

Autopsy Findings On A Corpse With Blunt Trauma Suspected Murder

(Case Report)

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Abstract- *In some cases of morbid deaths, especially bodies found in water, researchers need the help of a forensic pathologist to determine whether the deaths were due to suicide. A 58-year-old man, fully clothed, was found at the port of Tanjung Perak in a state of float on his stomach. Initially, investigators thought it was a case of suicide. The body arrived at the Forensic Medicine Installation on March 20, 2020, at 6 p.m with SPVR Police Number: B / 027 / III / 2020 / SPKT. On external examination, there were several abnormalities, postmortem hypostasis in the back, several tearing wounds, bruises, abrasions and a palpable crackle of bones in the sternum. At autopsy, there were several signs of asphyxia, blood absorption in the neck muscles, chest muscles and head of the pancreas, fractures of the right and left ribs that tore the heart muscle. Histopathology, found signs of intravital injury to the heart muscle. In cases of suicide there are usually no rib fractures and penetrating injuries to the heart muscle. If the body is found floating in a prone position then hypostasis will be most evident on the front of the body. The discovery of an intravital sign in a penetrating injury to the heart muscle is unlikely to occur in suicide. Based on the findings of an external examination and an autopsy, the case was suspected murder.*

Keywords- *Blunt Trauma; Murder; Autopsy*

I. INTRODUCTION

Violence has been an inseparable part of human civilization since time immemorial. Altogether people die each year as a result of persecution, equal to 14400 deaths every day [1].

According to WHO, violence is the use of physical force and power, threats or actions against oneself, an individual or a group of people or society which results in or is likely to result in bruising / trauma, death, psychological harm, developmental disorders or deprivation of rights [2].

If the body is found, suspected of drowning, the investigator will seek information on whether the body died before or after entering the water, the presence of antemortem injury, the existence of natural death or poisoning and the cause of death. So in this case, the expertise and high index of suspicion by the forensic pathologist are guaranteed

to uncover hidden murders. This must be proven and established through proper scientific investigation. Such as excessive injury, the many signs of violence, such as tearing, bruising, abrasions, fractures of the sternum and ribs that tear the heart muscle causing bleeding in the cavity of the heart covering is violence that occurs antemortem, usually does not occur in victims who die from drowning. Signs of violence on the victim's body will be hidden if the victim is thrown into the water, as if he had committed suicide or an accident.

In handling this case, the investigator can ask for help from a doctor in accordance with Article 133 paragraph (1) of the Criminal Procedure Code: in the event that the investigator treats a victim, whether injured, poisoned or dead, is suspected of being a criminal act, he is authorized to submit a request for expert information to a doctor or doctor or other specialist [3].

In this case report, a case of alleged compound murder with blunt force that causes death is presented. In cases of maltreatment that resulted in death or in cases of murder with multiple injuries, it is a challenge for a forensic doctor to determine the cause of death because each injury plays a role in determining the cause of death. So that the conclusion is clearly determined which wound is the cause of death.

II. PROBLEMS

First, how to explain the types of trauma? Second, how to explain the medicolegal aspects of blunt trauma? And third, how to determine the means, causes and mechanisms of death in cases of blunt trauma?

III. RESEARCH METHOD

Type of Case Report

The author uses this type of case tracking method in this case report by examining a problem through a case consisting of a single unit. This case report studied is only a single form, analyzed in depth covering several aspects, as well as the use of various techniques in an integrated manner. This report the authors take a case report entitled "AUTOPSY FINDINGS ON A CORPSE WITH BLUNT TRAUMA SUSPECTED MURDER (CASE REPORT)". This case report is carried out with external and internal examination activities as well as additional examinations.

Case report subject.

- Population

The population was the bodies that died due to blunt violence which were autopsied at the Medical and medicolegal Installation of Dr. Soetomo Surabaya.

- Samples

Mr. S aged 58 years who died with blunt trauma.

Case Report Instrument.

The case report instruments used were interview guidelines, external examination measures, internal examinations, additional examinations and documentation in the visum et repertum format according to the guidelines.

Data Collection Techniques.

Data collection techniques are carried out using :

Primary data : Examination. The method of collecting data is through an examination using the five senses or tools according to external examination standards, internal examinations and additional examinations according to standard operational forensic examination procedures. External examination : inspection, palpation, measuring and documentation. Internal examination : taking internal organs, weighed, sliced, observed and documented. Additional Examination : Examination of lung lymph and anatomical pathology. Interviews were conducted to obtain complete and accurate information regarding answers about the chronology of events in this case.

Secondary data : Data obtained from documentation of external inspection, internal inspection and additional inspection, to complement data related to the problems found.

Data Triangulation Is a data collection technique that combines various data collection techniques and existing data sources.

Triangulate data sources with criteria :

1. Observation : inspection by inspection, palpation, measuring, removing organs, slicing, weighing, documenting and performing additional examinations.
2. Interview : validity test by interviewing the investigator who handled this case.
3. Documentation : using a letter requesting a visum et repertum, the results of the documentation at the Place of the Case.

The tools and materials used are:

1. Tools and materials in data collection. Pada kasus ini menggunakan jenazah, alat tulis dan kamera HP.
 2. Tools and materials for external, internal and additional examination.
 - Autopsy room.
 - Autopsy table.
 - Autopsy equipment: enterotome, scalpel, hagedorn needle, hemp thread, rib cutters, anatomical tweezers / surgis tweezers, scissors, breadknife, vibrating saw, bone saw, skull chisel, hammer with hook, head brace.
- Additions: Sponge, dry cloth, paper scissors, measuring tape, cell phone camera, plastic evidence bag, trash can.
- Simple forensic laboratory tools and materials : formalin 10%, alcohol 10%.

IV. DISCUSSION

A man was found floating in the AKR port of Tanjung Perak on March 20, 2020 around 6:00 p.m. The position of the body when found face down by wearing a black basic colored shirt with a red checkered pattern and black trousers. Then the body was taken to the Forensic and Medicolegal Medical Installation Dr. Soetomo Surabaya with a request for an internal and external examination.

Figure 1. Condition of the victim when found at the crime scene.



Externa Examination found:

1. Corpse of a man, aged between fifty to sixty years, body weight 48 kg, body length 168 cm, brown skin color, good nutritional status.
2. Postmortem lividity over back disappears with emphasis.
3. Rigor mortis over whole body, still easily resisted.
4. No signs of decay were found.
5. Blood vessel dilation and Pethecial hemorrhages on the right and left eyelid mucous membranes (figure 2).

Figure 2. The eyelid mucous membrane.



6. Mucous membranes of the upper and lower lip looks cyanosed (figure 3).

Figure 3. Mucous membranes of the upper and lower lip looks cyanosed.



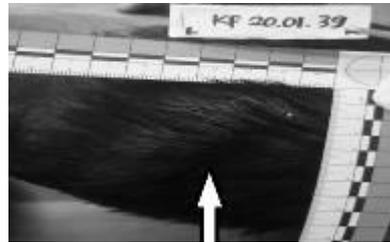
7. Fingertips and nails of both hands and feet looks cyanosed (figure 4).

Figure 4. Fingertips and nails looks cyanosed.



8. On the head, right in the mid back line, as high as the ear canal, bruises were found, irregularly shaped, bluish in color, measuring 8 x 2 cm (figure 5).

Figure 5. Bruise on the head



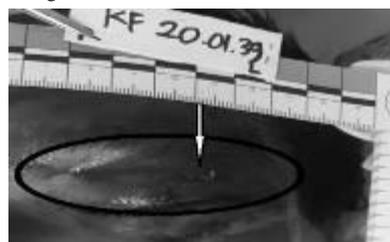
9. On the forehead, 3 cm left of the front midline, 3 cm above the inner corner of the eye, a bruise, irregularly shaped, reddish in color, measuring 6 x 5 cm (figure 6).

Figure 6. Bruise on the forehead.



10. On the upper eyelid, 5 cm left of the mid-front line, 1 cm above the outer corner of the eye, an open wound is found, irregularly shaped, uneven edges, blunt angle, muscle base, measuring 1 x 0.5 cm. On the left upper eyelid, an irregularly shaped, reddish bruise, measuring 6 x 2 cm (figure 7).

Figure 7. Tear cuts and bruises on the left upper eyelid

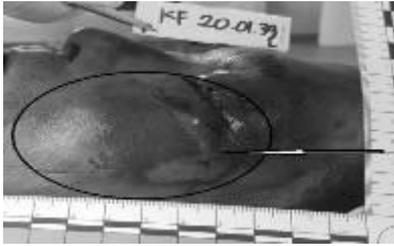


11. On the cheek, 6.5 cm

left of the mid-front line, 0.5 cm below the outer corner of the eye, found abrasions, irregularly shaped, reddish, measuring 5 cm x 2.5 cm. On the cheek, 5 cm to the left midline, 3 cm below the outer corner of the eye, bruises

are found, irregularly shaped, bluish red, measuring 6 cm x 5.5 cm (figure 8).

Figure 8. Blisters and bruises on the left cheek.



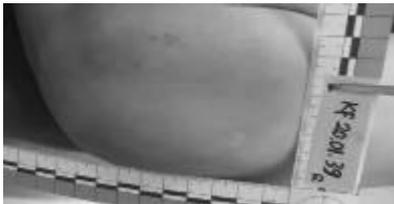
12. Right on the nose, bruises are found, irregularly shaped, bluish red, measuring 3 cm x 2.5 cm (figure 9).

Figure 9. Blisters on the nose



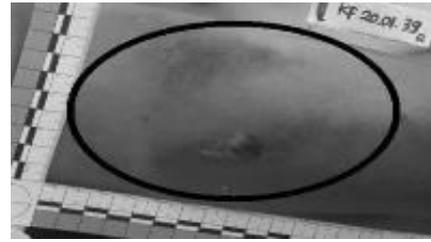
13. On the outer right upper arm, 4 cm below the top of the shoulder, a bruise is found, irregularly shaped, reddish in color, measuring 5 cm x 4 cm (figure 10).

Figure 10. Bruise on the right shoulder.



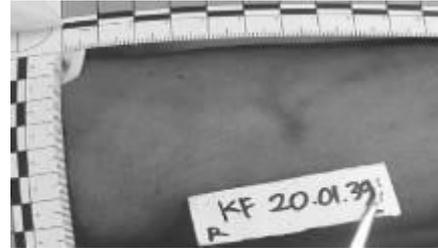
14. On the upper arm of the back side, 12 cm above the elbow, bruises are found, irregularly shaped, bluish in color, measuring 6 cm x 4 cm. On the upper arm of the back side, 12 cm above the elbow, there were abrasions accompanied by bruises, irregularly shaped, bluish red, measuring 8 cm x 2 cm (figure 11).

Figure 11. Bruise on the upper arm.



15. In the right forearm on the inside, 5 cm below the elbow, a bruise is found, irregularly shaped, bluish red, measuring 4 cm x 1 cm (Figure 12).

Figure 12. Bruising of the right forearm on the inside



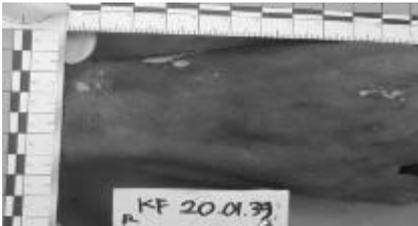
16. On the right forearm on the back side, 7 cm above the wrist, a bruise is found, irregularly shaped, reddish in color, measuring 1 cm x 1 cm (Figure 13).

Figure 13. Bruising on the right forearm on the back side.



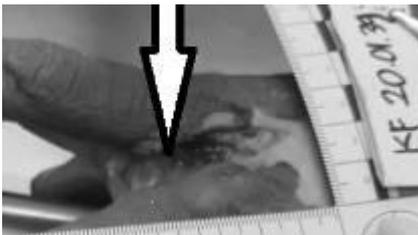
17. On the back of the right hand, 5 cm below the wrist, bruises are found, irregularly shaped, reddish in color, measuring 1.5 cm x 1 cm (Figure 14).

Figure 14. Bruising on the back of the right hand.



18. On the back of the left hand, right between the index and middle fingers, open sores are found, in the form of lines, uneven edges, obtuse angles, muscle base, measuring 4.5 cm x 1.5 cm (Figure 15)

Figure 15. Open wound on the back of the left hand



19. On the back, 2 bruises were found, irregularly shaped, bluish red in color. The first wound is 11cm right of the mid back line, 4.5 cm below the top of the right shoulder, measuring 14 cm x 4 cm. The second wound is 12 cm right of the mid back line, 12 cm below the top of the right shoulder, measuring 9 cm x 5 cm. On the back, 9 cm right mid back line, 14 cm below the top of the right shoulder, found abrasions, irregularly shaped, reddish, measuring 5 cm x 3 cm (Figure 16).

Figure 16. Bruising and abrasions on the right back.



20. On the chest, 10 cm right of the mid-front line, 15 cm below the top of the right shoulder, visible deformity, palpable rattling of bones in the right ribs (Figure 17).

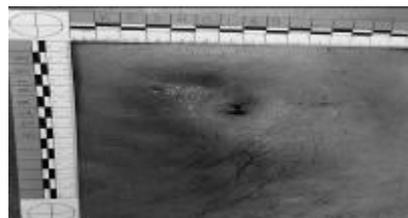
21. On the chest, 7 cm left of the mid-front line, seven centimeters below the top of the shoulder, visible deformity, palpable bone cracking in the left rib (Figure 17).

Figure 17. Deformity, palpable appearance of bone on the ribs



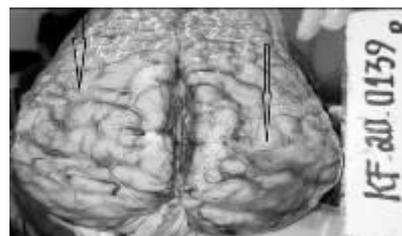
22. On the stomach, right in the mid-front line, as high as the navel, bruises are found, irregularly shaped, bluish in color, measuring 9.5 cm x 7 cm (Figure 18).

Figure 18. Contusion of the stomach



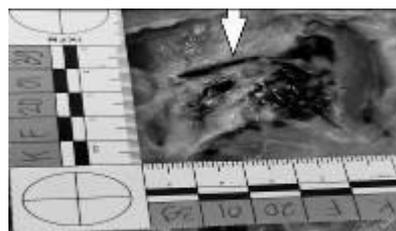
a. Visible dilation of blood vessels in the brain (Figure 19).

Figure 19. shows the dilation of cerebral blood vessels.



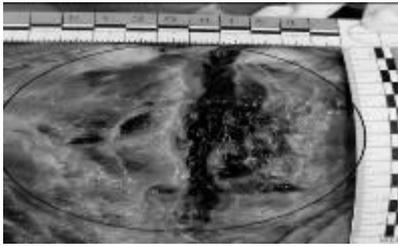
b. Blood absorption in the left neck muscle (Figure 20).

Figure 20. Infiltration of the neck muscles



- c. Blood absorption was found in the chest muscles (Figure 21)

Figure 21. Blood absorption in the chest muscles



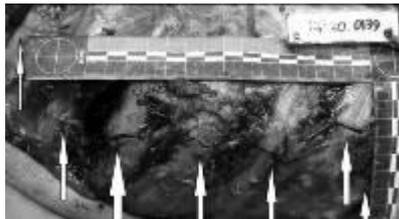
- d. In the chest, a broken upper chest bone was found (Figure 22).

Figure 22. Broken bones in the upper chest.



- e. In the right chest, found a second rib fracture to ribs seventh and tenth (Figure 23).

Figure 23. Broken ribs in the right chest.



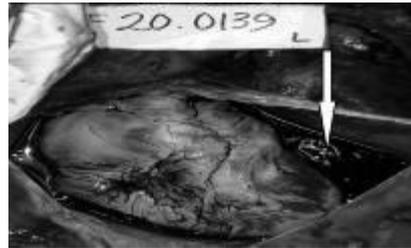
- f. On the left chest, fractures of the second to tenth ribs were found (Figure 24).

Figure 24. Broken rib cage on the left chest



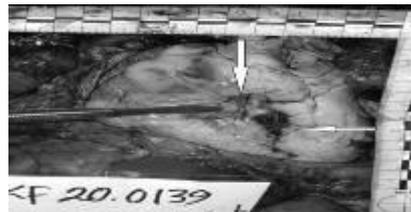
- g. 150 ml of blood is found in the heart cavity (Figure 25)

Figure 25. Blood in the heart cavity.



- h. In the heart, found 2 penetrating wounds, uneven edges, blunt angles. The first wound is 5 cm x 1.5 cm. The second wound is 1.5 cm x 1 cm (Figure 26)

Figure 26. Penetrating wounds to the heart muscle.



- i. The spleen appears wrinkled (wringkle capsule) (Figure 27).

Figure 27. wrinkle capsule.



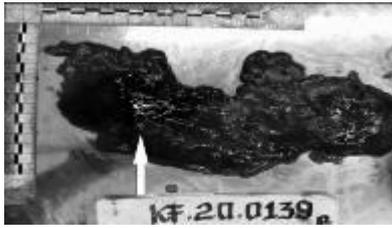
- j. In the spine, vertebrae 1 are fractures (Figure 28).

Figure 28. Broken vertebrae 1.



- k. Blood absorption in the head of the pancreas (Figure 29).

Figure 29. Blood absorption in the head of the pancreas.



Additional Examination

1. Lung lymph: Negative results.
2. Histopathology : Heart: Showing myocardial tissue, no visible area of infarction. At the edge of the pericardium fat tissue visible with the focus of the bleeding area.

Blunt Trauma.

In this case, the victim's body was found with many wounds due to blunt force. Wounds can be defined as 'damage to a part of the body due to exposure to mechanical forces'. Some jurisdictions have legal definitions of wounds, which usually characterize discontinuities at the surface of the body, so that the definition of injury is not due to its physical nature, but to the perceived risk to the victim's life or health [4].

On the victim's body, injuries caused by blunt objects include rips, bruises and abrasions. Bruises were found on the forehead, upper left eyelid, cheeks, back and abdomen of the victim. Bruises are bleeding due to rupture of capillaries and veins in the tissue under the skin or cutis, bleeding that occurs causes blood to seep into the surrounding tissue [5].

On the cheeks, nose and back of the victim, there were abrasions and scratches. Scratch abrasions are more superficial abrasions that barely damage the skin with little or no serum exudation and no scab formation [5].

On the victim's left upper eyelid, there was a torn wound. A torn wound is an open wound caused by a blunt object that causes the skin to stretch in one direction and the skin's elasticity limit is exceeded [5].

Medicolegal Aspects of Blunt Trauma.

According to Article 89 of the Criminal Code, it is stated that what is equated with committing

violence is making people faint or helpless (weak), but in some circumstances violence is considered a form of persecution. According to jurisprudence, persecution is often interpreted as intentionally causing unpleasant feelings (suffering), pain or injury. According to Article 351 paragraph 4, there is also the definition of persecution as deliberately damaging people's health. In Article 351 paragraph 3, if the maltreatment results in death, the maximum imprisonment for seven years is punishable. From R. Soesilo's explanation it was stated that serious injury or death should only be the result intended by the maker. Meanwhile, if death is meant then the act is considered murder [3].

Killing is the deprivation of the right to life by another person, not by himself (suicide) or by an animal. The nature of his actions that are contrary to justice, then the person who commits a murder will definitely be held accountable for his actions legally [6]. In deliberate murder, death can be the result of an act of commission or act of omission [1].

The victim experienced compound blunt violence. Here, law enforcers will ask forensic doctors for help regarding the cause and effect of the wound, because the cause and effect of the wound must be determined by the doctor, including the source of the trauma that caused the injury and how much effect the wound has on the condition of the wound. Determination of the magnitude of the effect of injury on the victim is related to the criminal sanctions that will be imposed on the perpetrator of the crime. Wounds can occur as a result of violence committed by the perpetrator of a criminal act. The formulation of these acts in the law as contained in Article 338 of the Criminal Code, is as follows: "Whoever deliberately seizes the life of another person, is threatened with murder, with a maximum imprisonment of fifteen years"[3].

Article 340 of the Criminal Code states as follows: "Anyone who deliberately and with prior plan seizes the life of another person, is threatened, because of murder by plot (moord), with a death penalty or life imprisonment or for a certain period of time, a maximum of twenty years" [3].

On the basis of the intention to violate the law, the act must be accounted for legally. It is very necessary to have sufficient evidence which

has the aim of seeking and bringing closer to material truth, namely the complete truth of a criminal case so that a criminal act can be revealed and the perpetrator is given the fairest decision [7].

The discovery of material truth cannot be separated from the problem of proof. Evidence in a criminal case in Article 184 of the Criminal Procedure Code requires valid evidence, including: witness statements, expert statements, letters, instructions, and statements of the accused [7].

What is meant by expert based on the sound of Article 1 point 28 of the Criminal Procedure Code is a person who has special expertise on matters needed to make clear a criminal case for the purpose of examination [7]. In this case investigators need assistance from experts in the field of Forensic Medicine to deal with problems regarding crimes against the human body. Forensic Medicine is a specialized branch of medical science that utilizes medical science for the benefit of law enforcement [8].

The process of upholding law and justice is a scientific effort, and not just common sense, nonscientific. Thus, in upholding justice concerning the body, health and human life, the assistance of doctors with the knowledge of Forensic Medicine and Medicolegal is very much needed [8].

The doctor's examination results will then be reported in writing and this report is known as *Visum et Repertum*. *Visum et Repertum* can be found in the 1937 staatsblad no. 350. The *Visum et Repertum* is as a substitute for evidence, because it is impossible for the evidence to be examined to be brought before the court in a situation as it is. This is possible because evidence that is related to the human body (for example: wounds, corpses or other body parts) will soon turn into healing or rot [5].

Determination of the Method, Causes and Mechanisms of Death.

The manner of death is explaining how the cause of death can occur. The mode of death is generally divided into several categories, namely natural death, for example due to disease, unnatural death or unnatural death such as murder, suicide, and accident, and cannot be determined / undetermined if the existing evidence does not clearly show wrong. One way death is there. Based on the results of examining the victim's body, it is

suspected that the manner in which the victim died was unnatural, namely the result of murder [9].

According to DiMaio, the way of death was determined by a forensic pathologist based on known facts in the field, including at the crime scene and combined with the findings at autopsy and laboratory results. This conclusion about the mode of death can change if there are new facts that change the previously existing facts. The conclusions of the forensic expert on how the corpse died may conflict with the opinion of the police or their families [9].

According to WHO, the causes of death are all diseases, conditions or causes of injury that cause or contribute to death [2]. Meanwhile, in DiMaio, it is stated that the cause of death is injury, injury, or disease which results in a series of physiological disorders of the body which ends in death [9]. In this case, the injury that contributed to the death of the victim was due to blunt force in the chest which resulted in a fracture of the chest bone and ribs that tore the ventricles of the heart causing bleeding in the heart cavity (Cardiac tamponade), causing suffocation.

The mechanism of death is a condition of physiological and biochemical disturbances that are caused by the cause of death, causing the death of a person [9]. In this case, blunt force to the chest resulting in a fracture of the sternum and ribs that tore the ventricles of the heart causes bleeding in the heart cavity (Cardiac tamponade) so that suffocation is the most likely mechanism of death.

V. CONCLUSION

1. Law enforcers will ask forensic doctors for help in examining the cause and effect of wounds, including the source of the trauma that caused the injury and how much effect the injury has on the victim's condition to determine the criminal sanction against the perpetrator, including Article 1 point 28 of the Criminal Procedure Code. The victim found wounds due to blunt force in the form of bruises, abrasions and lacerations.
2. In this case, the victim experienced multiple blunt violence, it is explained that Article 89 of the Criminal Code and Article 341 paragraph 4 of this act is included in maltreatment. Perpetrators can be subject to article 351 paragraph 3 if the maltreatment results in death,

they will be punished with a maximum imprisonment of seven years. If the death is intended then the act is considered murder, subject to Article 338 of the Criminal Code, threatened with murder with a maximum imprisonment of fifteen years. Murder by plot as stipulated in article 340 of the Criminal Code, is punishable by life imprisonment or a maximum of twenty years.

3. In this case, the victim died unnaturally as a result of murder. The cause of death was due to blunt force in the chest which resulted in a fracture of the sternum and ribs that tore the ventricle muscles of the heart causing bleeding in the heart cavity (cardiac tamponade). The mechanism of death due to the presence of blood in the heart cavity, a decrease in cardiac output, causing heart failure. The findings above will be stated in the Visum et Repertum which is a letter that can be used as valid evidence in accordance with Article 184 of the Criminal Procedure Code.

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