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Original Article

PATTERN OF HARD AND BLUNT INJURIES IN CUSTODIAL DEATHS IN KARACHI: AN AUTOPSY BASED STUDY

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ABSTRACT

Objective: To determine the patern of hard and blunt injuries in custodial deaths in Karachi: An autopsy based study

Background: The death in captivity is considered as custodial deaths which are reported not only in Pakistan but its neighbor countries like India, Middle East and even from developed countries. In custodial deaths autopsy becomes a necessary part of investigation. There are various natural and unnatural causes of custodial death. The objectives of this study are to identify the pattern of blunt injuries from autopsies of individuals died in custody, to know and analyze the trends of blunt injuries and physical and psychological effects on the victim's family.

Methodology:

Study design: This was a cross sectional study of 96 autopsy reports of custodial deaths.

Study Setting: All prisoners were male with age group ranging from 33 to 38 years. The data was collected for five years from February 2010 to February 2015. These autopsies were conducted in the three major hospitals of Karachi (Abbasi Shaheed Hospital, Civil Hospital and Jinnah Hospital) under the supervision of police surgeon of Karachi.

Duration: The data were collected for five years from February 2010 to February 2015.

Inclusion / Exclusion Criteria: The data were taken for five years and the data before that period were excluded.

Ethical Consideration: This study was conducted after the administrative approval of Police Surgeon Department Karachi

Results: The deaths were found in the age group ranging from 33 to 38 years. Observation of different patterns of injuries in table 02 revealed that contusion/ bruises has the highest percentage (42.6%) among other patterns. It was found that hypovolemic shocks was the major cause of death i.e., 44% in individuals

died in custodial death due to hard and blunt injury. It is shown in table 04 that around 46% custodial deaths due to hard and blunt injury were homicidal.

Conclusion: In Pakistan around 42% of deaths is custody are due to hard and blunt injuries. Torture should be avoided under all circumstances.

Most of the cases of custodial death came up with death due to hard and blunt injuries and all were adult males, the most common part involved was cranial cavity followed by neck, throat, abdomen and pelvis and were homicidal in nature.

Keywords: Hard and blunt injuries, Custodial death, Autopsy.

INTRODUCTION

There is a famous quote by Sylvan Barnet "Man is mortal" which indicates that death is a natural phenomenon. There are various causes of natural death in different countries [1,2]. Everyone is health conscious but some people cross the limits and every time think about their health and involve in psychological disorder known as hypochondriasis. It is a condition in which a person tries to educate himself from web based knowledge and harm his body due to self-medication and misinterpretation [3,4]. These types of unnatural deaths are relatively bearable as the family members have the pseudo feelings that it is a natural death. Unnatural death especially in custody are not bearable by the family members as well as society. The fear of being prison itself creates long lasting trauma condition in prison as well as family members.

According to Oxford dictionary custody means "protective care or guardianship of someone or something" Custodial death is defined as the death occurring in some form of detention, when a person's freedom of movement is been restricted by law enforcement agencies [5,6]

In this study authors have analyzed the prevalence pattern of custodial death occurred because of hard and blunt injuries, 96 autopsies were conducted at 03 major medico legal centers in Karachi that is (Abbasi Shaheed Hospital, Civil Hospital and Jinnah Hospital). As the medico legal autopsy act is one of the major investigating tools that help the investigator to calculate the time between the injury and death, cause of death and time since death[5,7]

Mostly head injuries are the result of blunt force trauma and accounts of ¼ of all deaths which occurs due to violence. It is essential for the medico legal officer who performs a postmortem examination to remember that significant cerebral trauma can be caused in the absence of obvious external trauma or skull fractures[8,9]. Medical certification of the victim of wounding should not be undertaken without proper knowledge of the interaction between the weapon responsible for bounding, local responses in the form of injury at the site of contact, generalized response of the body system must also be kept in mind. Blunt injuries are classified either on the basis of the weapon/ object causing them or manner of their inflection. Direct application of force produces wound at the point of application proportionate to the extent of the force and such injuries at the site of impact are called "impact injuries" like produced by club, kick, brick etc. at the site of impact. Impact with the club having some force and some direction on different parts of the body having different architectural design shall produce injuries of shapes- impact on forehead produces a laceration whereas similar impact on the buttock shall produce a bruise this difference in the shape of wound is due to the difference in architectural design, forehead has scalp stretched over a bone whereas buttock is compromises mostly of soft tissues of skin, fat and muscles.

Types of blunt injuries include "abrasions", which is extremely trivial form of damage and is respected to the most exterior part of the skin. When a hard and rough object is pressed against the body surface and moved and abrasion is produces.

- Moving abrasion indicates direction of abrasive force showing heaping and piling up of the epidermis.
- Imprint abrasion indicates the pattern of the object generally provide good corroborative evidence about the causative agent.
- Friction abrasion indicates both the movement and imprint of material causing like ligature mark of rope.
- Age of abrasion is difficult to estimate specially when it is superficial and dried, estimation of age would depend upon changes taken place in the effused serum the fluid when dry varies in color from straw to yellow to brawn depending upon the amount of blood followed by the formation of the soft scalp in about two days which harden in about in other three to four days, hard scalp retract in another three to four days and finally falls away.

Another type of blunt injury gives " Bruises" in which skin is not broken subcutaneous tissues and others structures beneath it depending upon its depth are damaged, extra vacation of the blood from the broken vessels spread into the surrounding tissues, severity of the bruise depends from amount of the force applied, type of underline tissue, age and state of health.

Age of bruise can be estimated by the colour of the effused blood, a recent bruise appear purple in colour, after about two days it darkens because oxygen in the blood removes enzymes of the tissue begins to change the hemoglobin in to blood pigments in 4-5 days it becomes greenish, 7-10 days changes to yellow and disappears completely in 12-15

TABLE 01.

Causes, frequencies and the percentages of custodial death due to hard and blunt injuries.

CAUSE OF DEATH	FREQUENCY	PERCENTAGE
Hypovolemic shock	24	44.44
Blood aspiration	6	11.11
Intracranial Hemorrhage	16	29.62
Fat embolic syndrome	4	7.40
Unknown cause	4	7.40
TOTAL	54	

TABLE 02.

Location, frequencies and the percentages of custodial death caused by hard and blunt injuries

BLUNT INJURIES	FREQUENCY	PERCENTAGE
SKULL AND BRAIN		
Laceration of skull	11	20.37
Fracture of skull	4	7.40
Concussion	2	3.70
Hematoma	6	11.11
NECK		
Construction of Neck by garroting	1	1.85
Throttling	3	5.55
Fracture of tracheal ring/ hyoid bone	2	3.70
THORAX		
Injury to heart/ cardiac temponate	8	14.81
Injury to Lungs	3	5.55
ABDOMINAL CAVITY		
Injury to Spleen	5	9.25
Injury to Liver	2	3.70
Injury to Intestines	1	1.85
PELVIS AND GENITALIAS		
Injury to Kidney	1	1.85
Injury to Scrotal region	2	3.70
FRACTURE OF LONG BONES		
Mid shaft of femur	2	3.70
Upper end of tibia	1	1.85

days.

Laceration is an open wound caused by breach, tearing of skin, it is produced by application of blunt force depending upon the mechanism involved, it is of 3 types.

- Split laceration; common seen on scalp, forehead and chin or any part of the body where skin is formally supported by underlying bone.
- Over stretched laceration it's commonly seen in areas of the body where skin is supported loosely such as wrist, forearm, axilla and abdomen.
- Grinding compression; usually the result of passing of heavy wheel over the limbs of the body causing grinding compression.

FIGURE 1.
Distribution of age (years) groups of custodial death caused by hard and blunt injuries

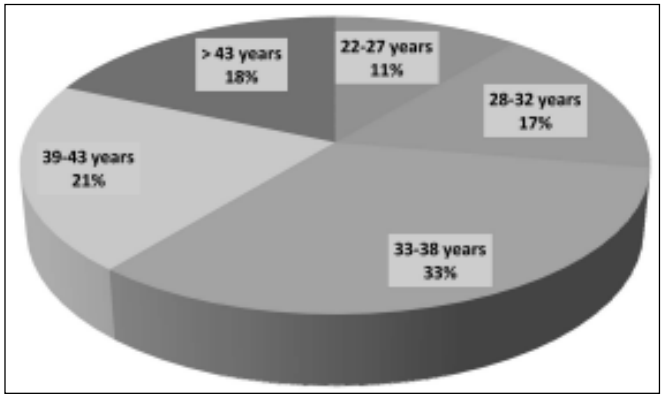


FIGURE 02.
Pattern of injuries, frequencies and the percentages of custodial death caused by hard and blunt injuries.

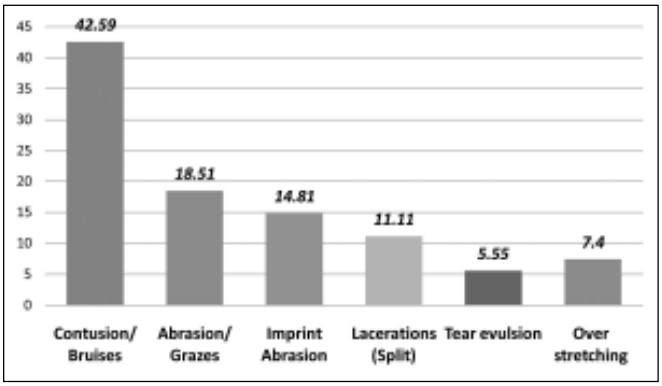
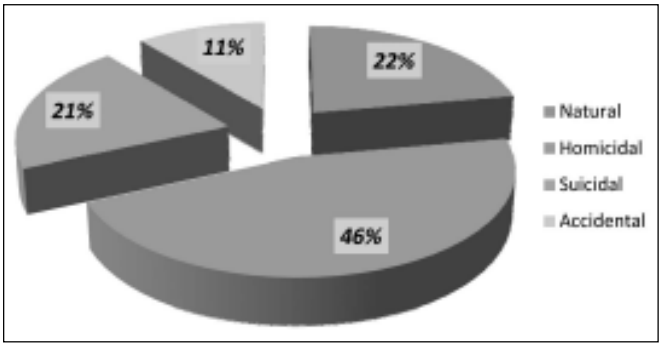


FIGURE 03.
Percentages distribution of manner of custodial death caused by hard and blunt injuries



MATERIAL AND METHOD

This was a cross sectional questionnaire based study conducted during the period of last five years from February 2010 to February 2015. The data comprises of 96 autopsy reports of custodial deaths. This study was conducted after the administrative approval of Police Surgeon Department Karachi. The study subjects were all prisoners male with age group ranging from 33 to 38 years.

These autopsies were conducted in the three major hospitals of Karachi (Abbasi Shaheed Hospital, Civil Hospital and Jinnah Hospital) under the supervision of police surgeon of Karachi. The most of the injuries were by hard and blunt weapon with majority of them to the head; and some of the cases were also of the lacerated wound of the scalp, fracture of skull, neck injuries indicating throttling, etc.

OBJECTIVE

An autopsy based study to determine the pattern of hard and blunt injuries in custodial deaths in Karachi.

RESULT

There were 96 cases of custodial death examined. The autopsy reports revealed that around 54 deaths in custody were due to hard and blunt injuries. These autopsies were conducted in the three major centers of Karachi (Abbasi Shaheed Hospital, Civil Hospital and Jinnah Hospital) under police surgeon of Karachi. Different age groups, frequencies and the percentages of custodial death caused by hard and blunt injuries has been shown in table 01. The highest percentage (33%) of the deaths were found in the age group ranging from 33 to 38 years. Observation of different patterns of injuries in table 02 revealed that contusion/bruises has the highest percentage (42.6%) among other patterns. It was found that hypovolemic shocks was the major cause of death i.e., 44% in individuals died in custodial death due to hard and blunt injury (Table 03). It is shown in table 04 that around 46% custodial deaths due to hard and blunt injury were homicidal.

DISCUSSION

In our daily life getting limb bruises and/or contusions is common in sports, accidents, fighting etc. The contusions do not get any serious importance when acquired in non-criminal conditions as they are repaired by the natural repair system. In case of crime investigation these bruises and contusions have great importance as the cause of death can be identified. In this study it was found that in Pakistan around 42% of deaths in custody due to hard and blunt injuries showed contusion and bruises. The most common part involved was cranial cavity followed by neck, thorax, abdomen and pelvis. Mostly the cases were homicidal. Most common cause appears to be hypovolemic shock. Due to the secrecy of autopsy reports, very little data is available on custodial death[5 & 6]. Death in custody is a serious matter for the human right commissions as the prisoner is totally dependent on the custodial authorities. There is no proper check and balance system known for custodian and/or policeman when torturing the prisoner. It is a matter of concern that custodial violence including torture and death

in the lock ups and to safeguard any abuse of power against the custody. According to National Human Rights Commission (NHRC) report of 2011, only in India around 14,231 custodial deaths were reported in ten years (from 2001 to 2010) and majority of these were due to torture[7 & 8]. It is not possible to compare the data until and unless the "death in custody" is defined properly and laws are followed equally all around the world.

CONCLUSION

Most of the cases of custodial death came up with death due to hard and blunt injuries and all were adult males, the most common part involved was cranial cavity followed by neck, throat, abdomen and pelvis and were homicidal in nature, this death in captivity is considered as custodial deaths.

In Pakistan around 42% of deaths is custody are due to hard and blunt injuries. Torture should be avoided under all circumstances.

The government should take the responsibility to take legal, social, medical and psychological need of the victim of Police violence and their families while the investigation is ongoing. Measures should be taken to provide a safe environment at the time of interrogation in Police custody.

CONFLICT OF INTERESTS

The authors declare that they have no conflict of interests.

CONTRIBUTIONS OF AUTHORS

All authors approved of the final draft. Author3 developed the initial draft. Author1 and Author2 were involved in data management and analysis. Author4helped with the writing of the draft. Author1 and Author5was involved with data analysis and interpretation, and critical revision of the manuscript.

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