

PP 20: A retrospective descriptive study on deaths due to firearm injuries

D.N. Alwis, D.P.S. Govinnage, D.L. Kulathunga, W.N.S. Perera, P. Paranitharan

Department of Forensic Medicine, Faculty of Medicine, University of Kelaniya

Introduction: Using firearms is one of the methods of committing a homicide. In Sri Lanka use of firearms was prominent among terrorists and underworld criminals. The analysis of the injury pattern will help to find the trends related to firearm injuries. Deaths that deviate from the routine pattern of injuries will be highlighted.

Objectives: The objective of the study was to identify injury patterns in firearm related deaths.

Methods: The data from 40 firearm related autopsy reports belonging to the investigators from the years 2000 to 2019 were entered to SPSS statistical package for analysis, based on a pre-prepared questionnaire.

Results: Majority were in between 21 and 40 years (75%) and male (97.5%). Head alone was involved in 25% of deaths and head in combination with other regions was involved in 40% of the deaths. Cause of death (COD) in 50% of cases was head injuries alone and in 12.5% cases COD was from head injuries in combination of other injuries. Main motive was homicide in 72.5% of cases. Rifled firearm was the commonest weapon (90%). Range was distant in 65% of cases followed by close range in 17.5% of cases. Range was decided by the history, if available, appearance of entry wound and other observations.

Conclusions: Scientific evaluation of deaths following firearm injuries demands proper assessment of range based on modern technology. This becomes more relevant if there is an incompatibility with the history and the appearance of the wound, especially when deciding circumstance of death.

Keywords: Firearm, homicide, injury pattern, death