopia which has not been reported till now. Overdose often results in its complications. However, in some patients, even with normal dose, complications occur most often after its instillation and resolves on stoppage. So, the patient has to seek the ophthalmic consultation as soon as the complication starts to occur.

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