ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023

original article-

# Pattern of ocular injuries in cases of domestic violence in women, attending ophthalmology OPD in a tertiary centre in South India

Author 1 (corresponding author)
Dr Jvoti Kandagdla, MBBS,MS Ophthal

Mallareddy institute of medical Sciences Suraram, Hyderabad

email-jyotifree23@gmail.com

Author 2
Dr Shabreen Sultana
AF Hospital Gorakhpur

#### AIMS AND OBJECTIVE

Highlight the prevalence of Domestic Violence (DV) as a mechanism of traumatic ocular injury in women, typical eye injury patterns and the clinical course of the affected patients. Importance of early reporting and sensitising the ophthalmologist to the severe problem of domestic abuse as a cause of eye trauma in women.

**KEY WORDS** – Domestic violence, women, ocular injury

#### MATERIALS AND METHODS

This study was conducted in a tertiary care centre of southern India mainly catering to rural population.

All women who attended the OPD with ocular symptoms and history of domestic abuse presenting to our hospital between 2022-2023 were examined 63 cases gave history of physical violence from the intimate partner.

Thus 63 cases of ocular trauma where a positive history of domestic violence was present were taken for the study.

## **Inclusion criteria-**

Female gender, Age-18 to 65 years

History of physical violence from the partner, ocular injury with varying degeree not associated with head injury

## **Exclusion criteria-**

Male gender, other causes of ocular injuries pre-existing ocular pathology, other co-morbidities like hypertension or uncontrolled diabetes.

A questionnaire was designed which included details of the patient, age, educational qualification, economic independence, years of marriage, number of children, their parental background, number of episodes of such violence, any verbal abuse etc.

All patients underwent a thorough ophthalmic examination and treated accordingly.

#### **Results-**

63 of the cases who gave history of physical violence from partner were undertaken for study. The extent of violence is variable, and all the findings were tabulated. The patients were all assessed by BETT'S trauma score and were treated according to their trauma as per the standard treatment regimes by appropriate specialists (eg- retinal detatchment treated by retinal surgeon)

The findings were as follows-

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023

Blunt trauma to lid and periorbital haematoma-13

Associated lid tears and conjunctival tears-7

Subconjunctival haemorrhage -9

Corneal abrasion-8

Traumatic mydriasis-11

Traumatic cataract- 4

Vitreous haemorrhage- 5

Retinal detachment -3

Orbital fracture and retrobulbar haemorrhage - 3

BETTs trauma score was used to give a prognosis. Some patients had two or three findings, but the data is collected on the major affliction. For example, in patients with orbital fracture, sub conjunctival haemorrhage, traumatic mydriasis and traumatic cataract all were present but, for the purpose of research evaluation they have been placed in category of orbital fracture. The major injury was noted.

Blunt trauma to eye with lid edema and subconjunctival haemorrhage were treated conservatively with systemic and topical antibiotics, Antiglaucoma medication, and NSAIDs.

Traumatic cataract, vitreous haemorrhage , retinal detatchment and orbital fractures required surgical management.

#### **OTHER FINDINGS-**

In our study we found that 80 percent of these cases had undergone a similar abuse in the past but continued to stay with the same partner (husband) and face repeated abuse. In this study we also found that 55 percent of the women were working and had an earning but still it did not prevent her from abuse. Not a single woman had sought legal help.

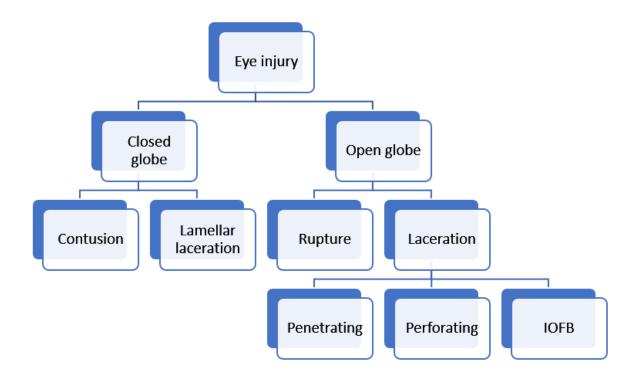
The present study took only age and gender into consideration.

## Discussion-

Domestic abuse in women is a common occurrence and many times the event is first reported to the ophthalmologist. An aware ophthalmologist can go a long way in helping the victims of domestic abuse by encouraging them to stop tolerating violence, as a deterrent to the abuser by showing the legal way, boosting the confidence of the victim and probably help the society prevent this menace. It is often underreported due to the multiple social factors. World Health Organization (WHO) and Birmingham Eye Trauma Terminology System (BETTS)[1,2] describes definition of ocular trauma as

Blindness: Visual acuity < 3/60

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023



Eye Wall: Cornea and Sclera Closed Globe Injury: not a full thickness wound of eye wall.

Contusions: direct energy delivery like choroidal rupture or due to change in shape of the globe like angle recession

Lamellar laceration: partial thickness wound

Open Globe Injury: A full thickness wound of the eye wall Laceration: Wound by a sharp object by outside- in mechanism

Penetrating: Presence of an entrance wound only

Perforating: Presence of an entrance as well as an exit wound

Intra- ocular foreign body

Worldwide articles related to domestic violence are published using different terminologies like spousal violence, intimate partner violence (IPV), domestic abuse.

ocular injuries related to DV with an average incidence of 1.09 per 100,000 adult population in US between 2008-2017 were reported, 84.5% of which were females [11]

The literature estimates that 45% of IPV injuries involve the eyes.

The most common IPV-related injuries were orbital fractures and eyelid contusion [4] In India, 30 percent of women have experienced domestic violence at least once from when they were aged 15, and around 4 percent of ever-pregnant women have experienced spousal violence during a pregnancy [5]

Despite gross under-reporting as per statistics, 30900 of cases violence against women were reported in 2022, out of which about 7000 were due to domestic violence. Domestic violence is often underreported. The following study demonstrates the wide variety of trauma due to domestic abuse.

Often the ophthalmologist is the first one to see and if the cases are reported as medicolegal cases and patient counselled about measures to combat and counter it, more severe cases may get prevented.

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023

Emotional aspects, social taboo, lack of economic independence, social support, children, lack of self-confidence all lead to multiple repetitions of violent behavior.[9] Indian society holds the institution of marriage at a high position and the women are often scared to stay single and hence become victims of such arson. Absence of awareness of legal position and inability to take the abuser to task due to strong patriarchal mindset leads to lack of fear in the abuser.

Looking at the data worldwide, the phenomenon is quite common and why women put up with so much violence needs to be understood.

There is an urgent need to sensitize the environment, economic independence, raising the self-confidence of women so that they take a stand for themselves is important. Even the ophthalmologists need to be sensitized to the issue and every single case of domestic abuse should be sent for psychological counseling and social work organizations giving legal help should be included in the treatment programme.

There is an urgent need to have zero tolerance to domestic abuse, so that human rights are protected.

Our study gives an overview of the number of ways ocular trauma can present.

Each case must be treated according to the extent of injury.

In our study we noted that despite educational qualification and in 30 percent of cases economic independence the women were subjected to domestic violence, and they do not seek legal help. [10]

Looking at the severity of violence, and repeated episodes of such violence, there needs to be wider recognition of the problem statement and proactive approach by the treating ophthalmologist to counsel the patients to prevent it in future. Though the social and the legal aspects are beyond the scope of this article, since the domestic violence is often first reported to ophthalmologist as the ocular symptoms are common, the authors feel that a psychological counseling should be done by psychologist in all cases of domestic abuse compulsorily and medicolegal case should be made in every case.

History of domestic abuse may not be given easily by the victim as often the victim continues to stay in her husband's place; hence the history should be taken in a sensitive manner.

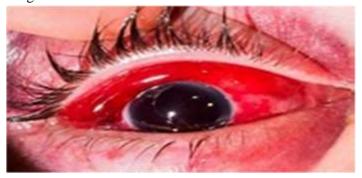
Domestic abuse by husband is very common in India as well as the world. Increased sensitivity and scientific approach may help patients.

Since some of the injuries are grievous and repeated, there needs to be a more aggressive approach towards empowering the victims so that they can protect themselves and the laws should be stricter against abusers.

## **Limitations of the study**

A small sample size a possibility of selection bias is possible.

Image-1.SUBCONJUNCTIVAL HAEMORRHAGE



LID EDEMA AND PERIORBITAL HAEMATOMA WITH MECHANICAL PTOSIS

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023



## VITREOUS HAEMORRHAGE



## Conclusion-

Based on the findings of the study it is concluded that domestic abuse is a common occurrence, women tolerate domestic abuse for a long time till they report it, seeking treatment is delayed, it can occur in all

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE 12, 2023

segments of the society, there is very less awareness about it the victims. The role of ophthalmologist in management as well as counselling is very crucial.

#### References-

- [1] Kuhn F, Morris R, Witherspoon CD, Heimann K, Jeffers JB. A standardized classification of ocular trauma. Ophthalmology 1996; 103: 240–243.
- [2] Kuhn F, Morris F, Witherspoon CD, Mester V. The Birmingham Eye Trauma Terminology system (BETT). J Fr Ophtalmol 2004; 27: 206–210.
- [3] Alik M, Malik M, Ashrafi R, Wu AY. Epidemiologic Pattern and Injury Mechanism of Intimate Partner Violence–Related Ocular Trauma in the US. *JAMA Ophthalmol*. 2023;141(5):431–439. doi:10.1001/jamaophthalmol.2023.0578.
- [4] Hoskin AK, Watson SL. Intimate Partner Violence and the Role of Ophthalmology. *JAMA Ophthalmol.* 2023;141(5):439–440. doi:10.1001/jamaophthalmol.2023.0580
- [5] International Institute for Population Sciences (IIPS) and ICF. 2017. National Family Health Survey (NFHS-4), 2015-16: India. Mumbai: IIPS. <a href="http://rchiips.org/nfhs/NFHS-4Reports/India.pdf">http://rchiips.org/nfhs/NFHS-4Reports/India.pdf</a>
- [6] Grose RG et al., "Sexual and reproductive health outcomes of violence against women and girls in lower-income countries: a review of reviews." *The Journal of Sex Research* 58, no. 1 (2021): 1-20.https://www.tandfonline.com/doi/full/10.1080/00224499.2019.1707466
- [7] Jaleel Ahmad, Nizamuddin Khan and Arupendra Mozumdar, "Spousal Violence Against Women in India: A Social–Ecological Analysis Using Data From the National Family Health Survey 2015 to 2016", Journal of Interpersonal Violence (2019).
- [8] Rocca CH, Rathod S, Falle T, Pande RP, Krishnan S. Challenging assumptions about women's empowerment: social and economic resources and domestic violence among young married women in urban South India. Int J Epidemiol. 2009 Apr;38(2):577-85. doi: 10.1093/ije/dyn226. Epub 2008 Oct 24. PMID: 18952621; PMCID: PMC2734072.
- [9] Koustuv Dalal, "<u>Does economic empowerment protect women from intimate partner violence?</u>", *Journal of Injury and Violence Research*, 3(1), 35-44 (2011).
- [10] Maani Truu, "Women are more likely to experience domestic violence when they out-earn their partner." SBS News, posted on March 30, 2021.
- [11] Andoh JE, Mehta SK, Chen EM, Mir TA, Nwanyanwu K, Teng CC. Domestic Violence-Related Ocular Injuries Among Adult Patients: Data from the Nationwide Emergency Department Sample, 2008-2017. Ophthalmic Epidemiol. 2023 Jun 22:1-9. doi: 10.1080/09286586.2023.2222792. Epub ahead of print. PMID: 37345877.