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Over The Counter Drugs-How Dangerous Can It Be

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Abstract:*The sale of over the counter (OTC) medicines can help individuals to self-manage symptoms. However some OTC may be abuse with over use. There is an example of such a otc drug who was suffering from a dermatological condition and was given steroids to relive his symptoms and it really worked amazingly so he started using it continually for a period of 4 yrs. which landed him into various other problems like Cushing syndrome and ophthalmological problems like steroid induced glaucoma and cataract formation*
Keywords:-*cataract,otver the counter drug, steroid induced glaucoma*

I. Introduction

Cataract and glaucoma are major causes of blindnessworldwide. Corticosteroids given orally, intravenously, or topically have been associated with increased risks ofcataract formation and glaucoma development. It has been noted that posterior sub capsular cataracts (PSC) aremore frequent in people taking steroids. Steroids, especially when taken in high doses, have multiple effectson the trabecular meshwork (TM), thereby raising the risks of glaucoma.Studies have shown that the use of systemic steroidtherapy is a risk factor for developing cataracts.There have been many attempts to correlate prolongedcorticosteroid use with ocular complications, such asdevelopment of cataracts and glaucoma. At best, the resultswere conflicting

II. Case Report

A 35 year old male patient presented with complain of progressive diminished vision in left eye more than right since last 5 months associated with pain and redness. He has no history of glasses and was not a known case of DM and HTN. The patient was on steroid therapy for skin allergy from past 5 yrs(Tab prednisolone 10 mg). which constitute steroid.On examination cornea of both eyes showed mild edematous changes, pupil were sluggishly reacting to light , vision in right eye was 6/24 with an improvement to 6/18 with pinhole and left eye 6/36 with an improvement to 6/24 with pin hole.

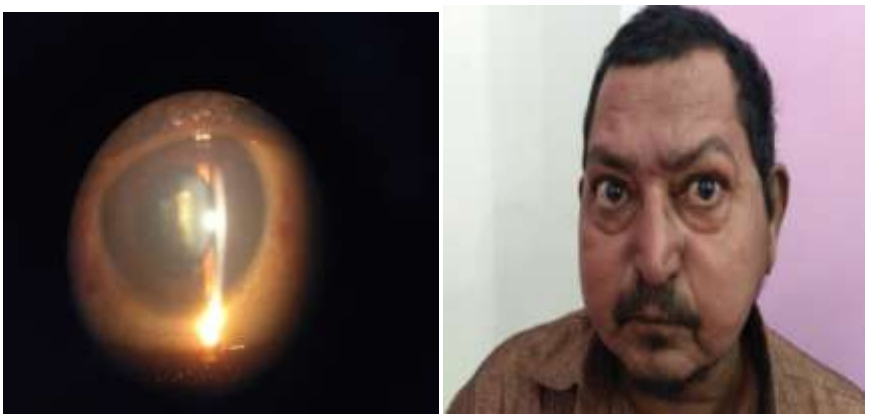

Fig 1a: slit lamp picture showing posterior sub capsular opacity

2.1investigation: Blood pressure- 100/70 mmhg, RBS-120mg/dl, intra ocular pressure of right eye was 54mmhg and left eye 64mmhg at 12:30pm
Slit-lamp examination- bilateral corneal edema, thick central psc around 60% in left eye and 40% in right eye.
Fundus examination- media was hazy due to cataract; RE- 0.6 cup neuro retinal rim was healthy, blood vessels showed thinning, background was normal, macula was not visualized, LE- 0.9 cup thinning of neuro retinal rim nasal shifting of vessels, background was normal macula could not be visualized.

2.2treatment: Patient was started immediately on anti-glaucoma drugs but even after 3 weeks of medical management thethe iop could not be brought to normal so we planned to do iridotomy and the results were satisfactory. Later cataract surgery in left eye was performed followed by right eye after 3 months. vision was restored to 6/9 in both eyes and on regular follow up every 3 months .

III. Discussion

Cataract formation is a common complication of prolonged oralcorticosteroid therapy with a prevalence rate of 13.6%. The route of administration of steroid may influence the responseof aqueous dynamics. Oppelt and colleagues found thatintravenous hydrocortisone produced a minimal effect onaqueous-humor formation and outflow, while topicalhydrocortisone or dexamethasone produced a markeddecrease in outflow Other studies indicated that systemicadministration of corticosteroids are likely to produce anincrease in aqueous production.Corticosteroids given orally, intravenously, ortopically have been associated with increased risks of cataract formation and glaucoma development .

The biphasic effect of corticosteroids may explain these conflicting results.An increase in circulating corticosteroid may cause an increaseaqueous production, in In the present case, it was taken by the patient, continuously for five years in a dose of 20mg/day for some minor skin allergy. This untoward medical occurrence could have been avoided, if the patient would have consulted his dermatologist once again. His symptoms could have been managed by antihistamines as and when required. This type of adverse drug reaction can be categorized as Type C ADRThere was no family history of DM or HTN. There was no other systemic disease or no other ophthalmological cause that could have contributed to this ADR.Patients undergoing steroid therapy should undergo regular ophthalmic checkup for slit lamp bio microscopy and dilated fundus evaluation. Theophthalmologist should check the contour and color ofthe optic disc, any asymmetry or elongation of the cup, thinning of neuroretinal rim and measure IOP

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