ORIGINAL RESEARCH PAPER

Ophthalomology

KEY WORDS:

A CASE SERIES REPORT OF PREVELANCE OF OCULAR EMERGENCIES IN A TERTIARY HEALTH CARE HOSPITAL

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Aim:
An Observational Case Series study on prevelance of ocular emergencies in a tertiary health care hospital.

Study Design:
Observational Case Study

Place Of Study:
Department of Ophthalmology.
Government Dharmapuri Medical College and Hospital.

Period Of Study:
July 2022 TO July 2023

Duration:
One year

Study Group:
Patients presenting in Ophthalmology OPD and Casualty fulfilling inclusion criteria are selected for the study group after getting proper consent.

Sample Size:
100

Inclusion Criteria:
- Patients with penetrating ocular trauma
- Patients with fire cracker injury
- Patients with bull gore injury
- Patients with traumatic optic neuropathy
- Patient with acute angle closure glaucoma and lens induced glaucoma
- Patients with orbital cellulitis
- Patients with retinal detachment
- Patients with central retinal artery and central retinal vein occlusion.

Exclusion Criteria:
- Unconscious and uncooperative patients.
- Patients not willing for participating in the study

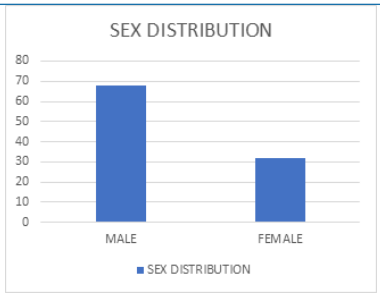
MATERIALS AND METHODS:
Patient fulfilling inclusion criteria after getting proper informed consent are evaluated in Ophthalmology Department as follows,

1. Age
2. Sex
3. GCS
4. Eye involved
5. Mode of injury
6. Visual acuity by Snellens Chart
7. Ocular examination by torch light
8. Ocular examination by slit lamp
9. Dilatation and fundus evaluation using 90D lens and indirect ophthalmoscope.
10. OCT in needed cases.

RESULTS

Table-1 Sex distribution

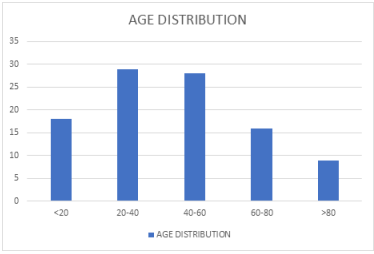
SEX	NO. OF PATIENTS	PERCENTAGE
MALE	68	68%
FEMALE	32	32%



From The above charts males are more commonly affected then females.

Table 2: Age Distribution

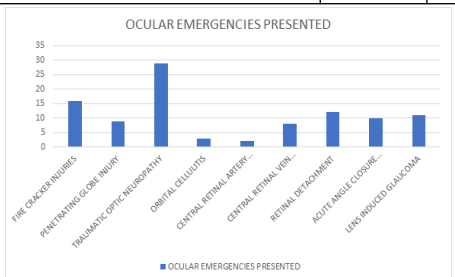
Age group	No of Patients	Percentage
>20	18	18%
20-40	29	29%
40-60	28	28%
60-80	16	16%
>80	9	9%



From the above chart between 30 to 60 years of age were more commonly affected

Table 3: Ocular Emergencies Presented

OCULAR EMERGENCIES PRESENTED	NO. OF CASES	PERCENTAGE
FIRE CRACKER INJURIES	16	16%
PENETRATING GLOBE INJURY	9	9%
TRAUMATIC OPTIC NEUROPATHY	29	29%
ORBITAL CELLULITIS	3	3%
CENTRAL RETINAL ARTERY OCCLUSION	2	2%
CENTRAL RETINAL VEIN OCCLUSION	8	8%
RETINAL DETACHMENT	12	12%
ACUTE ANGLE CLOSURE GLAUCOMA	10	10%
LENS INDUCED GLAUCOMA	11	11%



From the above chart Traumatic Optic Neuropathy was the most common ocular emergency presented in a tertiary care

hospital.

Table 4: Ocular Emergencies with Age Distribution

AGE DISTRIBUTION	FIRE CRACKER INJURY	PENETRATING GLOBE INJURY	TRAUMATIC OPTIC NEUROPATHY	ORBITAL CELLULITIS	CENTRAL RETINAL ARTERY OCCLUSION	CENTRAL RETINAL VEIN OCCLUSION	RETINAL DETACHMENT	ACUTE ANGLE CLOSURE GLAUCOMA	LENS INDUCED GLAUCOMA
>20	9	4	2	0	0	0	1	2	0
20-40	5	2	17	0	0	0	2	3	0
40-60	2	1	6	1	0	5	6	3	4
60-80	0	1	4	1	1	2	3	1	3
>80	0	1	0	1	1	1	0	1	4

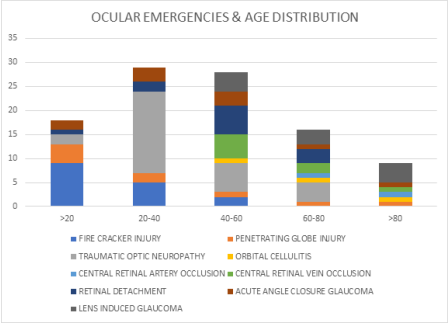


Chart 4: Ocular Emergencies with Age Distribution

The above chart explains the common ocular emergencies presenting in different age group in a Tertiary Health Care Centre.

Table 5: Ocular Emergencies with Sex Distribution

SEX	FIRE CRACKER INJURY	PENETRATING GLOBE INJURY	TRAUMATIC OPTIC NEUROPATHY	ORBITAL CELLULITIS	CENTRAL RETINAL ARTERY OCCLUSION	CENTRAL RETINAL VEIN OCCLUSION	RETINAL DETACHMENT	ACUTE ANGLE CLOSURE GLAUCOMA	LENS INDUCED GLAUCOMA
MALE	14	8	21	1	1	5	5	7	6
FEMALE	2	1	8	2	1	3	7	3	5

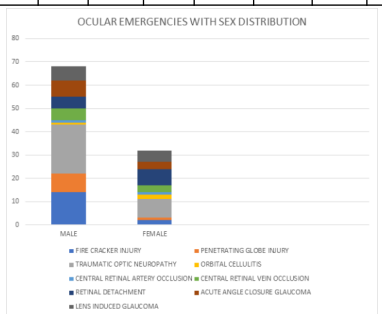


Chart 5: Ocular Emergencies with Sex Distribution

The above chart explains the common ocular emergencies presenting in males and females.

Table 6: Ocular Emergencies and Prognosis

PROGNOSIS	FIRE CRACKER INJURY	PENETRATING GLOBE INJURY	TRAUMATIC OPTIC NEU	ORBITAL CELLULITIS	CENTRAL RETINAL ARTERY	CENTRAL RETINAL VEIN OCC	RETINAL DETACHMENT	ACUTE ANGLE CLOSURE	LENS INDUCED GLA
BETTER OUTCOME (early diagnosis)	11	0	24	2	2	7	8	9	9
POOR OUTCOME (late presentation)	5	9	5	1	0	1	4	1	2

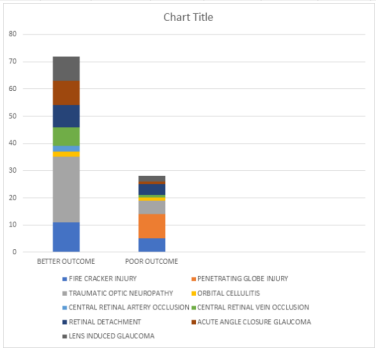


Chart 6: Ocular Emergencies and Prognosis

The above chart explains the visual prognosis of patients with different ocular emergencies.

CONCLUSION

The above Case Series is a attempt to assess the prevelance of Ocular Emergencies which are presenting in Ophthalmology OPD, Casualty of a Tertiary Care Hospital.

The study includes 100 patients with 68 males and 32 females presenting to Ophthalmology OPD and Casualty in Government Dharmapuri Medical College and Hospital.
Among the 100 cases studied

- Males are more commonly affected then females.
- Age group from 20-40 years are affected more with a percentage of 29%
- Traumatic Optic Neuropathy (29%) and Fire cracker injury (16%) is the most common presentation in a Tertiary Care Hospital.
- Fire cracker injury and penetrating ocular injuries are common among age group less than 20 years.
- Traumatic Optic Neuropathy is the common ocular emergency involving all age groups.
- Retinal detachment and lens induced glaucoma are common in elderly age group.
- Early diagnosis and treatment provides a better visual outcome than late presentation and delay in treatment

Ocular emergencies presenting in a Tertiary Care Hospital requires early diagnosis and appropriate management to provide a better visual outcome.

Proper history taking and a thorough examination of the eye is a must by all Health Care Professionals. Copious irrigation of the involved eye to be done in cases of fire cracker injuries and chemical injuries.

All Health Care Professionals should be trained and educated to pick up ocular emergencies thereby preventing vision threatening complications.

Timely referral for complete Ophthalmic evaluation and early institution of therapy should be done to help the patient

with rehabilitation and prevent permanent visual disability.

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