

Evaluation of Road Side Accident Cases at a Tertiary Care Centre: Medicolegal Aspects

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ABSTRACT

Background: Road traffic accident injuries have figured largely in reported series of those seeking or gaining compensation but have been rarely considered as a separate group. Hence; the present study was undertaken for assessing Road traffic accident cases in Medico-legal aspect.

Materials & Methods: A total of 80 cases of RTA were enrolled in the present study. Only those cases were included in which positive history of medico-legal involvement was seen irrespective of the etiologic profile of the injury. Complete collection of demographic, clinical and medical details in the master chart was done. All the results were analysed by SPSS software.

Results: Most common of medico-legal cause was blunt injury, found to be present in 48.75 percent of the cases. This was followed by occurrence of sharp injuries found to be present in 41.25 percent of the cases. In 61.25 percent of the cases, the patients had rural residence, while in the remaining 38.75 percent of the cases, they had urban residence.

Conclusion: Blunt injuries occurring in RTA are the most common cause of occurrence of medico-legal cases.

Key words: Medico-Legal Case, Road Traffic Accident.


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INTRODUCTION

India reports highest number of accident fatalities (1, 37,423 in 2013) in the world. More alarming than the sheer number of accidents is their severity (persons killed per 100 accidents). It steadily rose from 21.2 to 28.3 from 2003 to 2013.¹⁻³

Road traffic accidents are not the commonest form of injury resulting in medical treatment, but are especially likely to be associated with serious injury with longterm disability, and are the leading cause of mortality up to middle age. Road traffic accident injuries have figured largely in reported series of those seeking or gaining compensation but have been rarely considered as a separate group.⁴

Many general practitioners are rather reluctant to attend to cases of accident for fear of being involved in unnecessary litigation later on. It has been seen that even if a serious accident has occurred just in front of a doctor's clinic and he knows he can save the life of the patient by giving emergency treatment, yet generally he

advises the relatives to take the patient to a hospital. More often than not, the patient dies on the way.^{5, 6}

Hence; under the light of above mentioned data, the present study was undertaken for assessing Road traffic accident (RTA) cases.

MATERIALS & METHODS

The present study was conducted in the Department of Forensic Medicine, Gauhati Medical College and Hospital, Guwahati, Assam (India) and it included assessment of Medico-legal aspects of Road traffic accident cases. Ethical approval was obtained from institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol. The time period for carrying the present study was 2 months. A master chart was prepared. A total of 80 cases of RTA were enrolled in the present study. Only those cases were included in which positive history of medico-legal involvement was seen irrespective

of the etiologic profile of the injury. Complete collection of demographic, clinical and medical details in the master chart was done.

All the results were analysed by SPSS software. Chi-square test was used for assessment of level of significance. P-value of less than 0.05 was taken as significant.

Graph 1: Age and gender-wise distribution

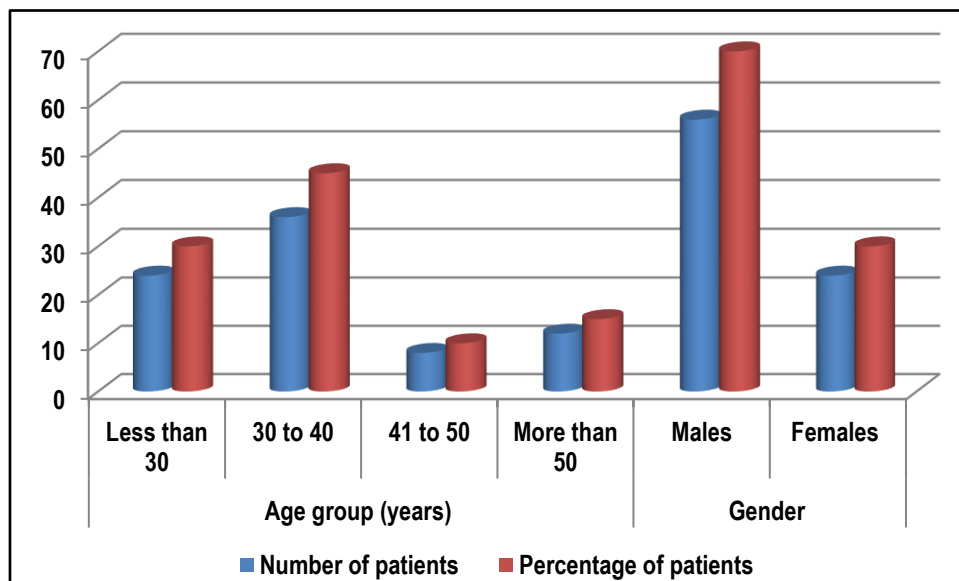


Table 1: Distribution of patients according to geographic location

Geographic location	Number of patients	Percentage of patients
Rural	49	61.25
Urban	31	38.75

Table 2: Different causes of medico-legal cases (MLCs)

Type of MLC	Number of patients	Percentage of patients
Blunt injuries	39	48.75
Sharp injuries	33	41.25
Others	8	10

RESULTS

Graph 1 show the age-wise and gender-wise distribution of patients. Mean age of the patients of the present study was 42.8 years. Out of 80 patients, 56 were males while the remaining were females. In the present study, most common of medico-legal cause was blunt injury, found to be present in 48.75 percent of the cases. This was followed by occurrence of sharp injuries found to be present in 41.25 percent of the cases. In 61.25 percent of the cases, the patients had rural residence, while in the remaining 38.75 percent of the cases, they had urban residence.

DISCUSSION

Professionals in the field of forensic medicine strive to make fair, scientific medical judgments, advocate for the individuals involved, and help make society a safer and more secure environment when working on legal cases that require medical explanation. Traffic accident fatalities fall into this category, making them an important focal point in the discipline of forensic medicine.⁷⁻⁹ The problem of Road Traffic Accidents is compounded by the fact that,

the age groups primarily involved in Road Traffic Accidents belong to the most productive age group of 15-40 years. Developing countries, such as India face the double burden of already existent communicable diseases and increasing burden of non-communicable diseases including Road Traffic Accidents.¹⁰ Hence; the present study was undertaken for assessing Road traffic accident cases in Medico-legal aspect.

All traffic fatalities are reported as unusual deaths and subjected to police inquests. If necessary, a judiciary process called a "forensic autopsy" is then performed to prove whether the victim died of injuries sustained in the accident, identify the vehicle at fault, and determine the cause of the accident.

India accounts for about 10% of road accident fatalities worldwide. Road accidents contributed 37.9 percent to all kind of unnatural accidental deaths during 2008-09. Out of total RTA, 30% was fatal in nature. Rate of death per 1000 vehicle was 1.4 in 2009. In India alone, the death toll rose to 14 per hour in 2009 as opposed to 13 in the previous year. The total number of deaths every year due to

road accidents has now passed the 135,000 mark, according to the latest report of National Crime Records Bureau or NCRB (NCRB 2010).⁶

Medico legal cases are essential component of medical practice and comprise most important constituent of emergencies. A medico legal case is a case of injury or illness where the attending doctor after obtaining history and examining the patient, considers that some investigation by law enforcement agencies is essential to establish and secure responsibility for the case. Medico legal cases form a major component of emergencies brought to casualty department of all teaching hospitals, which is mainstay to deal with all such cases. The provision of legal and medical services to such cases constitutes substantial proportion of workload in this hospitals.¹⁰

Kumar N et al in a previous study involving 100 fatal cases attempted to interpret various aspects of this so called rising pandemic of modern society. Out of 100, 88 % were male, 12 % female. Pedestrians and two-wheeler's rider victims were 37 % each. City roads and lanes were invariably equally risky since morning peak traffic hours till midnight. Highways were riskier since afternoon till late midnight hours. In 54.8 % on the spot death cases heavy motor vehicles were the offenders. 84.1 % cases opted for treatment at tertiary centers. Injuries to chest/abdomen/pelvis proved to be fatal within 1 day. Deaths on the way to hospital were due to coma and hemorrhagic shock. These facts highlight the need for availability of prompt resuscitative measures and an approach of zero tolerance for traffic related hazards.¹¹

CONCLUSION

From the above results, the authors conclude that blunt injuries occurring in RTA are the most common cause of occurrence of medico-legal cases.

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