EXAMINATION OF VICTIMS OF SHARP TRAUMA

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ARTICLE INFO

Date received: 07 September 2022
Revision date: 17 September 2022
Date Approved: 25 September 2022

ABSTRACT

Clinical forensic medicine is one that can be applied appropriately to the section of medical practice whose scope involves the interaction between the law, the judiciary, and the police involving (generally) living people and the issuance of visum et repertum. In general, there are two types of visum et repertum, namely visum et repertum for living victims and visum et repertum for the dead. The making of visum et repertum intended as a substitute for evidence is unlikely to be present before the trial court in such circumstances. A wound is a damage to a part of the body in the form of a break in the integrity of the tissues that can occur due to mechanical hardness. The body has the resilience and elasticity of tissues based on the softness and strength of the skeleton, the strength of which exceeds the strength of the tissues. Then the tissue will adjust to the existing pressure, then the event does not happen, then the event will occur injury or injury. Sharp or pointed weapons leave characteristic wounds on the body, depending on the type of weapon used. Examination and treatment of the victim of a male, aged 34 years, the general condition of the patient is good, the examination and the examination above, it is concluded that the victim experienced a sharp trauma. The wound is qualified as a moderate wound because it causes obstruction in carrying out his daily work as a factory worker in accordance with Article 351 of the Criminal Code.

Keywords: Examination, Victims, Sharp Trauma

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INTRODUCTION

Clinical forensic medicine is one that can be applied appropriately to the section of medical practice whose scope involves the interaction between the law, the judiciary, and the police involving (generally) living people and the issuance of visum et repertum. In general, there are two types of visum et repertum, namely visum et repertum for living victims and visum et repertum for the dead. For living victims, it can be in the form of wound visum et repertum, wound visum et repertum rape/sexual crime, visum et repertum psychiatric and so on according to the condition of the subject (evidence) examined (Afandi D, 2017; Payne-James & Stark, 2020).

The making of visum et repertum intended as a substitute for evidence is unlikely to be present before the trial court in such circumstances. This is possible because the evidence relates to the human body (Hoediyanto H, 2012).

One of the most important functions of any healthcare professional (HCP) (doctor, nurse, or paramedic) is the ability to assess, document, and interpret visible injuries, cuts, skin marks, or scars, that may have occurred as a result of trauma or violence (Payne-James & Stark, 2020).

A wound is a damage to a part of the body in the form of a break in the integrity of the tissues that can occur due to mechanical hardness. The body has the resilience and elasticity of tissues based on the softness and strength of the skeleton, the strength of which exceeds the strength of the tissues; Then the tissue will adjust to the existing pressure, then the event does not happen, then the event will occur injury or injury. Sharp or pointed weapons leave characteristic wounds on the body, depending on the type of weapon used. These wounds can be divided into three types: stab wounds, cuts, and laceration wounds (DiMaio & Dana, 2006) (Saukko & Knight, 2015).

Visum et Repertum

1. Definition

According to Abdul Mun'im Idries, visum et repertum is a written statement made by a doctor, containing findings and opinions based on his scholarship on the results of a medical examination of a human being or a part of the human body, both living and dead, at the written (official) request of an authorized investigator made under oath or strengthened by oath, for the benefit of the judiciary (Idries A, 1997).

According to Dr. Tjan Han Tjong, Visum et Repertum is an important thing in proof because it completely replaces the corpus delicti (proof), where in a criminal case involving the destruction of the body and health and destroying human life, the victim's body is a corpus delicti (Ranoemihardja Ra, 1991).
Legal Basis of Visum et Repertum

The name visum et repertum is never mentioned in the Criminal Procedure Code, but is only mentioned in staatsblad (Statute Book) No.350 of 1937 articles 1 and 2, which reads (Hoediyanto H, 2012) (Budiyanto A, 1997):

1. Reperta visas from doctors, made under oath of office pledged at the time of completing medical lessons in the Netherlands or in Indonesia, or under special oath as referred to in article 2, have evidence in criminal cases, to the extent that they contain information about what the doctor sees on the object being examined.
2. Doctors who do not take the oath of office in the Netherlands or in Indonesia, as referred to in article 1, may take the oath (promise) as follows: "I swear (promise), that I will do the work of medical, surgical and obstetric science according to the provisions stipulated by the law as best as I can according to my ability and that I will not announce to anyone, everything that is entrusted to me or that I know because of my work, unless I am required to testify as a witness or expert in court or otherwise I am under the law obliged to testify."

Based on the sound of Staatsblad No.350 of 1937 it is seen that:

1. The value of the doctor’s visum et repertum evidence is only limited to what was seen or found in the victim.
2. Visum et repertum is only valid if it is made by a doctor who has taken the oath while starting to serve as a doctor.

In the Criminal Procedure Code (KUHAP) article 133 states (Butt & Lindsey, 2020):

1. In the event that an investigator for judicial purposes deals with a victim whether injured, poisoned or suspected to be due to an event that is a criminal act, he is authorized to submit a request for expert information to a judicial medical expert or doctor and or other expert.
2. The request for expert information referred to in subsection (1) shall be made in writing, which in the letter is expressly stated for the examination of wounds or examination of corpses and or surgical examination of corpses.

According to article 184 of the Criminal Procedure Code, which includes valid evidence is:

1. Testimony of witnesses
2. Katerangan member
3. Letter
4. Instructions
5. Defendant's testimony
TRAUMATOLOGY

1. Definition

Traumatology comes from the words trauma and logos. Trauma means violence over living body tissues, while logos means science. So traumatology is a science that studies all aspects related to violence against the tissues of the living human body.

According to K. Vij (2011), a wound can be defined as 'the result of a natural continuity in living body tissues'. The wound can be seen externally but is not essential, since it could be that the wound occurs internally and fatally can be caused due to the absence of external signs of violence. The definition includes burns from fire/heat, electricity, all lacerations and bruises on organs/tissues of the body. (Vij, 2011)


- **Wheals and erythema (reddening)**
- **Bruises (sometimes referred to as contusion, ecchymosis)**
  - Hematoma (a fluctuant collection of liquid blood)
  - Petechiae (small hemorrhages)
- **Abrasions**
  - Grazes scuff/brush abrasions
  - Linear abrasions, point abrasion
  - Lacerations
- **Incisions**
  - Slash
  - Chop
  - Stab
- **Firearms**
- **Burns**
  - Thermal (heat and cold)
  - Chemical, radiation, electrical

![Figure 1. Classification of injuries](image_url)
Examination of Victims of Sharp Trauma

2. Etiology
A. Mechanical Trauma
   • Blunt Violence
     - Luka memar (bruise, contusion)
     - Abrasions (abrasions)
     - Laceration
     - Fracture, a shift in the joint (fracture, dislocation)
   • Sharp Violence
     - Luka sayat (incise wound)
     - Punctured wound
     - Luka bacok (chopped wound)
   • Gunshot Wounds
B. Physical Trauma
   • High or low temperature temperature
   • The aftermath of auditory violence
   • Due to hardness by electric current / lightning
   • Violent aftermath of radiation
C. Chemical Trauma
   • Strong acids
   • Strong alkaline substances
   • Intoxication
D. Trauma of a Combination of Mechanical and Physical Objects

Sharp Trauma

Wounds caused by sharp objects are usually easy to distinguish from wounds caused by blunt objects. Sharp trauma is usually caused by several objects such as knives, swords, machetes, or other objects that have slicing properties that cause loss of tissue continuity (Payne-James & Stark, 2020) (Afandi D, 2017).

Wounds caused by sharp objects have characteristics such as (Budiyanto A, 1997):

a. The boundary line of the wound is usually regular, the edges are flat and the corners are pointed.
b. When connected it will be tight and form a straight or slightly curved line.
c. The cliffs are flat and there is no network bridge.
d. The area around the wound was not bruised.

Wounds caused by sharp object trauma consist of several kinds, such as iris wounds, stab wounds, and lacerations.
Luka Bacok

A whipped wound is best regarded as a combination of a blunt injury and a sharp injury produced by a relatively sharp object held with extraordinary force. The weapons used are often of considerable weight and move at high speed. Due to the greater amount of force, the whipped wound has the characteristics of both sharp injury and blunt injury. Thus, the cut often has marginal abrasions and bruises, and sometimes lacerations.

The weapons usually used are axes, swords or meat machetes. The dimensions of the wound correspond to the cross section of the penetrating knife. The edges of the wound are sharp, and may show abrasion, bruising and some lacerations with the possibility of severe injury to the underlying organ.

WOUND QUALIFICATION

At the conclusion of visum et repertum for living victims should be equipped with a wound qualification. Wound qualification can be based on (Afandi D, 2017) (Hoediyanto H, 2012).

a. Criminal Code article 352
   Persecution that does not cause illness or obstruction to carrying out the work of the office or livelihood (as a mild persecution)

b. Criminal Code article 351 paragraph 1
   Persecution that gives rise to illness or obstruction to carrying out the work of the office or livelihood.

c. Criminal Code article 351 paragraph 2
   Persecution that inflicts severe injury

d. Penal Code article 90, seriously injured:
   • Falling ill or getting a wound that gives no hope of healing at all or that poses a death hazard.
   • Inability to continuously carry out the duties of the position or job.
   • Loss of one of the five senses
   • Severely disabled suffering from lame pain
   • Impaired thinking power for more than 4 weeks
   • The fall or death of a woman's womb.

WOUND COMPLICATIONS

Commonly encountered wound complications (David Dolinak EWM, 2005) (Maheshwari & Mhaskar, 2019).
1. Infection
   Infection is the most common complication of injuries that cause morbidity and / or serious mortality.

2. Disseminated intravascular coagulation / coagulopathy
   Hemostasis is a complex process that deals with fluidity and blood clotting. Trauma affects various tissue substances, platelets and coagulation proteins, causing damage to platelets, clotting and the fibrinolytic system. Coagulation disorders due to trauma are characterized by a decrease in coagulation ability in the blood. This is due to many factors, some of which are unknown. With large amounts of blood loss and extensive blood replacement, thrombocytopenia and the loss of other coagulation factors tend to occur. also meant, hypothermia, alcohol intoxication, and various electrolyte abnormalities are likely to decrease the effectiveness of blood clotting.

3. Syndrome of acute respiratory distress / diffuse alveolar damage
   Acute respiratory distress syndrome (ARDS) is the most important cause of acute respiratory failure in surgical patients of all ages. ARDS is a complex entity characterized by clinical evidence of respiratory failure with diffuse alveolar capillary injuries. It involves a loss of integrity of the alveolar capillary membrane resulting in an increase in microvascular permeability with the leakage of plasma proteins into the interstitium, and subsequently atelectasis, hypoventilation, pyrax, and hypoxemia occur.

4. Deep vein thrombosis / pulmonary artery thromboembolism
   The three main predisposing factors for the development of vascular thrombus are hypercoagulability, venous stasis, and vascular injury (Virchow triad). Trauma patients are particularly susceptible to the development of deep vein thrombosis, especially with fractures of the lower extremities.

5. Acute tubular necrosis
   Acute tubular necrosis is the most common pathological finding in those with acute renal failure and most commonly occurs as a result of ischemia to the renal parenchyma. A histological examination will find the remains of cells covering the tubules and necrosis of the epithelial cells of the tubules. Acute renal failure in surgical patients usually has a serious prognosis because it often occurs simultaneously with the failure of other organ systems.

6. Compartment syndrome
   Compartment syndrome is a condition in which the injured muscle swells, increasing pressure in the area of the enclosed tissue space, resulting in impaired circulation to the muscles and associated nerves. Usually, it occurs inside the fascia
compartment in the lower limbs, but it can also occur in the forearm, thighs, hands and buttocks. In the limbs, compartment syndrome may occur after a fracture of the tibia, a combined arteriovenous injury to the knee, severe muscle bruising, or prolonged compression.

7. Fat embolism
   Fat embolism should be considered in trauma patients who have tachypnea, dyspnea, and confusion from several hours to several days after the injury. There may also be petechies in the chest, armpits and conjunctiva. Laboratory testing may also indicate thrombocytopenia. Although fat embolism is generally associated with fractures of the pelvic bones or long bones such as the femur, with marrow (fat) forced into the circulation
   through torn blood vessels, it can also occur in the absence of fractures, in which fatty tissue becomes slurry and forced into a torn blood vessel.

8. Necrotizing fasciitis
   Necrotizing fasciitis is an infection of the fascia that spreads along the fascia and can cause gangrene on the skin of the muscles because the blood vessels that supply this area have thrombosis

9. Physiological stress ulcers (Cushing ulcers, Curling ulcers)
   Ulcers can occur in the gastric mucosa in critically ill patients and develop in a state of severe physiological stress. The term stress ulcer, unlike peptic ulcer, is not a primary disease, but rather is a manifestation of the underlying disease and most often occurs in the abdomen. Stress ulcers are believed to be due to a combination of physiological factors including decreased blood flow, hypoperfusion/reperfusion injuries, and coagulopathy.

10. Neurogenic pulmonary edema
   Neurogenic pulmonary edema (NPE) is a condition in which an increase in interstitial or alveolar pulmonary water occurs in people with acute diseases of the central nervous system, acute severe head trauma, intracerebral hemorrhage, and subarachnoid hemorrhage. Clinically, NPE appears as a sudden blockage, alveolar hemorrhage, and protein-rich exudate. Its etiology and pathogenesis are not known for certain.

11. Multiple system organ failure
   Multiple system organ failure (MSOF) is a condition that describes multiple organ failures that usually occur progressively and often end in death. It most often involves the pulmonary system first, followed variably by the liver, gastrointestinal, and kidney systems.
Although injuries usually come from murder, but the issue of suicide/accident cannot be removed, The following points may be useful in determining whether murder or not (Vij, 2011) (Gautam Biswas, 2015)

- Suicide: Multiple incision wounds of varying depths on the neck or wrist indicate the presence of suicide. Some of the characteristics of suicide wounds are:
  - Fatal injuries appear in limited areas of the body, such as the front neck, groin, chest, or back of the legs. Wrist cutting is rarely fatal. People who commit suicide usually do not hurt the face.
  - Indecisive wounds/marks or temporary wounds or trial wounds: These wounds are multiple, small and shallow often only hitting the skin, and are visible at the beginning of the sliced wound, perhaps hesitating while gaining the courage to make a cut.
  - A person who commits suicide can expose his body by undressing him and then inflicting wounds.
  - When the razor blade safety was opened, an accidental wound was found on the finger.
  - Most people have an unclear knowledge of anatomy and do not know where to cut the main blood vessels, and perhaps cut their forearms vertically instead of horizontally.

- Murder wounds: The wounds are deep and intentional and visible on the head and front neck, and sometimes on the torso. Iris sores on the nose, ears, and genitals are usually homicidal in nature, and may be caused by sexual jealousy, caused by a lover, husband or wife.

- Involuntary injuries: Commonly seen around the hands.

- Defensive wounds: Injuries are visible on the arms and palms, as the victim tries to deflect an attack by raising the hands and arms as defense or by grabbing a weapon.

  Self-mutilation: Sometimes, injuries can be caused by someone with a mental disorder as a form of self-mutilation or by a person who deliberately hurts themselves for profit. injuries are found anywhere on the body; shallow, multiple, and avoid vital areas such as lips, nose, and ears.

**RESULT AND DISCUSSION**

- The victim was escorted by villagers and the Police to the emergency room of Dr. Pirngadi Hospital Medan on January 25, 2022 at around 10.00 WIB, with the explanation that it was suspected that the person was a victim of a criminal act of abuse on January 25, 2022 at around 09.00 WIB at a coffee shop near his home. Based on the results of the anamnesis, the victim said that the victim had received violence against him, because the molester did not accept the treatment of the victim who had beaten the
molester's child. It is because of this that the persecutor feels irritated and angry even to the point of hacking the victim.

- From the results of the examination, it was obtained that the patient's general condition was good, the awareness of mentis compost, as well as the examination of vital signs within normal limits.

- In this case, there was a reddish open wound on the chin to the jaw next to the kirr, with the edges of the wound flat at both angles pointed, there was no network bridge. The size of the wound is 15 cm x 5 cm with a wound depth of 4 cm and the base of the wound appears jawbone. The aforementioned types of wounds are included in bacok wounds. This is in accordance with the theory that states Wounds that are chop wounds have the following characteristics: The general characteristics of wounds caused by sharp objects, the size of large wounds and gaping the length of the wound are approximately the same as in the wound usually the bones below it also suffer from the wound, and if the weapon used is not so sharp then around the boundary line of the wound there is a bruise

- In this case, no signs of suicide or accident were found, but this case is suspected to be a case of mistreatment.

- The qualification of the injuries suffered by the victims is moderate injuries, namely wounds that cause illness or obstacles to carrying out office work or livelihood for a while where the victim is a daily construction worker. If from a medical point of view, a wound is tissue damage (whether accompanied or not accompanied by discontinuities of the surface of the skin) due to trauma, then from a legal point of view, the wound is a disorder that can be caused by a criminal act, whether intentional, careless or less careful. To determine the severity of the punishment, it is necessary to determine in advance the severity of the wound. The legal policy in determining the severity of the injury is based on its effect on:
  - Physical health.
  - Spiritual health.
  - Fetal survival in the womb.
  - Physical aesthetics.
  - Job title or livelihood job.

- Criminal Code article 352 Persecution that does not cause disease or obstruction to carrying out the work of office or livelihood (as a minor persecution)
- Criminal Code article 351 paragraph 1 Persecution that gives rise to illness or obstruction to carrying out the work of the office or livelihood.
- Criminal Code article 351 paragraph 2 Persecution that causes serious injury
- Penal Code article 90, seriously injured:
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- Falling ill or getting a wound that gives no hope of healing at all or that poses a death hazard.
- Inability to continuously carry out the duties of the position or job.
- Loss of one of the five senses
- Severely disabled suffering from lame pain
- Impaired thinking power for more than 4 weeks
- The fall or death of a woman's womb.

LEGAL REVIEW
The perpetrator in this case can be charged with the following legal sanctions:
Criminal Code article 351:
(1) Persecution shall be punishable by imprisonment for a maximum of two years and eight months or a fine of not more than four thousand five hundred rupiah.
(2) If the act results in serious injury, the guilty shall be punished with imprisonment for not more than five years.

CONCLUSION
One of the most important functions of any healthcare professional (HCP) (doctor, nurse, or paramedic) is the ability to assess, document, and interpret visible injuries, cuts, skin marks, or scars, that may have occurred as a result of trauma or violence.

According to Abdul Mun'im Idries, visum et repertum is a written statement made by a doctor, containing findings and opinions based on his scholarship on the results of a medical examination of a human being or a part of the human body, both living and dead, at the written (official) request of an authorized investigator made under oath or strengthened by oath, for the benefit of the judiciary.

Examination and treatment of the victim of a male, aged 34 years, the general condition of the patient is good, the awareness of mentis compost has been carried out, as well as the examination of vital signs within normal limits. On examination, it was found that there was a cut on the chin to the left jaw due to sharp trauma. Based on the theory of the results of the examination and the discussion above, it is concluded that the victim experienced a sharp trauma. The wound is qualified as a moderate wound because it causes obstruction in carrying out his daily work as a factory worker in accordance with Article 351 of the Criminal Code.
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REFERENCE


