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RESEARCH ARTICLE

CLINICAL STUDY OF INCIDENCE OF EXTRAOCULAR FOREIGN BODIES IN TERTIARY HOSPITAL

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Key words:-

Foreign Bodies, Corneal Erosions, Arc Welding

Abstract

Aim: To study the incidence and aetiological causes of extra ocular foreign bodies in patients attending outpatient department in a Tertiary Hospital.

Result: This is a retrospective study done in all the patients who attended OPD with a history of fall of foreign body into the eye.

The study comprises of 65 patients done during a period of one year, we have observed that the incidence of foreign bodies is more in male patients, patients working in quarries and arc welders. The impairment of vision and the rate of infection was lesser in patients who received primary treatment. The incidence can also be decreased by wearing protective goggles while welding and also while working in mines.

Conclusion: In this study we have observed that early treatment and health education given to workers in mines and those who work in quarries reduces the incidence of infection and also injury to the eye.

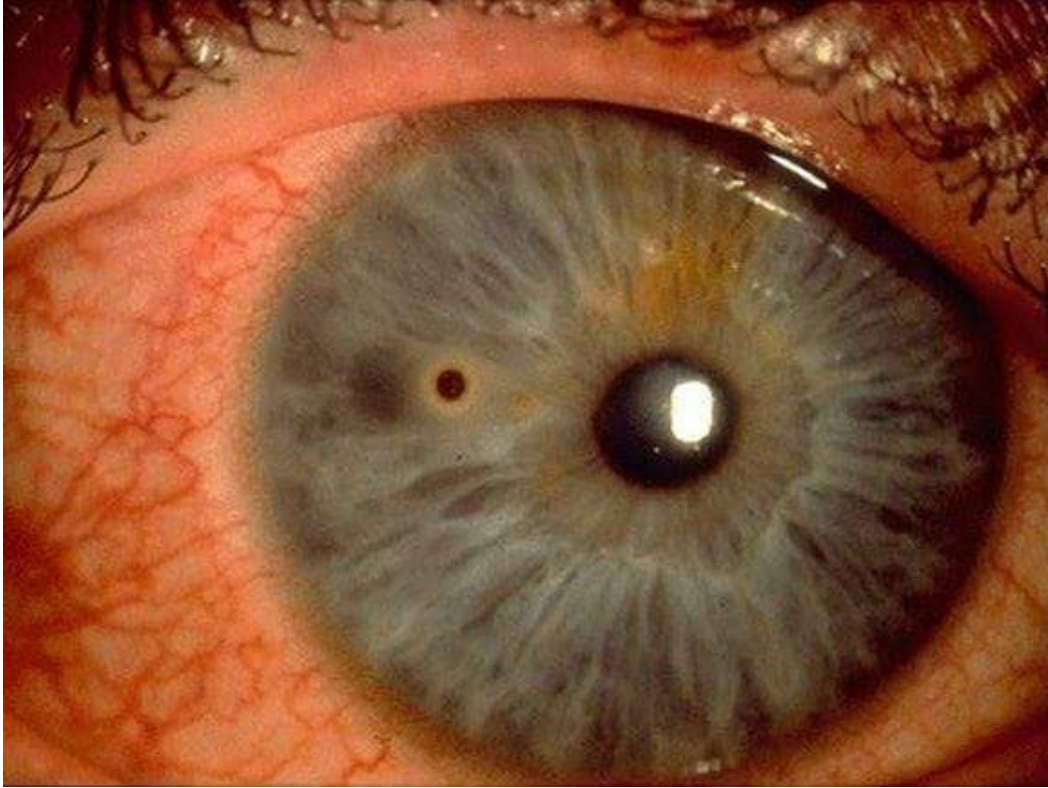
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Introduction:-

The eyeball is enclosed in the bony orbit and protected by the eyelids and eyelashes. Tear film which covers the eye washes out few of the small foreign bodies.

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Common symptoms with which the patient presents are Pain, Redness, Itching, Foreign body sensation. If the eyelids are deformed (1) for example Entropion or Ectropion, Corneal damage and Infection are more.

Treatment:

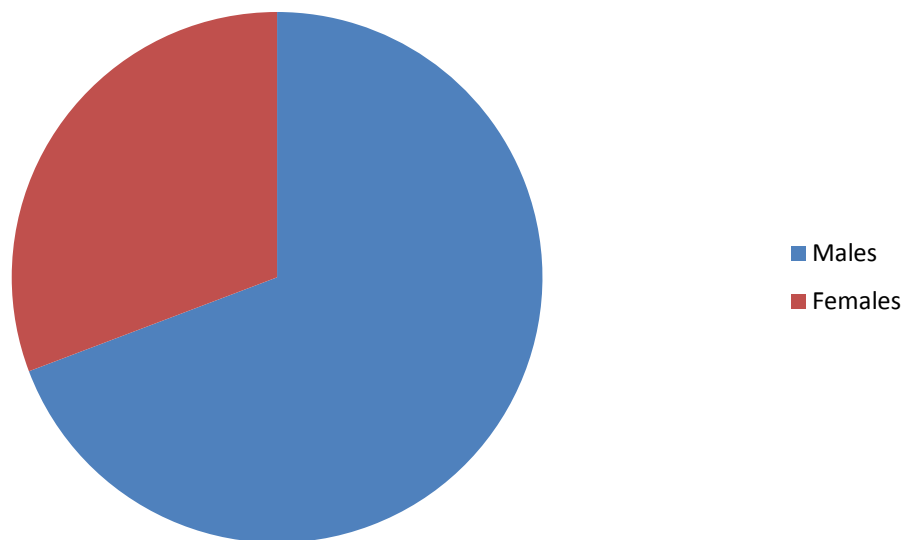
For all the patients, Visual assessment was done and Detailed slit lamp examination was done. For patients with corneal erosions fluorescent staining was done. The eye must be cleaned thoroughly with sterile fluid. Local anesthetic drops were instilled. If any small foreign body is present over the cornea, it can be removed with sterile cotton swab or corneal spud or with a small foreign body forceps. Sometimes foreign bodies may be seen in the Conjunctival Fornices, Sulcus Subtarsalis and they cause Foreign body reaction (2). Common foreign bodies seen are Dust, husks of grain, Insect wings, Iron particles.

After foreign body was removed, Antibiotic drops are instilled and if there was corneal damage Cycloplegics are also advised along with Systemic Analgesics.

If the foreign bodies were embedded in the deeper layers of cornea, removal was done in the Operation Theatre under Operating Microscope.

Results:-**1. Male Female Distribution**

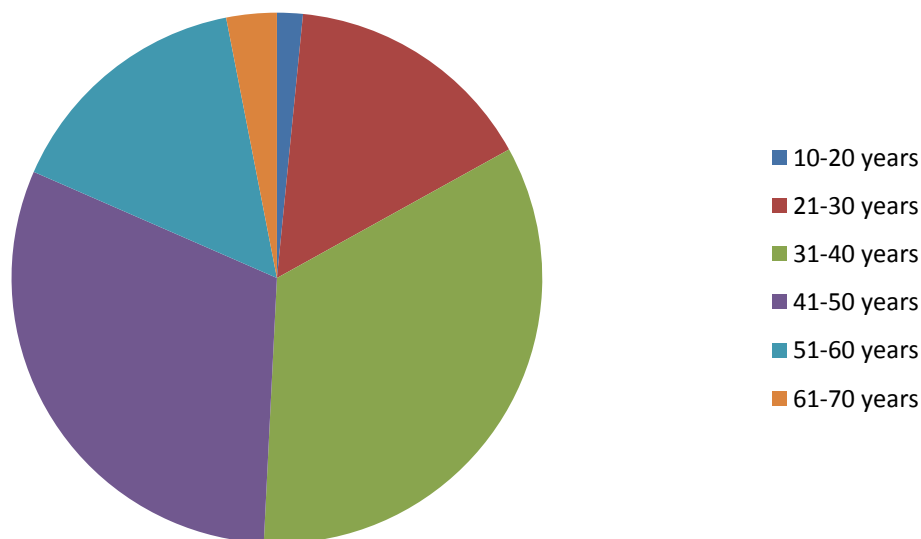
Male Female Distribution



Males	45	69.24%
Females	20	30.76%
Total	65	100%

2. Age Distribution

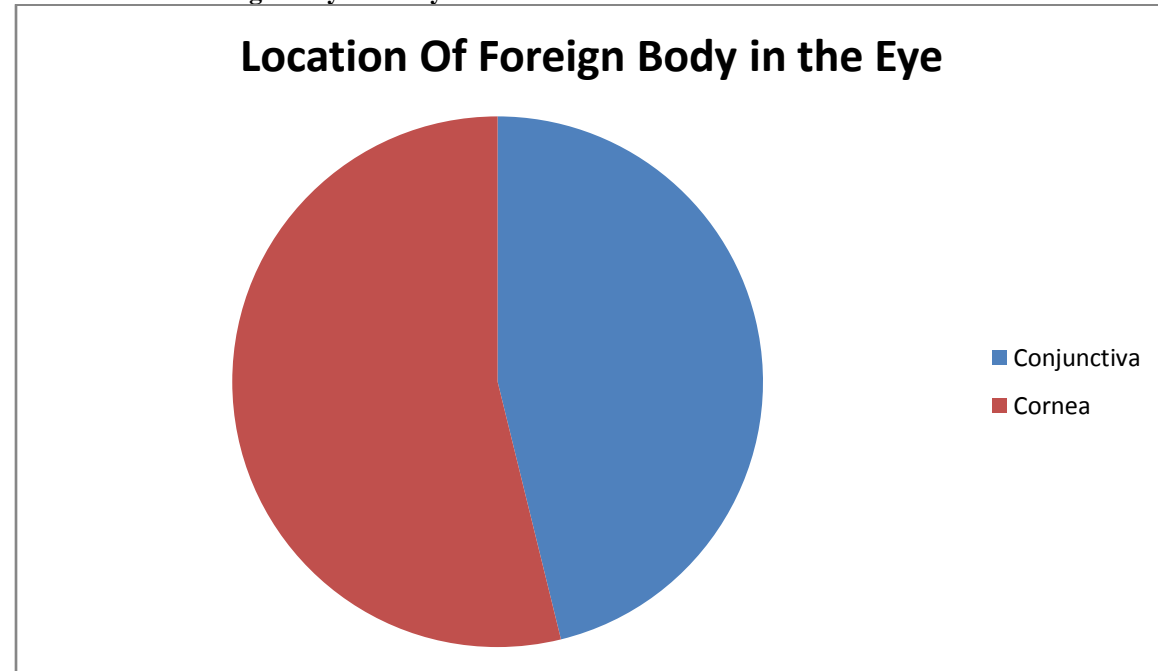
Age Distribution



10-20 years	1	1.57%
21-30 years	10	15.38%
31-40 years	22	33.84%
41-50 years	20	30.76%
51-60 years	10	15.38%
61-70 years	2	3.07%

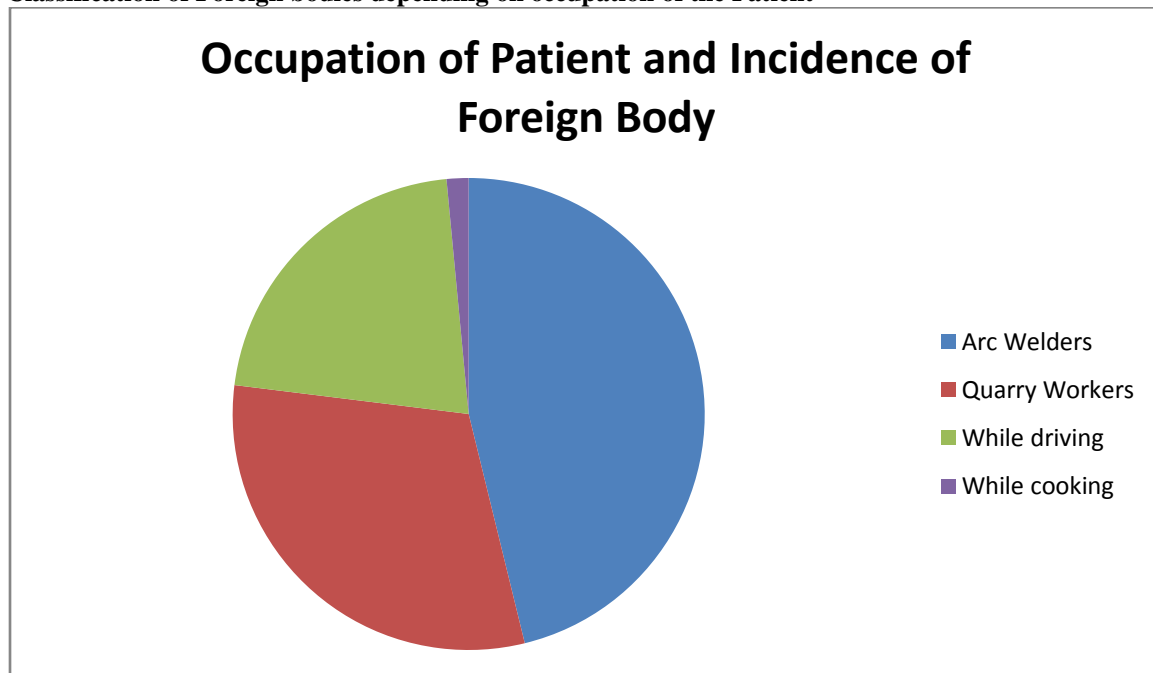
Total	65	100%
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3. Location of foreign body in the eye



Conjunctiva	30	46.16%
Cornea	35	53.84%
Total	65	100%

4. Classification of Foreign bodies depending on occupation of the Patient



Arc Welders	30	46.15%
Quarry workers	20	30.76%
While driving	14	21.53%
While cooking	1	1.5%

Total	65	100%
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Material and Methods:-

This study was done in the Department of Ophthalmology, Siddhartha Medical college, Vijayawada.

Type of study :

Retrospective

Total number of Cases:

65

Study Period :

1 Year, January 2022 to December 2022

Informed written consent was taken from all the Patients.**Inclusion Criteria:**

All the patients who came to outpatient department with Foreign body sensation and history of fall of some foreign body in the eye have been included.

Exclusion Criteria:

Patients with Foreign body sensation due to Pterygium, Tumors have been excluded.

Discussion and Conclusion:-

Corneal foreign bodies are more common in people working in Quarries(4). More than 40% are metallic and seen in workers. Sometimes foreign bodies embedded within the fornices will cause formation of granuloma and pain which persist till it is removed (5).

The injury to the eye by extraocular foreign bodies can be minimized by using glasses while driving vehicles, usage of protective goggles while welding and also protective glasses while working in quarries.

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