

Original article

## Study of sex ratio of head injury cases autopsied at Mortuary, Dinajpur Medical College

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### Abstract :

With greater mechanization in industry and an increasing in high velocity transport the incidence of head injury is increasing. The head injuries are most common and account for about one fourth of all deaths due to violence and responsible for 60% of fatal road accident. Head injury adds complexity to the problems because of the facts that in can not be completely evaluated until some times has elapsed after the alleged injury. The often , ill defined clinical manifestation , the issue of settlement of claims and deliberate malingering pose further difficulties to the aspects of fair decision . It was a retrospective study of 36 cases of head injury in 13 thanas of Dinajpur District during 1<sup>st</sup> January to December 2006. Among them 24 cases were due to Road Traffic accident, 6 cases were due to fire arms injury and 6 cases were due to assault. All the cases were autopsied in the mortuary of Dinajpur Medical College. The number of head injury due to Road Traffic accident were more about 17.64%, this was mostly due to accident , property dispute and dowry system.

**Key words:** Head injury, sex ratio, autopsy

### Introduction:

Head injury is very much common as frequent transportation injuries occurs frequently in our country. No form of cranio- cerebral injury is too trivial to be ignored or so serious as to be despaired of<sup>1</sup>. Head injury is the most common and most important injury in forensic practice among the all regional injuries<sup>2</sup>.It is a morbid state resulting from gross or subtle structural changes in the scalp, skull, and content of skull produced by mechanical forces<sup>3</sup>.To be complete , how ever , it should take into account that the impact , responsible for the injury need not be applied directly to the head. The application of blunt force to the head may result injury to the content of skull either alone or with fracture of bone .Unfortunately we are considered as the third world developing nation with high rate of birth, mortality and morbidity and the higher population growth rate. Higher population pressure directly and effects on countries low socioeconomic group, lack of education, unemployment and poverty. As a result, criminal activities of our country

are increasing day by day. Head injuries are increasing gradually. Although the mortality of man breaks down certain conditions 1.Social and economic insecurity and political terrorism often cause the increase number of head injury incidence. Now a days , different papers publish the incidence of head injury with due importance although many cases are not reported due to social stigma and fear .Infect the head injury cases are much higher than the cases recorded by authority. IN 1998,85 percent of all road deaths in the world occurred in developing countries, where death rates of nearly 30 per 100000 per annum are common; high -income countries generally have death rates of less than 5 per 100000 per annum correct interpretation of head injury is of great importance in providing the proper treatment in the living victim. It is also important for the purpose of accurate reconstruction of the events of injury in the dead<sup>4</sup>.

### Methodology:

It was a retrospective study of 36 head injury cases which were autopsied at the mortuary of Dinajpur Medical College coming from 13 different thanas of Dinajpur District during January to

December 2006. All the cases were brought to mortuary by escorting Police of different thanas for autopsy.

**Result :**

A significant number of 256 cases were autopsied. Among them 36 cases of head injury were brought to the mortuary of Dinajpur Medical College from different thanas of district for postmortem examination. Total 36 cases among 256 cases were head injury which is 27.47% (showed in table 1). The male and female ratio of head injury cases in table 2.

**Table-1**

Total number of cases	Head injury	Percentage
256	36	27.47

Table-1 shows 36 cases among 256 cases were head injury which approximately 27.47%.

**Table-2**

Total number of cases	Male	Percentage	Female	Percentage
36	24	66.12%	12	35.28%

Table -2 shows number of male and female cases their corresponding percentages. The number and percentage of head injury a related to source is shows in table 3.

**Table-3**

Source of head injury	Male	Percentage
Road traffic accident	22	64.72
Fire arm	6	17.64
Assault	8	18.60

Table-3 shows the number and percentage of head injury to source.

**Table-4**

Source of head injury	Male	Percentage	Female	Percentage
Road traffic accident	15	64.19%	9	60.25%
Fire arm	6	27.27%	00	00%
Assault	1	4.00%	5	24.67%

The sex ratio of head injury cases a related to source is shows in table 4.

**Discussion**

This study has identified that road traffic accident to be the leading cause of death for head injury among the cases

studied at the department of forensic medicine in Dinajpur Medical College. The study also highlights the facts that male are significantly prone to death due to head injury caused by road traffic accident. The social pattern of male is liable to cause that type of death because males are more prone to work in the streets and also in the workshop.

Persons with xyy chromosome pattern have a natural tendency to violence. Whether such victim is excusable or not is for the courts to decide<sup>5</sup>. Correct interpretation of head injury is of great importance in providing the proper treatment in the living victim. It is also important for the purpose of accurate reconstruction of the events of injury in the dead <sup>6</sup>. Head injury cases are increasing day by day if u look for the daily newspapers, there is news on cases of head injury. In case of death from head injury, the question of their being suicidal, accidental or homicidal may often arise. Though it is mainly an exercise of the circumstantial evidence, it can be solved to an extent by the doctors. The points to be observed may include 1. At the scene (to be observed by investigating agency) 2. On the body (to be observed by the doctors).

**Conclusion:**

The numbers of head injury cases are increasing day by day due to high mechanization of different industries and an increasing in high velocity transport. It is the most important injury of causing death of many individual frequently in the world. So we must not ignore it and should take in to account to take the steps to prevent or lessen this sorts of undesired and unwanted deaths. Of all regional injuries, the injuries of head and neck are most common in routine forensic practice because of the fact that head is the target of choice in the great majority of assaults involving blunt trauma. It is also true that when a victim is pushed or knocked to the ground, he often strikes the head, the brain and is covering are vulnerable to degrees of blunt trauma that would rarely be lethal if applied to other areas.

**Reference:**

1. Text Book of Forensic Medicine & Toxicology by krishan Viz ,3<sup>rd</sup> edition(new edition, Regional injury.
2. Forensic Pathology by Bernard Knight , 2<sup>nd</sup> edition, page-171.
3. The Essentials of Forensic Medicine & Toxicology by K.S. Narayan Reddy , regional injuries.
4. Text Book of Forensic Medicine & Toxicology by Nagesh Kumar G Rao, regional injuries, page-234.
5. Parikh's Text Book of Medical Jurisprudence, Forensic Medicine & Toxicology,6<sup>th</sup> edition (medicolegal aspect) page no.-4.55