

Original Research Article


# Pattern of ocular injuries at tertiary care hospital, Valsad

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## Abstract

**Background:** Ocular injury is the most common cause for visual morbidity and blindness and should not be neglected at all.

**Materials and methods:** A retrospective study was conducted at GMERS Medical College, Valsad on patients who came to Ophthalmology Department from January 2015 to December 2016 for period of 2 years. Outdoor as well as indoor patients were included in the study with history of ocular injury. Data were collected from clinical records and analyzed to study pattern of ocular injuries.

**Results:** Total 100 cases were studied, out of which 74 were male and 26 were female with history of ocular injury. Maximum numbers of patients were in age group of 21 to 30 years. Road traffic accidents were the most common cause of ocular trauma among all patients. Conjunctival hemorrhage and scleral hemorrhage were more common among all.

**Conclusion:** This study showed that road traffic accidents were the commonest causes of ocular injuries and conjunctival hemorrhage was the most common type of ocular injury.

## Key words

Ocular injuries, Tertiary care hospital, Valsad.

## Introduction

Ocular injury is the most common cause for visual morbidity and blindness [1]. Worldwide there are approximately 6 million people blind

from eye injuries, 2.3 million bilaterally visually impaired and 19 million with unilateral visual loss; these facts make ocular trauma the most common cause of unilateral blindness [2]. According to estimates by WHO, about 55

million eye injuries restricting activities for more than one day occur each year, 750,000 cases requiring hospitalization which includes 200,000 open globe injuries [3, 4].

### Materials and methods

A retrospective study was conducted at GMERS Medical College, Valsad on patients who came to Ophthalmology Department from January 2015 to December 2016 for period of 2 years. Outdoor as well as indoor patients were included in the study with history of ocular injury. Data were collected from clinical records and analyzed to study pattern of ocular injuries.

### Results

Total 100 cases were studied, out of which 74 were male and 26 were female with history of ocular injury. Maximum numbers of patients were in age group of 21 to 30 years (**Table – 1**). Road traffic accidents were the most common cause of ocular trauma among all patients (**Table – 2**). Conjunctival hemorrhage and scleral hemorrhage were more common among all (**Table – 3**).

**Table – 1:** Age and sex distribution of ocular trauma patients.

Age (Years)	Male	Female	Total
≤ 10	2	---	2
11-20	11	2	13
21-30	20	5	25
31-40	8	11	19
41-50	10	7	17
51-60	9	1	10
≥61	14	---	14
Total	74	26	100

### Discussion

Study done at JUDO, south west Ethiopia [5] showed that 63.8% patients were below 30 years of age with mean age of 25.5 (SD±15.6) years and male to female ratio of 3.2:1.

**Table – 2:** Cause of injury in ocular trauma patients.

Cause of injury	Total
Occupation related	11
Domestic accidents	24
Road traffic accidents	34
Sports related	17
Others	14
Total	100

**Table – 3:** Pattern of ocular injuries.

Pattern of injury	Total
Black eye	22
Injury to eye lid	31
Injury to cornea	19
Scleral hemorrhage	33
Conjunctival hemorrhage	45

According to a study conducted in Haryana, males (76.01%) were more frequently affected than females (23.99%). Among non-occupational injuries (61.74%), those occurring due to playing and sports among children were the main etiological factor (33.67%). In occupational injuries (38.26%), those occurring during agricultural activities (19.9%), were most common followed by industrial accidents (12.24%). Cornea was the most affected part of eyeball (47.6%) followed by iris injury (32.64%) [6].

GC Menelik II hospital study showed assault was the commonest cause accounting for 32.5% cases [7].

### Conclusion

This study showed that road traffic accidents were the commonest causes of ocular injuries and conjunctival hemorrhage was the most common type of ocular injury.

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