



CLASSIFICATION OF ROAD TRAFFIC ACCIDENT DEATHS IN A TERTIARY CARE CENTRE

Forensic Medicine

Dr. Abhishek Bhati Senior Resident, NIIMS, U.P.

Diya Chowdhury* BSC-MSC, NFSU, Tripura *Corresponding Author

Dr. R.K. Sinha HOD, NIIMS, U.P.

ABSTRACT

Road traffic accidents (RTAs) are a leading cause of trauma-related mortality worldwide. This means that injuries from vehicle crashes—whether involving cars, motorcycles, bicycles, or pedestrians—are one of the most common reasons people die from trauma (physical injury). Globally, RTAs cause more deaths than many other types of injury, such as falls or assaults. with a significant burden on healthcare systems, particularly in developing nations RTAs not only cause death but also lead to many serious injuries that require emergency treatment, surgeries, intensive care, and long-term rehabilitation. This puts a lot of pressure on hospitals and healthcare infrastructure—especially in low- and middle-income countries, where resources are often limited, and trauma systems may be underdeveloped.

KEYWORDS

Trauma, RTA, Worldwide, pedestrian

INTRODUCTION

An autopsy examination, also known as a post-mortem examination, is a thorough medical investigation performed on a deceased individual to determine the cause of death, evaluate any disease or injury, and gather evidence for legal purposes if necessary. Here are the key aspects involved in an autopsy: Types of Autopsies:

- 1.) Clinical Autopsy: Conducted primarily for medical research and education, often to understand diseases and improve treatment protocols.
- 2.) Forensic Autopsy: Performed when the death is suspicious or involves criminal activity, often required by law. Steps Involved in an Autopsy 1.) External Examination: The body is examined for identifying marks, injuries, or other notable features. This includes documenting the condition of the body and collecting evidence like clothing and personal items. 2.) Internal Examination: A) Dissection: The body is opened to examine the internal organs. This usually involves the thoracic and abdominal cavities. B) Organ Examination: Each organ is inspected for abnormalities, diseases, or signs of trauma. Tissues may be sampled for histopathological analysis. 3.) Toxicology Testing: Samples (blood, urine, tissues) are tested for the presence of drugs, alcohol, or other toxic substances. 4.) Documentation: Detailed notes and photographs are taken throughout the process to document findings. This information is compiled into a final report. 5.) Final Report: The findings are summarized, and a cause of death is determined, which may include factors like natural causes, accidents, homicide, or suicide.

METHODOLOGY

Our focus here would be upon RTA autopsies conducted by me in a span of 36 months in

- 1) The mortuary of MAMC associated with Lok Nayak Hospital, Institute from where I pursued my M.D.
- 2) Sabzi Madi Mortuary associated with Aruna Asaf Ali Hospital, Delhi (As a part of my District Residency Program)
- 3) Mortuary Of Rao Tula Ram Memorial Hospital, Delhi (As a part of my District Residency Program) In this study I have categorized cases (autopsies) based on the types of RTAs.

Data Collection

A large number of my subjects were formed by

- (1) Deaths in central district of Delhi as the main 6 Police Stations which are covered by our mortuary are: I.P. Estate, Hauz Quazi, Jama Masjid, Darya Ganj, Chandni Mahal, Kamla Market. Other subjects were mainly hospital deaths which were referred to LNH from other parts of India.
- (2) Sabzi Mandi Mortuary: Previously majority of post-mortem cases of Delhi were handled here but at present due to decentralization and subsequent division of work in Delhi, post-mortem examination of whole of the Railway Network (excluding P.P. Shahdara) District North and District East (excluding Kalyan Puri subdivision) areas are conducted in this Mortuary.
- (3) Mortuary associated with Rao Tula Ram Hospital.

RESULT & CONCLUSION

TABLE – 1 Different Types of RTAs

Type of RTA	No. of Deaths
2 wheeler	26
3 wheeler	07
4 wheeler	04
Pedestrian	48
Public Transport	05
Total	90

Source: based on autopsies performed in a span of 3 year.

A total number of 352 autopsies were conducted by me in a span of 36 months. Out of which 90 deaths were due to RTA. 26 deaths were due to cars (occupants/ driver); 7 deaths were due to 3 wheelers(occupants/driver), 4 deaths were due to 4 wheeler(occupants/ driver), 48 pedestrians were victims of hitting or being run over by other vehicles, only 5 deaths were due to public transport like buses (driver/occupants)

We can say that pedestrians suffered the most in RTAs and public transport and 4 wheelers proved to be the safer choice.

REFERENCES

- [1] Cordner SM. Deciding the cause of death after necropsy. Lancet. 1993 Jun 05;341(8858):1458-60. [2] Pollanen MS. Deciding the cause of death after autopsy--revisited. J Clin Forensic Med. 2005 Jun;12(3):113-21. [PubMed]
- [3] Kotabagi RB, Charati SC, Jayachandrar D. Clinical Autopsy vs Medicolegal Autopsy. Med J Armed Forces India. 2005 Jul;61(3):258-63.
- [4] Banwari M. An erroneous opinion on a cause of death in a forensic autopsy: a case report. Afr Health Sci. 2017 Dec;17(4):1246-1249.
- [5] Essentials of Forensic Medicine & Toxicology by S. Chand [6] The Essentials of Forensic Medicine & Toxicology by K.S. Narayan Reddy & O.P. Murt