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Firearm Injures in Culpable Homicides

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Abstract

Since firearm weapons provide convenient mean of destroying human life from a considerable distance affording at time opportunity for the shooter to escape, the possibility of apprehension as well as of being over powered by a strong adversary, is substantially reduced it has been the weapon of choice for gangsters, terrorists, extremities, anti social and anti national elements for better service to their purpose. A study was conducted on 200 alleged cases of homicides. Different profiles from type of injuries by blunt force were evaluated. The incidence of homicidal deaths was observed as 13.03% with male preponderance and the commonest age affected was 21 to 40 yrs.

Out of different weapons used to inflict the injuries on dead bodies of culpable homicides smooth bored firearm weapon 9(3.16%) and Rifled firearm weapon 29(10.17%) used. Perforated lacerated wounds caused by rifled firearm weapons comprised maximum 68(79.06%) followed by multiple perforated lacerated wounds caused by smooth bored firearm weapons 18(20.94%).

Perforated lacerated wounds were present maximum on chest 16(18.6%). Multiple perforated lacerated wounds were present maximum on chest 18(20.94%).

Keywords: Firearm injuries, Culpable homicides.

Intoduction

The word Homicide has been derived from Latin word "Homo- a man[1] and cadre –to-kill or cut" [2], means killing of one human being by another. Homicide embraces killing by the one who plans the death of another with malice a forethought, 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.

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 with the people in ancient Indian as in all other ancient civilization 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 through out the ages. Homicide or killing of fellow

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human being by a man therefore has been a perennial phenomena either in the form of human sacrifices or mass-massacres in wars or killing of a particular individual here and there actuated by personal motive whether offensive or defensive. The incidence of homicide has increased at an alarming rate in our country during the period of 1978 to 1982, homicides constituted from 1.4% to 3.2% of total crime rate.[3]

The incidence of homicide by the use of all kinds of weapons and instruments weather blunt, sharp or firearm has risen substantially and steadily in the society which results that today hardly a day passes in the life of a Forensic Pathologist working in any of the medicolegal postmortem center in the country, when he is not required to face or to do autopsy on the dead body of a victim of homicide.[4]

For millennia man has been fascinated with idea of launching a projectile at animals or men of opposing points of view and has developed more efficient ways of doing so. Invention of gun powder led to the development of fire. Ever since the firearms have not only passed through continuous evolutionary changes producing their highly sophisticated modern versions like various shotguns and rifled firearms including the self-propelled and automatic ones, but also they have established their claim as the most popular instrument for committing homicide, whether during peace or in war time.[5,6,7.]

Material and Method

The study consists of all the cases of homicidal deaths except deaths due to rash and negligent act which were brought to the mortuary complex of the Department of Forensic Medicine and Toxicology of Govt. Medical College, Amritsar, Punjab (India) during the period extending from February 2003 to September 2004.

A total of 200 cases of homicidal deaths were studied to find the demographical, medicolegal aspects of mechanical injuries in culpable homicides.

Observations

Total number of 1662 cases were brought for the post mortem examination from February 2003 to September 2004 out of which 200(12.03%) cases comprised of study group.

54(27%) males maximum became the victim of culpable homicide were of the age group of 21-30 yrs followed by 33(16.5%) and 32(16%) who belonged to the age group of 31-40 and 41-50 yrs respectively. Similarly maximum 8(4%) females who died due to culpable homicide were from the age group of 21-30 years and 31-40 yrs. Thus maximum 103(51.5%) victims belonged to the age group of 21-40 yrs.

285 different weapons used to inflict the injuries on 200 dead bodies of culpable homicides smooth bored firearm weapon 9(3.16%) was used and Rifled firearm weapon 29(10.17%) used.

Out of 86 different firearm injuries found on 200 dead bodies, perforated lacerated wounds caused by rifled firearm weapons comprised maximum i.e. 68(79.06%) followed by multiple perforated lacerated wounds caused by smooth bored firearm weapons i.e. 18(20.94%). Perforated lacerated

wounds were present maximum on chest i.e. 16(18.6%) followed by head and face, abdomen, upper limbs, lower limbs and neck i.e. 14(16.28%), 13(15.2%), 12(13.95%), 11(12.79%), 2(2.32%) respectively.

Multiple perforated lacerated wounds were present maximum on chest 18(20.94%) followed by abdomen, upper limbs, lower limbs, head and face and neck i.e. 4(4.65%), 3(3.49%), 2(2.32%), 1(1.17%), 1(1.17%) respectively.

Different types of firearm injuries of which maximum were on chest 23(26.74%) followed by abdomen, upper limb, head and face, lower limbs and neck i.e. 17(19.77%), 15(17.44%), 15(17.45%), 13(15.11%), 3(3.49%) respectively.

Discussion

In the present study 1662 cases for postmortem examination were received from February 2003 to September 2004, 200(12.03%) cases were of deaths due to culpable homicide. The incidence was higher than Tonsayonand (1984), Pal et al (1997) i.e. 7.7% and 7.69% respectively. Much less than Dikshit, Dogra and Chandra (1986) 28%, but almost the same as compared to Khanagwal and Paliwal (1991) and Dikshit and Kumar (1997) i.e. 10%, 11.5% respectively.

Site	Types of Firearms Injuries					
	Single Perforated LW caused by rifled firearm weapon		Multiple Perforated LW caused by smooth bored firearm weapon		Total	
	No	%	No	%	No	%
Head & Face	14	16.28	1	1.17	15	17.45
Neck	2	2.32	1	1.17	3	3.49
Chest	16	18.60	7	8.14	23	26.74
Abdomen	13	15.12	4	4.65	17	19.77
Upper Limbs	12	13.95	3	3.49	15	17.44
Lower Limbs	11	12.79	2	2.32	13	15.11
Total	68	79.06	18	20.94	86	100

This variation is due to regional conditions i.e. political, social as well as other law order problems as a result of unemployment, poverty, migratory labour etc.

Age and Sex Wise Distribution

In the present study maximum 31% victims were of age group of 21-30 yrs though 51.5% victims of age group of 21-40 yrs.

Dasgupta and Tripathi (1983) reported 45.16% victims of age group of 25-44 yrs. Fimate and Singh (1989) reported 50% of victims of age group of 21-40 yrs. Dikshit and Kumar (1989) reported maximum 41.37% victims of age group of 21-30 yrs. Pal et al (1999) reported 29.24% victims of age group of 21-30 yrs.

Majority have observed that maximum number of victims were of age group of 21-30 yrs. Just like current study this could be attributed to the fact that this is the most active phase of an individual's life, including out door activities, increased aggression and early losing of temper which leads to increase in crime rate by this age group.

In the present study 82.5% main victims were males. Similar observations were of Dasgupta and Tripathi (1983) who reported 88.97% victims as males. Tonsayanond (1984) reported male and female ratio 9:1. Dikshit, Dogra, Chandra (1986) reported male to female ratio as 7:1. Khanagwal and Paliwal (1991) maximum were male victims 75.2%. Pal et al (1999) male to female ratio was 3:1.

Sex wise distribution is in unison with other studies. This preponderance could be due to the fact that male member of the family is expected to preserve every financial, honor, moral prestige of the family. Hence any threat to these would make him to reach the extremes of most dreadful act. Secondly, female are less likely to be involved in brawling incidents which are commonly associated with intentional killings or likely to be killed as a matter of jealousy and irrespective to whether they had an emotional or sexual relationship with the offender.

The distribution of firearm injuries is maximum firearm injuries were on chest 26.74%, followed by abdomen 19.77%, then head and face 17.45% and minimum on neck 3.49%.

Kanger et al (2002) 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%.

Present study is in variance from study of Kanger et al (2002) who observed main target in firearm injury was head. But in current series main target was chest region whereas distribution of injuries on neck is almost same as observed by Kanger et al (2002).

Firearms especially the smooth bored, they are the least used in the current series only 3.16% deaths attributed to this. It is mainly used for scaring and dispersing the mobs or rivals. Rifled firearm injury contributed to death in 10.17% of cases and injuries were mostly on chest region where as Kangar et al (2002) observed main seat of injury for rifled firearm was head and neck. This is contrast to study of Kangar et al. No specific reason can be drawn out of this variation.

Summary and Conclusions

The incidence of homicide was 12.03%.

The largest number of victims was of the age group of 21-30 years 31% and majority of victims were males 82.5%.

Total firearm injuries (smooth bored firearm and rifled firearm) 13.23% was used to cause homicide out of which rifled weapon 10.17% and smooth bored weapon 3.16%.

References

1. The advanced learner's Dictionary of Current English. 2nd ed. London: Hornby AS, Gatenby EV, Wakefield H; 1972.Homo;.p. 238 & 474.
2. Saharan DV, Tripathi AK, Chandra J, Dogra TD. A study of murders in South Delhi. J For Med Tox 1988; 3 & 4: 12-5.
3. Mant AK. Taylor's Principles and Practice of Medical Jurisprudence. Wounds and their interpretation. 13th ed. London: Churchill Livingstone; 1984. p. 214-248.
4. The history of firearms (cited 2004 Jun 5); 1(1): (20 screens). Available from: URL. http://www.history offirearms/eid.htm.
5. Harisw, Luterman A, Currei PW. BB and Pallet guns- toys or deadly weapon?. J Trauma 1983; 23: 566-9.
6. Ragsdale BD. Gunshot wounds a historical perspective. Milit Med 1984; 149: 301-15.
7. Tosayaround S. Homicide: A study at Siriraj Hospital, Bangkok. Med Sci Law 1984; 24: 3: 222-6.
8. Pal V, Paliwal PK, Sirohimal BL, Yadav DR. Epidemiological study of deaths due to poisoning of Rohtak (Haryana). Proceedings of the Forensicon-99 International Congress of Forensic Med and Toxicology. XXth Annual Conference of Indian Academy of Forensic Med; 1999 6th-8th Feb.
9. Dikshit PC, Dogra TD, Chandra J. Comprehensive Study of Homicides in South Delhi 1969-79. J Med Sci Law 1986; 26(3): 230-4.
10. Khanagwal VP, Paliwal PK. Evaluation of homicidal victims in Haryana. Proceedings of the BHV Platinum Jubilee Year 1916-1991. XIII Annual Conference of Indian Academy of Forensic Med; 1991 Feb 19th to 21st. p. 13.
11. Dikshit PC, Kumar A. Study of homicidal deaths in central Delhi. J For Med Tox 1997; XIV (1): 44-6.
12. Dasgupta SM, Tripathi CB. A study of the homicide cases occurring in Varanasi area. Ind Med Gazette 1983; 285-8.
13. Singh HN, Fimate L. Trends of homicide in Manipur. Proceedings of the XI Annual Conference of Indian Academy of Forensic Med; 1989 Feb 2nd to 4th. p. 11.
14. Dikshit PC, Kumar B. A review of the deaths due to homicidal stab wounds during the period 1983-1987. Proceedings of the IX Annual Conference of Indian Academy of Forensic Medicine; 1989 Feb 2-4; 1989. p. 24-25.
15. Kanger B, Billeb E, Koops E, Brinkmann B. Autopsy features relevant for discrimination between suicidal and homicidal gun shot injuries. Int J Legal Med 2002; 116: 273-8