

Examination of cut throat injury to ascertain manner of death in a decomposed body: a case report

Dr. S.P. Akhade¹, Dr. Laxman Gangadhar Phad^{*2}

¹Assistant Professor, Dept. of Forensic Medicine, T.N. Medical college and hospital, Mumbai, Maharashtra, India.

²Assistant professor, Dept. of forensic medicine Govt. medical college and hospital, Aurangabad, Maharashtra, India.

***Corresponding author**

Dr. Laxman Gangadhar Phad

Email: laxmanphad87@gmail.com

Abstract: The case is taken for discussion to ascertain the manner of death in a decomposed body having cut throat injuries, found in suspicious circumstances. In the present case a female aged 17 years, bar attendant by profession, was found dead, in an apartment bedroom of size 20 x15 x 18 feet located on the first floor, living with a person known to her. The body was in advanced stage of decomposition with incised wound of size 12cmx 8cm x trachea deep present over the neck with underlying muscles, vessels and nerves were cut. The typical findings of incised wound were obscured by decomposition changes. A locked room from outside, absconded most suspected person, blood stained razor blade at scene of crime, absence of hesitation and unintentional cuts and most important is direction and pattern of wounds, collectively depicts the manner of death as homicidal.

Keywords: Sharp-edged weapon, Cut throat injury, Homicide, Razor blade weapon, decomposed body

INTRODUCTION:

Anterior aspect of neck is body part of choice in assault cases because of its easy accessibility, minimum body shields, small diameter, location of airways and major blood vessels makes it one of the most vital structures of the body, as any damage to this structure entails fatality [1]. In vertebral anatomy, the throat (Latin- Gula) is the anterior part of the neck, in front of vertebral column. It consists of larynx, trachea, pharynx, vital blood vessels carotid and jugular, esophagus, cricoids, thyroid and hyoid bone. It is sometimes considered a synonym for faucets [2].

In any criminal investigation of a death under suspicious circumstances, the forensic pathologist plays a crucial role in ascertaining the manner of death which guides the investigator on a particular path[3]. The determination of the manner of death is somewhat easy as compared to when the bodies which are in advanced state of decomposition. Although homicidal cut throat is the commonest method employed with resultant fatality, suicide cut throats are not rare. Advancing stage of decomposition makes it more difficult for a forensic pathologist to differentiate the manner and ascertain the cause of death. Unlike the Medical Examiner System, criminal investigation in India is carried out by the police and therefore a forensic pathologist plays a crucial role in assisting such investigations[3].

Cut-throat injuries may be suicidal, homicidal or accidental but to determine the manner of death is one of the most difficult tasks for the autopsy surgeon.

It becomes further difficult when an advanced stage of decomposition is reached. As decomposition is a mixed process ranging from autolysis of individual cells to tissue autolysis from liberated enzymes and from external processes introduced by bacteria, fungi, maggots and mammals [4]. The tissues become moist and eventually liquefy which may have gross effects on the peculiar characteristics of incised wound like edges, margins, size, shape, depth etc. It needs an utmost and careful examination to reach the accurate conclusion. Many a time, the crime scene details, past and personal history helps to reach the proper conclusion up to a certain level. Usually the motives behind the homicide are political conflicts, sex related crimes, dacoits, family conflicts and land disputes [5]. In advanced stages of decomposition, the evidence starts to fade but a proper history, thorough crime scene investigation and meticulously performed autopsy is vital in ascertaining the manner of death in such cases.

CASE REPORT

A female of 17 years old was found dead, in an apartment bedroom located on the first floor of the building with dimensions 20x15x18 feet. As per history given by the neighbors of the deceased, she used to live alone and she was a bar attendant by profession. A male aged about 30 years, used to visit her often and also stay with her for two- three days a week, they have frequent episodes of quarrel and many times he used to beat her. Since the last four days, the neighbors had not noticed anyone coming or going out of the room and the door of the room was since closed. The neighbors informed the

police about the foul smell coming out from the nearby room since morning.

Crime scene investigation

On reaching the crime scene on the 1st floor, the main door of the residence was locked from inside which was duly opened by the accompanying police officer. On reaching inside it was a one BHK flat, furniture and other materials in the living room were undisturbed and on reaching the bedroom the door was open, we saw dried blood stains present on floor at places, with blood stained clothes and bed sheet scattered on bed with one closed almirah on the left corner of the bed. On lifting the pillow, one small cutter blade made of steel one edge sharp with sloping tip end of dimensions 3.8cmx2cmx0.1cm. With brownish blood like stains on it. The stained bed sheets, pillow and the blade were collected sealed and sent for chemical analytical examination.

External examination

At the time of autopsy the body was in advanced state of decomposition - features swollen, marbling over front of chest and shoulder, foul smell emanating, tongue and eyes protruding out, reddish fluid oozing out from nostrils and mouth, blood stains present over the face, neck and chest, air-filled blebs and peeling of epidermis at places over the body. The body was clothed with salwar- kameez which was

removed, innerwear consisted of brassiere and panty, on the left side of brassiere a piece of paper was discovered which bore the name and phone number of a woman. The back was intact with no ante mortem injuries but slippage of skin at places due to decomposition. On examination of neck region, a clean cut incised wound 12 cm long, obliquely placed in front and sides of neck extending from right lateral aspect of neck and sloping towards the left side of size 12cmx 8cmx trachea deep tailing of wound present on right side for 1cm. Anterior aspect of neck muscles, trachea, were cut through and through with infiltrations of blood along margins. The wound was situated 4.5cm below chin, 1cm above suprasternal notch, right end 9cms below mastoid and left end 11cms cm below mastoid protuberance. Further two injuries were present as incised wound obliquely placed over right side of chest 6cm x 4cm x Subcutaneous deep with upper end 2cm below clavicle and lower end 6cm below accordion process situated 8 cm lateral to midline. And a third injury in the form of incised wound present over anterior-inferior to left ear on angle of mandible of size 5 cm x cm x muscle deep. In all the above mentioned injuries the onset of decomposition has obscured the definite signs of incised wounds such as angles, tailing, beveling, and margins. Three abrasions were present over anterior aspect of left shoulder of size 5cm x 0.8 cm each, brownish colored.



Fig-1: Showing incised wound over the anterior aspect of neck, left side of neck, and abrasions over anterior aspect of shoulder.



Fig-2: Showing incised wound over the anterior aspect of neck, right infraclavicular region, left side of neck, and abrasions over anterior aspect of shoulder.

Internal examination

On dissection of neck following neck structures were clean cut: Skin, subcutaneous tissues, anterior laryngeal cartilage, anterior half of trachea both internal carotid artery, infiltration of blood seen along margins. Brain intact and soft, lungs intact and soft, all gastrointestinal organs were intact and soft. Final cause of death was given as "hemorrhagic shock due to cut throat injury"

DISCUSSION:

Suicidal cuts may be differentiated from the homicidal ones by the site, level, slope, number and direction of wounds, presence or absence of tentative cuts, deep cuts and additional wounds or marks all over the body [6]. Usually sharp edged and moderately heavy weapons used in homicidal cases. even though it is said that the direction of injury in homicidal cases is transverse but it may vary upon relevant position of victim and assailant, in case of struggle with accused, because it is very difficult to inflict the regular and patterned injury in a normal healthy person when he is conscious and alert. The main cuts were deep and severe in homicidal cases unlike suicidal where the cut is deep at start and shallow at later. Sometimes allied injuries were present while struggle. Tentative and hesitation cuts were characteristic of suicidal wound but not as a rule, in many suicidal cases hesitation cuts were not seen. Evidence of struggle may present in the nearby area. It is very unusual to throw away or hide the weapon in suicidal cases. Cause of death in almost all cases is hemorrhage and shock due to injury to large neck vessels, asphyxia when blood enters trachea bronchial tree, air embolism, septic pneumonia, local infection and pulmonary embolism [7].

In Present case, cut throat injury was cutting through the skin, superficial fascia, and platysma, sternocleidomastoid muscle on left side, left jugular vein, left common carotid artery and anterior and lateral wall of trachea the cut wound is very deep up to posterior wall of trachea. patient was lying on bed there was absence of hesitation cuts, the room circumstances were undisturbed and only bed clothes were somewhat scattered, the associated injuries present were not so fatal means these were inflicted when deceased became alert most probably that the she was lying on back and accused inflicted the injuries when she was in sleep also it is very difficult to cut the throat by inflicting such a large injury with such a small weapon. Decomposed state of body makes the examination too much difficult due to obliterated and obscured signs of incised wounds such as angles, tailing, beveling, and margins.

CONCLUSION:

A closed room from outside, with no mark of violence, absconded accused since the incidence, blood stained razor blade at scene of crime, direction and pattern of wounds, associated injuries over the body, absence of hesitation cuts, absence of unintentional cuts, Crime scene investigations collectively depicts the manner of death as homicidal.

Contribution

All authors have made substantial contribution in the conception and design of the study and drafting the article

Funding

No funding for this research study

Conflict of Interest

None declared

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