

Epidemiological Study of Ocular Injuries in Tertiary Care Hospital.

*¹Dr.G.Serina Samuel,M.S. ²Dr. V.Siva ram prasad,

¹Assistant Professor of Ophthalmology,G.M.C/ G.G.H. GUNTUR.

²Junior Resident, Dept. of Ophthalmology,G.M.C/ G.G.H. GUNTUR .

Corresponding Author: *¹Dr.G.Serina Samuel,M.S.

Abstract

Aim:- This is a retrospective study of ocular trauma profile related to injury cases.

Aims & objectives:- To study the pattern of ocular trauma cases in Government General Hospital Guntur.

Results:- It was observed in our study that 94.5% cases were blunt injuries and 0.8% were perforating injuries.

Vision at presentation in 47.9% of patients was <CF 3mts.

Conclusion:- Primary preventive approach such as promotion of safe riding and strict implementation of traffic rules like riding & driving at safe speed, wearing helmet and avoiding alcohol during driving/ riding are needed to decrease ocular morbidity.

Keywords:- Blunt injuries, lacerations, perforating injuries, hemorrhages, periorbital hematoma.

Date of Submission: 25 -10-2017

Date of acceptance: 04-11-2017

I. Introduction

Informed consent was taken from all the patients. A detailed history of each subject were taken. Both the eyes were examined, assessing nature & type of injury. Visual acuity was assessed with snellen's chart and where the patient condition did not permit finger counting was done. Injuries were classified as blunt, perforating, chemical. Severity of extraocular and closed globe intraocular trauma were classified into mild, moderate and severe based on classification by DUKE ELDER(1).

In the study 236 subjects were enrolled and affected eye was taken as single case. Male:Female ratio in our study was 5:1 High incidence of male subjects in RTA is because most of commuting done by males and there are few female drivers.

II. Material & methods

This study was conducted in the Department of Ophthalmology, Guntur medical college/ Government General Hospital, Guntur.

A total of 236 patients who had come to casualty department and then referred to ophthalmology department for ocular injuries have been reported.

This study was done in a period of 6 months during March 2017 to August 2017.

This study was done in both hospitalised and out patients.

Inclusion criteria:- Cases of trauma presenting with decreased vision in the casualty have been included.

Exclusion criteria:- Cases which were already treated outside and referred to GGH have been excluded.

Results:- Distribution of cases according to age:-

S.No	Age group	Number of cases	Percentage
1	0-10	12	5.08%
2	11-20	20	8.41%
3	21-30	71	30.081%
4	31-40	62	26.27%
5	41-50	39	16.52%
6	51-60	18	17.3%
7	61-70	8	3.4%
8	71-80	6	2.5%

Distribution of cases according to sex:-

S.No	Total number of cases	Percentage
1. Male	197	83.5%
2. Female	39	16.3%

Distribution of cases depending on type of injury:-

S.No.	Type of injury	Number of cases	Percent
1.	Blunt injuries Lid tears Periorbital hematoma Lens dislocation Sub conjunctival hemorrhage	223	94.5%
2.	Burns	8	3.4%
3.	Chemical injuries	3	1.3%
4.	Perforating injuries	2	0.8%
	Total number of cases	236	

Vision at Admission:-

S.No.	Vision	Number of cases	Percent
1.	6/18 - 6/24	2	0.84%
2.	CF 3mts - CF 5 mts	110	46.61%
3.	<CF 3 mts	117	49.57%
4.	PL+	4	1.69%
5.	Uncooperative	3	1.27%

Type of treatment given:-

S. no.	Treatment	Number of cases	Percent
1.	Medical	60	25.42%
2.	Medical treatment and surgical repair has done.	176	74.58%

III. Discussion

Ocular injuries are most important cause of monocular blindness. 2.4 million eye injuries occur every year (2). 90% of ocular injuries are preventable and ocular trauma is one of the leading cause of preventable blindness in the world today(3,4). Severity of injury is divided into mild moderate and severe (5). Peden et al. 2004, observed that urban population was at high risk for road traffic accidents. Vasu et al found out that in closed globe injuries 23% mild, 28% moderate and 48.7% severe. In the present study 236 patients were included incidence of blunt injuries was very high 94.5%. Vision at admission in 79.5% was <CF 3mts. Review of literature has shown that majority of trauma cases were in the age group of 20+/- 5yrs. In our study majority of cases are seen in 20-40yrs and more in male patients - 83.5%.

IV. Conclusion

The morbidity of RTA with ocular injuries can be drastically reduced if precautionary measures are taken i.e, fastening of seat belts in four wheelers and wearing helmets by two wheelers, avoiding alcohol consumption before and during driving, along with increasing public awareness implementation of more strict traffic legislature is required.

References

- [1]. Duke Elder. S. Paul PA injuries part - 1; Mechanical injuries system of Ophthalmology 1972, Page 14.
- [2]. Karlsen T. Klein B incidents of acute hospital treated eye injuries. Arch Ophthal 1986. 104 : 1473 - 1476
- [3]. Parver L.M eye trauma. The neglected disorders. Arch Ophthalmology 1986. 104 : 1452 - 1453
- [4]. Pizzarello. I.D. Ocular trauma time for action. Ophthalmology epidemiology 1998 5 : 115, 116
- [5]. Keeney A - Prevention of eye injuries in Freeman HM Ocular trauma - Appleton Century - Croft New York 1976 377 - 383
- [6]. Peden MS Crufield E Sket et al - world report on road traffic injury prevention .the global impact ,Geneva. The world health organisation 2014 p33-37.
- [7]. VasuU Vasnaik A et al - occupational open injuries . indian journal ophthalmology 2001 vol49 p 43-49.

*Dr.G.Serina Samuel,M.S. "Epidemiological Study of Ocular Injuries in Tertiary Care Hospital."
IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.11 (2017): 85-86.