

# Adverse Drug Reactions Leading To Ocular Surface Disease Clinic Visits At An Eye Hospital: A Brief Report

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An adverse drug event (ADE) is a noxious or harmful effect of medications that cause a huge burden on the health system. It is proven that every medication, beside its useful effects, may have some adverse consequences. It is estimated that the incidence of ADEs is approximately 1.7 to 25.1% in hospitals and they also results in patient admission with a frequency of 2.0 to 21.4%<sup>1</sup>. Knowledge improvement regarding ADEs is essential to reduce the prevalence, morbidity, and burden of ADEs through early detection of adverse reactions<sup>2</sup>.

Many drugs, such as:

**Topiramate, Quetiapine, Retinoids**, especially **Isotretinoin, Amiodarone, Tamoxifen, Chloroquine** and **Hydroxychloroquine** and medications used for erectile dysfunction are known for their ocular toxicity<sup>3</sup>.

Drug induced ocular adverse events are the second common reason for official complaints against ophthalmologist<sup>4</sup>.

This study was designed to collect the data of the pattern of ocular adverse events and the potential drugs in order to improve patient's safety.

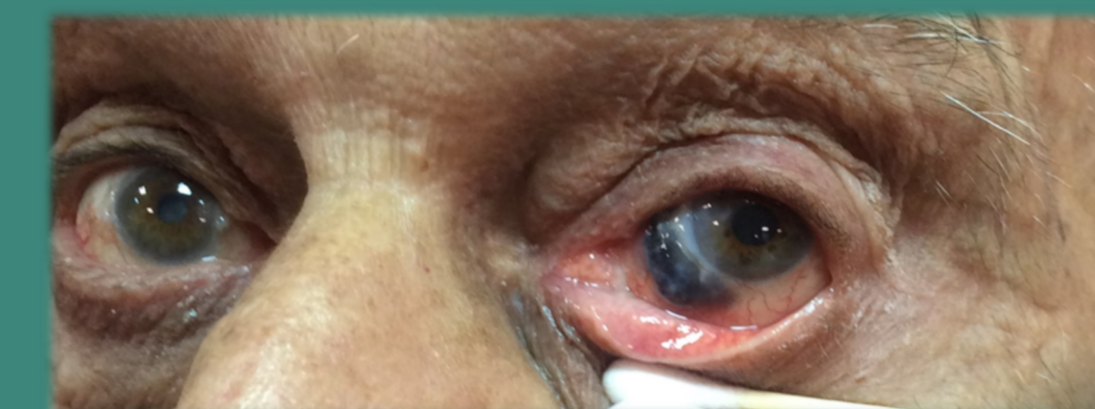
- ◆ Observational, prospective study
- ◆ **Ocular surface clinic** of a university affiliated tertiary, eye hospital
- ◆ **8.00 a.m. and 1.00 p.m. during 15 days**
- ◆ Demographic data, chief complaint and present illness, past medical history, and drug history of the patients were reviewed by a pharmacist.
- ◆ An ophthalmologist and a pharmacist reviewed the diagnosis to ensure it was an ADE related problem.
- ◆ National yellow card
- ◆ Following patients for at least two weeks after discharge to evaluate the outcome.

## Data Analysis with SPSS

- ◆ Causality → WHO criteria
- ◆ Preventability → Schumock and Thornton scale
- ◆ Seriousness → WHO



- ◆ Female - 28 years old
- ◆ **Vial Penicillin**
- ◆ 18 years - **Dry eye**



- ◆ Male - 84 years old
- ◆ Pterygium surgery - **Mitomycin**
- ◆ **Scleral thinning**



- ◆ Male - 13 years old
- ◆ **Phenobarbital 100 mg BD - 12 days**
- ◆ 3 years - **Symbblepharone**



- ◆ Of the 571 patient visits, **20** (3.5%, 95% CI: 2.3 to 7.3%) were drug related.
- ◆ There were **6 males** 30% and **14 females** 70% (P=0.063).
- ◆ **Corticosteroids**
- ◆ **Oral route**
- ◆ **Posterior Subcapsular Cataract, Dry eye.**
- ◆ Only **1.5%** of the ADRs were **preventable**.
- ◆ Accessing the **seriousness**, the rate was 9 out of 20 ADRs (4.5%).

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## References