



## POSTMORTEM STUDY OF BRAIN INJURY IN ROAD ACCIDENT IN LUCKNOW

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### Abstract

Study was conducted at KGMU Morgue among 121 postmortem cases of road accident victims over a period of 1 year. The objectives of this study were to know incidence of Brain injury among vehicular accidents, characteristics of victims eg age, sex, involved vehicle, circumstance of accidents. In this study only those postmortem cases were observed that reached morgue after accident. The criteria for exclusion were decomposed bodies, unknown, natural diseases, admitted cases and fatality due to other body parts. Out of 121 cases 88.42% were male and 11.57% were female. The highest incidence of RTA was observed in the age group of 21-30 years. Among the two wheelers 99.22% had not used helmet. The highest number of victims were of two wheelers.(46.34%). 100% injury to brain. Most of the victims had subdural haemorrhage 85.95%.

**Keywords:** Head Injury, Road Traffic Accident, Post Mortem, Cerebral Hemorrhage

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## INTRODUCTION

An estimated million people are killed each year and around 50 million are injured due to RTA occupying 30-70% of orthopedic beds in hospital of developing countries. 85 percent of annual death and 90 percent of the disability adjusted life years (DALYs) lost because of road traffic injury. RTA represents 45 - 50 % of the causes of head injury and young adults were the most common victim.

## NEW DELHI:

National level data of 2012 is as such- the report prepared by the transport research wing of road transport ministry based on FIR show that states known for having better quality roads report more number of such accidents.

The NCRB data for 2013 indicates that 137423 persons including 117055 males and 20368 females, died in road accidents across the nation in 2013.

## MATERIAL AND METHOD

Study has been done in KGMU Morgue, Lucknow: In this study only those Postmortems were observed which reached mortuary after death from an accident site. Various identification data of victims like age, sex, vehicle involve etc have been noted from inquest report. intracranial haemorrhage were noted during postmortem examination.

## OBSERVATIONS AND RESULT

A study was done for period of one year about the analytical postmortem study of head injury in road traffic accidents in city, Lucknow and data was collected in 121 cases about various objectives like knowing the relationship in terms of age, sex, and intracranial haemorrhage.

Month wise analysis was done from February 2014 to January 2015 of total number of autopsies and total number of death due to head injury at RTA.

The minimum number of autopsies were done in the month of December 2014 of 312 cases of which 14 (4.48%) were done due to road traffic head injury.

The maximum number of autopsies were done in the month of June 2014 of 486 cases of which only 1 case (0.20%) was road traffic head injury.

Maximum number of death were observed in the month of September 2014 in which 362 autopsies were done of which 21 deaths occurred due to road traffic injury (5.80%) .

On observing age group and sex of the victims, it was noted that males 107 (88.42%) outnumbered

the females 14 (11.57%) . Majority of the victims were in the age group of 21-30 years, 30.08% in males and 3.2% in females.

In road traffic accidents when data was analyzed among the type of road users, two wheeler motor vehicle occupants were maximum accounted for 57 (46.34%) cases, 26 (21.48%) were pedestrians, 29 (23.57%) were four wheelers and 04 (3.25%) were other types of road users like bicycle riders .While Bus /Truck indicate less among all victims 04 (3.25%) .

Among the motor cyclist out of 57 only 5 (8.77%) used helmet while 52 (91.22%) did not use helmet.

### Types of Meningeal Hemorrhage

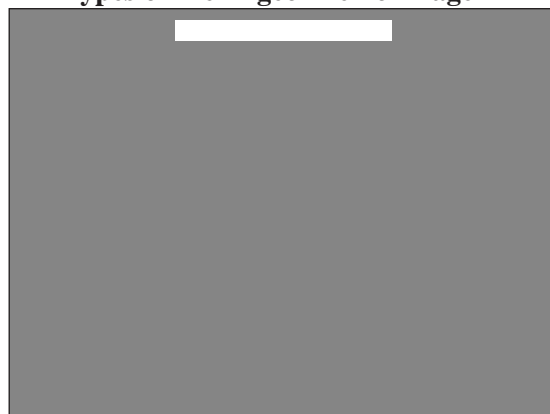


Figure No. 1

### Total Age Group & Sex Victim of Male and Female

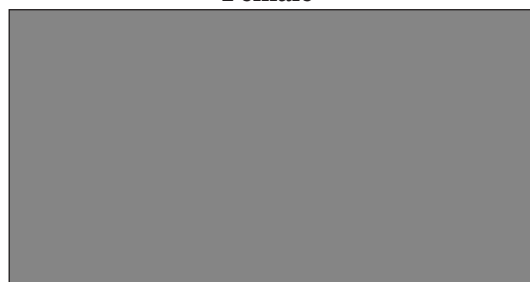


Figure No. 2



Figure No. 3



**Figure No. 7: Linear & Comminuted Fracture**



**Figure No. 8: Comminuted & Depressed Fracture**

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