



## BE CAUTIOUS: WHILE PRESCRIBING CIPROFLOXACIN.

### Ophthalmology

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### ABSTRACT

Ciprofloxacin is a widely used drug due to its broad spectrum activity against gram positive and gram negative organisms. It is commonly used pre and postoperatively. Here we report a case of bullous fixed drug eruption due to use of ciprofloxacin when given to a 60 years old patient who undergone small incision cataract surgery. Treatment with oral corticosteroids lead to resolution of lesions with residual hyper and hypopigmentation of the skin and oral mucosa.

### KEYWORDS

Ciprofloxacin, Drug Reaction

#### INTRODUCTION:

Ciprofloxacin is a well tolerated drug. Side effects reported are nausea, abdominal discomfort, headache, dizziness, cutaneous rash such as photosensitivity, fixed drug eruption, bullous eruption has been reported. The prevalence of drug eruptions has been reported in the range of 2-5 %. Fixed drug eruption may account for as much as 16-21 % of all cutaneous drug eruptions. Several variants of fixed drug eruption have been described with involvement of skin, oral and vulvar mucosa. Here, we describe a case of bullous fixed drug eruption to ciprofloxacin which is widely used quinolone antibiotic.

#### CASE SUMMARY:

60 years old male undergone small incision cataract surgery and started on oral ciprofloxacin along with topical moxifloxacin and topical steroids. He presented on 3<sup>rd</sup> post operative day for second follow up of small incision cataract surgery of his left eye. There was presence of ruptured bullous eruptions on cheek, lips, oral mucosa and hands followed by crusting of the lesions. There was no involvement of conjunctiva. Provocative test done with 125 mg of oral ciprofloxacin followed by erythema of the base of ruptured bullae suggestive of bullous fixed drug eruption. He was given oral corticosteroids with topical steroid ointment followed by resolution of lesions over a 1-2 weeks period with residual hyper and hypopigmentation present at the site of lesions.



Figure showing bullous eruptions on the skin of face, hands and oral mucosa. We can notice ruptured bullae and crusted lesions.



Treatment with oral steroids leads to resolution of lesions with residual hyper and hypo pigmented lesions.

#### DISCUSSION:

Ciprofloxacin is the drug used since 1986 and known to cause cutaneous drug reactions in up to 1-2 % of treated patients. The most characteristic finding of a fixed drug eruption are the recurrence of similar lesions at the same sites that heal with residual hyper pigmentation which may persist for months and years. The residual hyper pigmentation serves as an indicator of site recognition. The causative drug and cross reactants should be avoided to prevent recurrence. Re challenge or provocative test is the most reliable method of identifying causative drugs. A genetic susceptibility to developing a fixed drug eruption with an increased incidence of HLA-B22 has been reported. Manifestations most commonly attributed to the drug are urticaria, maculopapular exanthem and photosensitivity. Variants of fixed drug eruption described like generalized or multiple, linear, bullous, urticarial, pigmented, nonpigmented, eczematous, psoriasiform, erythema dyschromicum perstans and oral fixed drug eruption. Fixed drug eruption exact mechanism is unknown but suggested that it is due to delayed type IV-c hypersensitivity reaction of CD8+ lymphocyte mediated reaction by the drug which may induce local reactivation of T-cell lymphocytes leading to release of lymphokines, mast cells and antibodies causing damage to basal cell epithelium. Earlier similar case reports of fixed drug eruption has been reported by various authors. Newer quinolones producing fixed drug eruption have not yet been reported except very few cases with ofloxacin.

#### CONCLUSION:

Be cautious while prescribing ciprofloxacin because of emergence of cases of fixed drug eruption, so must ask history of prior drug reaction. Patch test can be done to find out the culprit drug.

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