

RECONSTRUCTION OF HIT-AND-RUN VEHICLE TYPE BASED ON UN-COMMON RUN-OVER INJURIES

Vidanapathirana M¹, Gunethilake K.M.T.B.²

¹Department of Forensic Medicine, Faculty of Medical Sciences,
University of Sri Jayewardenepura, Sri Lanka and

²Office of the JMO, Provincial General Hospital, Ratnapura, Sri Lanka

ABSTRACT

The main objective of investigations in hit-and-run accidents is to trace the vehicle. This is a significant challenge when there is no eye witness. It is easy when vehicle is a car or heavy vehicle since it leaves expected injury patterns. Following case discussion is based on a body found roadside with un-common run-over injuries.

An unidentified body with injuries was found roadside in supine position. There were no eyewitnesses. Autopsy revealed three groups of injuries; crushed fractures in feet, crushed laceration over the pubic area with underlying major vessels damage, and superficial abrasions over knees. Distance from feet to knee injuries was 23 inches and to pelvic injuries 46 inches. Stomach had liquor smell.

Two areas of crushed injuries with almost injury free area in-between suggest run-over by two tires. The distance between two crush injuries was 4 feet and was compatible with rear wheels of a three-wheeler. Injuries over knees were not severe and were situated midway between two severe injuries and were compatible with front tire of three-wheeler. The deceased would have been in lying position probably under the influence of alcohol. However, there were no tire marks, paint or glass fragments etc for specific identification of the three wheeler.

Keywords: hit and run accident, un-common run-over injuries, reconstruction, three wheeler.

INTRODUCTION

Leaving the scene of a crash without reporting is called hit-and-run collisions. It is an offence in most countries¹ including Sri Lanka. Hit-and-run collision is a punishable offence as it delays crash notification thereby delaying emergency response which increases the likelihood of traffic fatality². Therefore, hit-and-run crashes account for a significant proportion of pedestrian fatalities. Of the 48,000 pedestrian deaths that were recorded in the United States between 1998 and 2007, 18.1% were caused by hit-and-run crashes³.

Many studies have been devoted to improve the ways and means to identify hit-and-run vehicles and the drivers involved. A study done in Singapore in 2008 found that drivers were more likely to run when crashes occurred at night, on a bridge and flyover, bend, straight road and near shop houses; involved two vehicles, two-wheel vehicles and vehicles from neighboring countries; and when the driver was a male, minority, and aged between 45 and 69¹. On the other hand, collisions occurring on undivided roads were less likely to be hit-and-run crashes¹.

The main objective of the medico-legal investigations in hit-and-run accidents is to trace the vehicle. This is a significant challenge when there is no eye witness. It is easy when the vehicle is a car or heavy vehicle since it leaves expected injury patterns. Following case discussion is based on a body found roadside with un-common run-over injuries.