

ASSESSMENT OF PATTERN OF INJURIES TO VITAL ORGANS IN CULPABLE HOMICIDE: A SERIES OF 200 CASESShilekh Mittal¹, Ramandeep Singh Dang², Rajeev Sharma³, Ravinder Kaur⁴**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: Homicide, "the killing of the individual", is the worst type of crime that a man can conceive or indulge in. It is treated as the highest level of aggression and is found in all cultures. Homicide is a crime in which one man ends another man's life willfully and is known to mankind since the existence of man. The word Homicide has been derived from Latin word "Homo- a man and cadre (cide) -to-kill or cut", means killing of one human being by another. Homicide embraces killing by the one who plans the death of another with malice-aforethought, one who looks for a purpose to kill but means to inflict serious injury only and the one who acts in want of disregards of human life. In the selected time span 1662 cases were brought for postmortem examination of which 200 alleged case were of homicide. The incidence of homicidal deaths was observed as 12.03%. Amongst the homicidal death cases injury to vital organ (Heart, Lungs, Liver, Spleen, Kidneys, intestines and mesentery) was the cause of death in 15%. Out of different injuries inflicted on chest of dead bodies, 14.46% were abrasions, bruises 14.08%, lacerated wounds 1.57%, incised wounds 9.38%, Penetrating Wounds 31.75% and Firearm Injuries 26.74 %.

KEYWORDS: Chest and Abdominal Injury, Culpable Homicides, Vital Organs, Penetrating Wounds, Firearm Injuries.

INTRODUCTION: Homicide is the most 'heinous crime' prevalent in the society. Homicide means "Killing of human being by another human being". It is the killing by one who plans the death of another with malice-afore thought, one who looks for a purpose to kill but means to inflict serious injury only and the one who acts in want of disregard for human life.¹⁻³ It is the highest level of aggression found in all cultures.⁴

The crime of committing homicide or murder or taking another man's life willfully is as old as the existence of man. Viewed in this context it would be seen that homicide was a common practice not only in ancient India but was also prevalent in all other ancient civilizations of the world. Revenge, quarrel, anger, jealousy, loss of prestige etc. have been the real motives leading to the worst and most dreaded act of homicide all over the world, throughout the ages.

MATERIAL AND METHODS: The study consisted of all the cases of homicidal deaths which were brought to the mortuary complex of the Department of Forensic Medicine and Toxicology of a tertiary care center of North India in eighteen running months.

A total number of 1662 cases were brought for the post mortem examination of which 200 (12.03%) cases were of homicidal deaths and they comprised the study group.

OBSERVATIONS: A total of 200 cases of homicidal deaths were selected for the study and medico legal aspects of mechanical injuries of these cases were evaluated.

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Age in Years	Males		Females		Total	
	No.	%	No.	%	No.	%
0-10	6	3%	2	1%	8	4%
11-20	10	5%	6	3%	16	8%
21-30	54	27%	8	4%	62	31%
31-40	33	16.5%	8	4%	41	20.5%
41-50	32	16%	1	0.5%	13	16.5%
51-60	10	5%	2	1%	12	6%
61-70	12	6%	1	0.5%	13	6.5%
>70	8	4%	7	3.5%	15	7.5%
Total	165	82.5%	35	17.5%	200	100%

Table No. 1: AGE AND SEX WISE INCIDENCE AND DISTRIBUTION OF CULPABLE HOMICIDES

Table No. 1 depicts that 54(27%) males who became the victim of culpable homicide were of the age group of 21-30 years, followed by 33(16.5%) in the age group of 31- 40 years and 32(16%) belonged to the age group of 41-50 years. Similarly 8(4%) females who became victims of culpable homicide were from the age group of 21-30 years and 31-40 years. Thus maximum 103(51.5%) victims belonged to the age group of 21-40 years.

Type of Injuries	Sub-type	% on Chest	% on Abdomen
Abrasion	Scratch	2.98	2.13
	Graze	8.08	5.96
	Imprint	3.4	1.70
Bruise	Intra Dermal	2.11	1.41
	Subcutaneous	7.04	2.11
	Deep Bruise	4.93	4.23
Laceration	Split	0	1.57
	Stretch	1.57	3.13
Incisions	Incised Wounds	9.38	9.38
Penetrating Wounds	Incised	30.16	26.98
	Lacerated	1.59	1.59
Firearm Injuries	Single Perforated LW Caused By Rifled Firearm Weapon	18.60	15.12
	Multiple Perforated LW Caused By Smooth Bored Firearm Weapon	8.14	4.65

Table No. 2: DISTRIBUTION OF DIFFERENT TYPES OF INJURIES

In the 200 cases included in study, 235 abrasions of different variety were seen. Incidence of grazed abrasion was found maximum with 8.08% on the chest and 5.96% on abdomen.

Out of 142 different bruises found on 200 cases, predominately subcutaneous bruises present on chest and abdomen i.e. 7.04% and 2.11% respectively.

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Out of 64 different lacerations found on 200 cases, predominately Stretch lacerations were present on 3.13% on abdomen, 1.57% on chest.

Out of 128 different incision wounds 9.38 % are on chest and abdomen in 200 cases.

Out of 63 different puncture wounds found on 200 cases, penetrating incised wounds were present on chest 30.16%, Abdomen 26.98%.

Out of 86 different firearm injuries found on 200 cases, perforated lacerated wounds caused by rifled firearm weapons, were present on chest 18.6% and on abdomen 15.2%.

Multiple perforated lacerated wounds caused by smooth bored weapons, were present on chest 20.94% and on abdomen 4.65%.

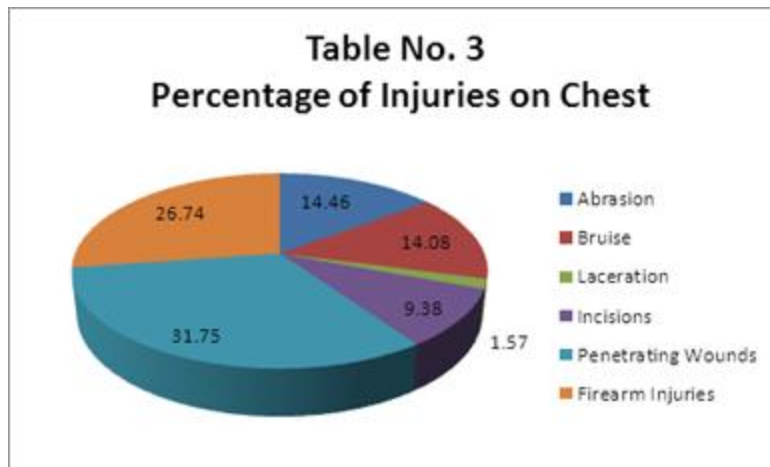


Table 3 depicts distribution of various types of injuries on chest: Penetrating Wounds 31.75% were maximum followed by Firearm Injuries 26.74%.

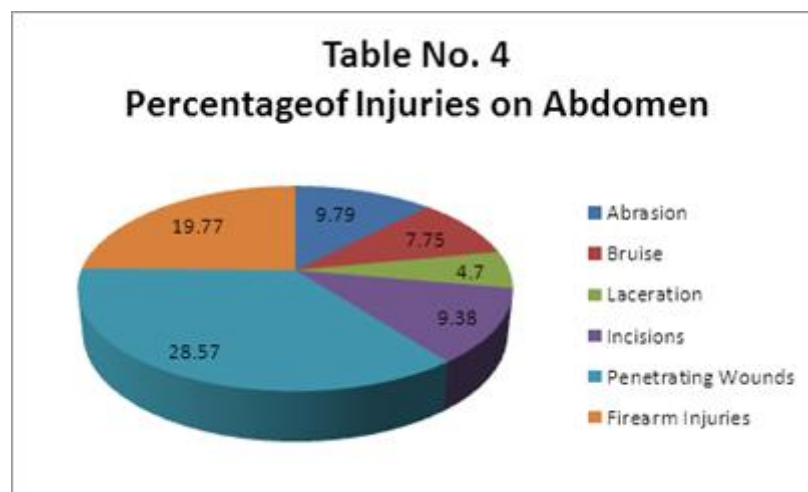


Table 4 depicts distribution of various types of injuries on abdomen: Maximum incidence was of Penetrating Wounds 28.57% followed by Firearm Injuries 19.77%.

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Cavity	Organs	No.	%
Chest Cavity	Lungs	54	10.84
	Heart	24	4.82
	Total	78	15.66
Abdominal Cavity	Liver	17	3.42
	Spleen	4	0.8
	Kidneys	4	0.8
	Intestine	25	5.02
	Mesentery	13	2.61
	Total	63	12.65

Table No. 5: INCIDENCE AND DISTRIBUTION OF INJURY TO INTERNAL ORGANS IN CULPABLE HOMICIDES

In 200 cases of culpable homicide 498 different injuries on different internal organs were noted. Injury to chest cavity 78(15.66%) of which lungs were commonly injured 54(10.84%). The abdominal structures were injured in 63(12.65%) out of which intestine, liver and mesentery were injured in 25(5.02%), 17(3.42%) 13(2.61%) respectively and minimum number of injuries to abdominal viscera were of spleen and kidneys 4(0.8%) each.

DISCUSSION: The present study is on 200 autopsy cases of culpable homicide brought for post-mortem examination in eighteen months. This study has been conducted and analyzed with special reference to their medico legal aspects.

Incidence of various types of abrasions seen on abdomen was 9.79%. No such studies are available in literature.

Incidence of various types of bruises present on abdomen was 7.75%. They were least on abdomen due to yielding of lax abdominal wall. Similar effects have been observed by Vij.⁵

Incidence of various types of lacerations present on abdomen was 4.7% and on chest was 1.57%. Chest region was least affected by laceration due to resilient nature of tissues and defensive posture adopted by the victim. Similar effects have been observed by Modi.⁶

Out of 200 cases studied, incised wounds present on chest and abdomen were 9.38%. Gorden and Shipiro⁵ observed that the incised wounds are commonly seen in cases of homicidal assault. Prajapati, Sheikh, Patel⁷ also observed in their study that incidence of incised wounds as 21.48% on chest and 16.15% on abdomen. Homicidal incised wounds are usually multiple and can occur in any region of the body.

For the puncture wounds, chest and abdomen are favored sites, 31.75% on chest and 28.57% on abdomen. Dikshit, Dogra, Chandra ⁴ observed that stab wounds were in majority on abdomen of which 38.4% were on intestine, 19.2% on stomach, 17.3% on liver while in the chest, 28.8% were on heart and 15.3% on lungs. Prajapati, Sheikh, Patel⁷ observed in a study that lungs were involved in 23.13% cases and heart in 12.93% which is in variance from Bostram, Heinius, Nilsson⁸ because they included chest and abdominal injuries in one group i.e. injury on trunk region.

The most prominent reason for the majority of puncture wounds on chest and abdomen was that it contains the vital organs and this fact is well known to assailants that any injury to vital organs are usually fatal.

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As regards to the firearm injuries, maximum were on chest (26.74%), followed by abdomen (19.77%) and minimum were on neck (3.49%). Kanger et al⁹ observed that main target was head (33.1%) followed by back and lateral trunk (21.9%). Chest (19.9%), extremities (12%), abdomen (7.7%) and neck (5.4%) followed in that order.

The present study is in variance from study of Kanger et al⁹ who observed that the main target in firearm injury was head, but in the current series main target was found to be chest region whereas distribution of injuries on neck was almost same as observed by Kanger et al.⁹

Maximum cases of injury to internal organs were seen to brain followed by lungs, intestine, heart and least incidence was seen to kidneys and spleen. Dasgupta and Tripathi¹⁰ in their observation found incidence of internal injuries on head and neck as 31.18%, abdomen 26.35% and heart 20.43%. They also observed brain as main victim of homicidal assault. These observations are in line with the current study.

Maximum number of victims (31.5%) died of hemorrhage and shock. This was followed by those with injury to brain (28.5%), asphyxia (17%), and injury to vital organs (15%). Dasgupta and Tripathi¹⁰ have also observed that hemorrhage and shock as the main cause of death (56.72%). The incidence of causes of death in our study is similar i.e. hemorrhage and shock.

CONCLUSION: Our study has revealed that culpable homicide can have wide variety of presentation in terms of site of injury, type of injury and cause of death. Data collected in the study, conducted in a tertiary care institute of north India corroborates with the observations made in other studies across the globe cementing the fact that aggression and malice – a fore thought is identical in all cultures.

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