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CONCLUSIONS

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CONCLUSIONS

1. 104 cases who died due to road traffic accidents were studied at the mortuary of Lok Nayak Hospital, New Delhi.

2. The age of the victims varied from 1-80 years. The peak incidence was observed in the age group 31-40 years comprising 23.6% of the cases. It was also observed that 22.1% belonged to the age group 21-30 years. Thus 55.7% of cases comprised of age group of 21-40 years in the study. Individuals in the age group 0 to 10 years were the least affected 4.8% followed by older people i.e. 60 years and above in 5.7% of total cases. The lowest age of the victim was 3 years and the highest age observed was 80 years.

3. Males comprised a majority and constituted 98 (94.2%) compared to females who were only 6 (5.7%). The male to female ratio in the study was 16.3:1 (Male=98, Female=6). Male to female ratio in the most commonly affected age group 31-40 years was 13.5:1.

4. Most of the incidents irrespective of the cause, occurred between 9PM to 12 mid night comprising 28.8% of total cases and a large percentage of cases 41% occurred between 6PM to 12 mid night. The least number of incidents occurred between 3AM to 6AM comprising 3% of the total cases. While in nine cases the time of incidence was not known.

6. Survival of a victim after sustaining injury varied from spot death to about 19 days. Twenty two victims had died on the spot. Most of victims died within 6 hours of incidence 22% and 5% of victims were.

7. Being able to survive more than 7 days. A total of 23 victims survived up to 6 hours and 39 up to 24 hours. The maximum period of survival was 19 days.

8. There were a total 82 cases out of 104 survived for a variable period of time in the hospital, ranging from few minutes to up to 19 days. Of these only 8 could be taken for surgery.

Among eight cases operated, 5 lived beyond three days, and the remaining 3 had died within 6 hour to 24 hours of the incident. Only one victim was able to survive up to 19 days. A total of 22 were spot death

9. In the present study, there were 99 individuals with external injuries to the head namely abrasions, contusion and lacerations. Crush injury of the scalp were present in 4 cases. There were 5 cases with no external injury at all. The commonest type of scalp injury was contusion. Contusions were present in 70 (70.7%) victims out of 99. Lacerations were present in 60 (60.6%) and the least common scalp injury namely, abrasions in 54 (54.5%) victims only. Contusions only were present in as many as 9 (10%) individuals. The commonest region to be involved by any injury was the frontal region, having 98 injuries. This was followed by temporal 64, parietal 48 and occipital 20 region in that order.

10. A skull fracture was seen in 78 (75%) individuals out of total 104 cases. The combination of both vault and skull base fracture was commonest 35 (44.8%) cases as compared to skull vault alone and base alone fractures seen 31(39.74%) and 4(5.1%) victims respectively.

11. There were 70 cases having 116 fracture sites involving vault of skull. There were four crush injuries. Eight had craniotomy in the vault. It was observed that temporal region was the commonest region involved in the vault of skull having 52 (44.8%) fractures. Parietal region had 44 (37.9%) and frontal 20 (17.2%) fractures. The unilateral involvement was more common than bilateral. The unilateral bilateral ratio of skull vault fracture was 7.9:1. The commonest type of fractures present in the skull vault were linear or fissured fractures, constituting 73 out of 116 sites almost 62%. Depressed (localized) fractures were frequent but relatively less common than comminuted fractures being 10 and 33 out of 116 sites (8% and 28%) respectively.

12. There were 74 victims with 53 fracture sites of the base of skull, linear or fissured fractures numbered 41 (77%) and comminuted fractures 12 (23%).Middle cranial fossa was the commonest fossa involved, having a total of 27 fractures out of 53 (51%) followed by posterior cranial fossa having 17 out of 53 (32%) and anterior cranial fossa with 9 out of 53 (16%) fractures.

13. There were 104 victims with one or other form of intracranial injury. 4 had crushing injury of the head. Among the intracranial injuries, subarachnoid haemorrhage was the commonest, present in 90 (86.5%) cases. Next common was subdural haemorrhage in 79 (75.9%) cases, followed by intracerebral haemorrhage and damage in 35 (33.6%) cases. Contusions of the brain parenchyma were present in 70 (67.3%) cases. Laceration were present in 6 cases. Intraventricular:

14. Haemorrhage was seen in 19 (19.2%) cases followed only after extradural haemorrhage 18 (17.3%). Intracranial injuries were most frequent in temporal region of the brain, closely followed by the parietal region, totaling 234 and 170 instances, respectively. The frontal region was more affected than the occipital region among intracranial injuries 165 and 138 instances of injury, respectively. Cerebellar involvement was least frequent only in 4 cases.

15. There was a total of 104 victims of vehicular accidents. Most of the victims were pedestrians, 72 (69.2%) while most of the offending vehicles were bus, in 26 (25%) cases. There were 9 (8.6%) victims traveling on a bicycle. Among victims on motorized vehicles 23 (22.1%) most were traveling on scooters, as many as 15 (14.2%) cases. Of these 11 were drivers and 4 passengers (pillion riders). Of the scooter drivers, 8 were helmeted and the

rest 7 not. Buses were the most common known offending vehicle involved in 26 (25%) cases followed by trucks and car in 14 (13.46%) cases each. In 35 (33.65%) cases of vehicular accidents, the vehicle was not known or unidentified, all 35 of these were cases of Hit and Run accidents. TSRs were offending vehicles in 4 (3.8%) cases while two wheelers had caused the death 10 persons.

In 2(1.9%) cases the Circle of Willis was damaged. Of these one had rupture of left anterior communicating artery alongwith left anterior cerebral artery. There was no associated fracture in this case. In the other case, there was rupture of left anterior communicating artery, middle cerebral artery, left anterior artery, left posterior communicating artery associated with fracture of left frontal and left temporal bone along with communicated fracture of left anterior cranial fossa.

