



Penetrating Facial Trauma Resulting in Loss of Sense

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ABSTRACT

Introduction: Clinical forensic medicine interacts between the law, the judiciary and the police involving living and dead people with the issuance of a visum et repertum. A wound is damage to a part of the body in the form of a break in the integrity of the tissue that can occur due to mechanical violence. The eye organ is particularly vulnerable to injury, which can be fatal and lead to blindness. Trauma is the leading cause of unilateral blindness. Approximately 3 million cases of ocular and orbital trauma occur in the United States each year. An estimated 20,000 to 68,000 of these cases are visually impairing and approximately 40,000 have significant vision loss. **Objective:** To review forensic and medicolegal cases of sharp facial trauma to sensory loss. **Case Illustration:** Reported a case of stabbing a woman who was riding a motorcycle with the intention of the perpetrator to seize the victim's motorcycle. **Discussion:** the results of the examination, the victim is a woman, 54 years old, the patient's general condition is good, cooperative *compos mentis* consciousness, and examination of vital signs within normal limits. On examination, there were stab wounds on the face covering the forehead, nose and right cheek to the right eyeball due to sharp trauma. It was confirmed that the condition of the victim's left eye was categorized as blind, the eye could not see anymore because the eyeball had been cut and bleeding occurred so that the removal of the eyeball organ had to be done to avoid complications from the injury, but in this case the victim refused to take this action. **Conclusion:** Based on this injury, the victim suffered a loss of vision. This case constitutes serious injury pursuant to Article 90 of the Penal Code and the suspect is charged under Article 355 of the Penal Code.

Key Point: Forensic and medicolegal, loss of sense, penetrating facial trauma

ABSTRAK

Pendahuluan: Kedokteran forensik klinis berinteraksi antara hukum, peradilan, dan polisi yang melibatkan orang hidup dan mati dengan diterbitkannya visum et repertum. Luka adalah kerusakan bagian tubuh berupa pemutusan integritas dari jaringan yang dapat terjadi karena kekerasan mekanik. Organ mata sangat rentan dengan cedera, yang dapat berakibat fatal dan menyebabkan kebutaan. Trauma merupakan penyebab utama kebutaan unilateral. Terdapat sekitar 3 juta kasus trauma okular dan orbital terjadi di Amerika Serikat setiap tahun. Diperkirakan 20.000 hingga 68.000 dari angka tersebut merupakan kasus yang mengganggu visus dan sekitar 40.000 mengalami kehilangan visus yang signifikan. **Tujuan:** Meninjau kasus trauma tajam wajah terhadap hilangnya panca indera secara forensik dan medicolegal. **Ilustrasi Kasus:** Melaporkan kasus pembacokan perempuan yang sedang berkendara sepeda motor dengan tujuan pelaku untuk merampas sepeda motor korban. **Pembahasan:** hasil pemeriksaan, korban seorang perempuan, berusia 54 tahun, keadaan umum pasien baik, kesadaran *compos mentis* cooperative, serta pemeriksaan tanda-tanda vital dalam batas normal. Pada pemeriksaan dijumpai luka bacok pada wajah yang meliputi dahi, hidung dan pipi sebelah kanan hingga mengenai bola mata kanan akibat trauma tajam. Dipastikan kondisi mata kiri korban termasuk dalam kategori buta, mata tidak dapat

melihat lagi dikarenakan bola mata sudah terpotong dan terjadi perdarahan sehingga harus dilakukan pengangkatan organ bola mata agar tidak terjadi komplikasi dari luka tersebut, tetapi dalam hal ini korban menolak untuk tindakan tersebut. **Kesimpulan:** Berdasarkan luka tersebut mengakibatkan korban mengalami kehilangan pancaindera penglihatan. Kasus ini termasuk luka berat berdasarkan KUHP pasal 90 dan tersangka di tindak pidana pasal 355 KUHP.

Kata Kunci: Forensik dan medikolegal, kebutaan, trauma tajam wajah

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INTRODUCTION

Clinical forensic medicine is one that can be appropriately applied to the part of medical practice whose scope involves the interaction between the law, the judiciary and the police involving (generally) living people and the issuance of a 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 a visum et repertum for wounds, a visum et repertum for rape/sexual crimes, a psychiatric visum et repertum and so on according to the condition of the subject (evidence) being examined.^{[1][2]}

Traumatology comes from the words trauma and logos. Trauma means violence against living body tissue, while logos means science. So traumatology is a science that studies all aspects related to violence against living human body tissue.^{[1][2]}

The number of crime cases in Indonesia is still relatively high, with 1,150 cases in 2017 and 1,024 cases in 2018. Meanwhile, in North Sumatra, according to data reported by the provincial police for the incidence of crimes against life in 2018, the province ranked number 2 with 107 cases, and for the number of physical crimes in 2018, the province of North Sumatra reportedly ranked first with 5,240 cases.^[3]

Street crime, such as violent theft, is still prevalent in Medan city. For cases of theft with violence such as begal and

robbery that disturbed the community in 2018, 305 cases were recorded while in 2017 there were 407 cases. The incidence of violent theft in 2018 was less than the previous year.^[3]

A wound is damage to a part of the body in the form of a break in the integrity of the tissue that can occur due to mechanical violence. The body has resilience and elasticity of tissue based on the softness and strength of its skeleton, a force that exceeds the strength of the tissue. As the tissues adjust to the pressure, the injury or wound does not occur. 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 stab wounds.^{[4][5]}

The eye organ is particularly vulnerable to injury, which can be fatal and lead to blindness. When driving, playing sports, or even playing in open areas, eye injuries can occur. Ophthalmic trauma is a condition that can damage all parts of the eye, from the eyelids, orbital bone or eyeball wall, eyeball, and eye nerves. Causes of eye injury include a hard impact of sharp or blunt objects on the area around the eye, and can also be caused by heat trauma, radiation and chemical trauma.^[6]

Approximately 3 million cases of ocular and orbital trauma occur in the United States each year. An estimated 20,000 to 68,000 of these cases are visually impairing and approximately 40,000 have significant vision loss.

Trauma is the leading cause of unilateral blindness. Males are more commonly affected than females. The frequency of eye trauma in the United States is: superficial trauma to the eye and adnexa (41.6%), foreign body to the outer eye (25.4%), eye and adnexa contusion (16.0%), open trauma to the adnexa and eyeball (10.1%), orbital floor fracture (1.3%), nerve injury (0.3%).^[7]

CASE ILLUSTRATION

Chronology of the incident

On July 3, 2022 at approximately 01.30 WIB, a young man carrying a sharp weapon stabbed the victim who at that time was riding a motorcycle to sell to the market, as the victim was a trader at the market. The victim had been assaulted, because the suspect intended to seize the victim's motorcycle by paralyzing the victim. The victim was then escorted by residents around the scene to get help, at around 03.42 WIB the victim arrived at the hospital with registration number 01.18.80.15. Based on the request for a visum et repertum from the Republican State Police Resorts Medan New Medan Sector, Number: B/90/VII/ VII/2022/ Medan Baru Sector, dated July 5, 2022, signed by KANIT I SPKT, Supriardiyanto rank AIPTU NRP 65110398. With the identity of the victim: Name Mrs. M 54 years old, Muslim, works as a trader.

Examination Result

The victim came in a fully conscious state. The victim complained of severe pain in the face area. It was found that the victim's clothes were stained with blood which was suspected to have come from an injury to the victim's face. General condition appeared to be moderately ill, cooperative compos mentis consciousness. Blood pressure 110/60mmHg, pulse 81x/min, respiration 28x/min, temperature 36°C. On physical examination of the face,

a reddish open wound was found on the face covering the forehead, nose and right cheek with a size of 12.8 cm x 8.3 cm, with a depth of 1.1 cm. The wound was characterized by flat edges, two sharp corners, the wound base was the skull bone of the forehead and tissue in the eye socket, and the right eyeball was cut off at the wound base. About the same distance as the frontal midline of the body, 5 cm from the right ear canal.



Figure 1. Penetrating Facial Trauma.

Supporting examination: (1) Blood laboratory examination on 03/07/2022 showed an increased leukocyte count. (WBC = 12,390/ μ L) and hemoglobin levels within normal values. (Hb = 11.8 g/dl) (2) Radiological examination of the head (Schedel) shows no discontinuity in the internal tabula, diploe, and external tabula, sutura and vascular lesions are good, there are no fractures in the bones of the skull and facial bones. No destruction, lytic or blastic lesions, good soft tissue. The conclusion of the description is Normal.

Management in the emergency room is monitoring consciousness and vital signs. Administration of intravenous fluids through the veins. Wound cleaning (wound toilet). Giving painkillers, antibiotics and gastric acid antidote through the veins. - Consultation with a surgeon, then the surgeon consults with an anesthesiologist for debridement surgery. Furthermore, the surgeon consulted with an ophthalmologist, for joint care with a diagnosis on the eye is rupture of the oculi dextra. The patient has been educated by

an ophthalmologist for surgery (enucleation, palpebra repair, canaliculi repair) of the right eyeball and the victim's family refused the surgery. But in the end the surgery was performed by a surgeon.

DISCUSSION

According to the victim's confession, he was a victim of a sharp-armed robbery on July 03, 2022 at approximately 01.30 WIB on the way to the location where the victim sells / works. Based on the results of the victim's anamnesis, the victim said that the victim had been assaulted, because the suspect wanted to rob the victim's motorcycle. Because of this the suspect committed an act of violence using a sharp weapon to immobilize the victim.

In this case an open reddish wound was found on the face covering the forehead, nose and right cheek. The wound was characterized by flat edges, two sharp corners, the base of the wound was the skull bone of the forehead and tissue in the eye socket, and the right eyeball was cut off at the base of the wound. Radiological examination showed no signs of fracture. From the description above, the wound was categorized as a slash wound caused by sharp trauma. This is in accordance with the theory which states that wounds that are chop wounds have the following characteristics: General characteristics of wounds caused by sharp objects, the size of the wound is large and gaping the length of the wound is approximately the same as in the wound usually the bones underneath suffer injuries, and if the weapon used is not so sharp then around the boundary line of the wound there is bruising.

In this case, the forehead bone and tissue of the right eyeball were cut due to sharp trauma, resulting in bleeding of the eyeball. The wound resulted in blindness in the victim's right eye, so the ophthalmologist recommended surgical

removal of the right eyeball to prevent infection and bleeding. The ophthalmologist had provided information and education about the injury to the victim's eye as well as the risks and complications that might occur if the surgery was not performed, but the victim refused to have the surgery performed by signing a letter of refusal of medical treatment signed by the victim's older sibling on July 3, 2022 at 11.15 am.

Trauma to the eye can affect tissue from the eyeball, optic nerve and adnexa, and can be a superficial lesion that jeopardizes vision. Trauma to the eye that is an emergency can be divided into mechanical trauma and non-mechanical trauma. Mechanical trauma consists of blunt trauma, lamellar laceration, eyeball rupture, penetrating trauma, foreign body in the eyeball, and penetrating trauma. Mechanical trauma can include closed trauma and open trauma. Non-mechanical trauma consists of chemical trauma, radiation trauma, and thermal trauma.^[8]

The key trauma assessment standard used is the Birmingham Eye Trauma Terminology (BETT). BETT is a standardized terminology and classification system used to describe and share information on trauma to the eye. This terminology is used as a standard in eye trauma to prevent misunderstandings between healthcare workers and also as a form of communication. BETT criteria also serve to analyze the patient's possible visual prognosis.^[8]

In this case, it was confirmed that the condition of the victim's left eye was categorized as blind (according to AAO standards) because from the results of the examination from the ophthalmologist it was confirmed that the eye could no longer see because the eyeball had been cut and bleeding occurred so that the removal of the eyeball organ was required to prevent complications from the injury, but in this

case the victim refused this action. This is because the physical violence committed by the suspect resulted in blindness to the right eye, which means the loss of one of the five senses which according to Article 90 of the Penal Code is considered a serious injury.

The crime of aggravated maltreatment is regulated in Article 355 of the Penal Code, namely: 1) Serious maltreatment committed with premeditation shall be punished by a maximum imprisonment of twelve years. 2) If the act results in death, the offender shall be sentenced to a maximum imprisonment of fifteen years.

CONCLUSION

Based on the results of the examination, and the results of the supporting examination and discussion, it is concluded that the examination and treatment of the victim is a woman, 54 years old, the patient's general condition is good, cooperative *compos mentis* consciousness, and examination of vital signs within normal limits. On examination there were stab wounds on the face covering the forehead, nose and right cheek to the right eyeball due to sharp trauma. The wound caused the victim to lose his sense of sight.

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