

Patterns of Fatal Head Injury in Road Traffic Accidents

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Background: Head Injury is the single most common cause of mortality in vehicle accidents. Its outcome is a product of different mechanisms, types and amounts of head injuries and their anatomical locations.

Objective: To analyze the pattern of fatal head Injury in road traffic accidents.

Design: A retrospective autopsy based study conducted in correlation with the relevant clinical records and the reports from investigating agencies.

Subjects: Cases of Road Traffic Accidents subjected to medico-legal autopsy at the department of Forensic Medicine, Government Medical College and Hospital Chandigarh, India - a tertiary care center.

Main outcome: Young adults (both males and females) in their most productive years of life, are especially prone to head injury, as a result of vehicle accidents.

Results: Vehicle accidents comprised 35% (632) of the total medico-legal autopsies. Fifty-eight percent (367) had sustained head injury, 76% (279) had a Glasgow Coma Score of 8 or less at the time of presentation in the emergency, 72% (273) survived less than 24 hours. Subdural (62.40%), Subarachnoid (23.5%), Extradural (16%) and Intracerebral (9%) haemorrhages were the major causes of death. Skull fractures were detected in 88.1%, while cerebral contusions and lacerations occurred in 23.7%. Six percent developed intracranial infections.

Conclusion: For prompt treatment of such cases immediate Glasgow Coma Scoring, radiological evaluation, surgical Intervention and Intensive care is required. Establishment of trauma teams and proper infrastructure at the primary health care level is recommended.