

## Case Report

## Open Access

# Infant Death due to Smothering

Asan Petrus

Department of Forensics and Medicolegal, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

### ABSTRACT

**Background:** Infanticide has varying terminology and definitions in different jurisdictions. It is usually defined as the murder of a child in the first 24 hours of life, whereas in the US it is defined as the murder of a person one week or less. In the UK, the adultery of a baby, who is not yet one year old by his own mother is referred to as infanticide and is given a lighter sentence due to considerations of mental status. Meanwhile, in Indonesia, the basis for consideration used is the motive for fear of being caught giving birth to a child and the murder is carried out immediately during childbirth. As for determining that murder is the murder of one's own child or ordinary murder, a forensic examination is required.

**Case:** A case was reported with the victim of a baby boy in a cardboard box on the road around the housing complex and an examination of the body was carried out in the autopsy room of the Forensic Medicine and Medicolegal Medical Installation of Bhayangkara General Hospital, TK II Medan City according to the Visum Request Letter.

**Results:** it was found that the baby was born alive, viabel, did not get treatment with the estimated age of the baby in the womb was 9-10 months (mature). The cause of death is due to exposure that causes suffocation due to the obstruction of air entering the respiratory tract.

**Discussion:** On examination, the baby was estimated to be aged 9-10 months in the womb (viable). There is no sign of treatment. Bruises were found on the upper and lower lips of the outer and inner parts which indicated the presence of closure of the baby's mouth by the perpetrator. There are also signs of asphyxia. On internal examination, a positive pulmonary buoyancy test was found and the results of pulmonary histopathology showed that the baby was viable and quite a month.

**Conclusion:** The baby is a victim of murder, so the perpetrator must be held accountable for his actions and can be prosecuted under articles 341, 342 of the Criminal Code if the perpetrator is a biological mother and article 343 of the Criminal Code if there are people who help / do.

### \*Corresponding author

Asan Petrus, Department of Forensics and Medicolegal, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia.

Email: asanpetrus95@gmail.com

**Received:** September 09, 2022; **Accepted:** September 15, 2022; **Published:** September 22, 2022

**Keywords:** Smothering, Murder of one's own child.

### Introduction

Murder cases of newborns have been known since the time of Pharaoh who had ordered to kill every born baby boy for fear of the appearance of a new king, or the murder of every baby girl in ancient times in Arab lands which was commonly carried out because of the thought for being unlucky carriers for the family [1].

An account of the true occurrence of child murders around the world is difficult to obtain because they are not detected or mis-categorized. This is due to the multiform presence of terminology and definitions in various jurisdictions. Newborn homicide is usually defined as the murder of a child in the first 24 hours of life, whereas in the U.S., based on the *Federal Bureau of Investigations-Uniform Crime Reporting System* (FBI-UCR), it is defined as murdered of a person aged 1 week or less. By these criteria, the average annual neonatal homicide rate in the period from 1976 to 1979 in the U.S. was 1.3 per 100,000 live births and

infanticide rates (>1 week to less from 1 year) is 4.3 per 100,000 live babies [2].

Under the law in force in the UK, the murder of a baby, who is not yet one year old by his own mother is called infanticide. The sentence given is lighter than the punishment in ordinary murder on the basis of consideration of mental status in women who are pregnant, maternity or breastfeeding very labile and easily distracted. In Scotland, infanticide and ordinary homicide are not distinguished at all. Indonesia has a different basis for consideration than the UK, which the basis for consideration is a motive for fear of being caught giving birth to a child and the murder was carried out at the time or not long after birth [3].

The motive of fear of being caught giving birth to a child is associated with a culture in society that considers it taboo to give birth to a child without a husband. If a woman murders her own newborn baby from a legal marriage, then the murder is not categorized as infanticide, but it is an ordinary murder because it

has no appropriate motive. So, to be able to say the murder of one's own child in Indonesia, it must meet the following conditions: (1) The perpetrator is the biological mother, (2) The victim was the biological child, (3) The time of murder at birth or not long after, and (4) The motive for the murder was the fear of being caught giving birth to a child. This corresponds to the legal basis for the murder of one's own child in the chapter crimes against the lives of persons in the Criminal Code Articles 341, 342 and 343 [4].

The role of the doctor in child murder cases itself is to examine the baby's remains to obtain clarity in the following matters: (1) determination of infant viability, (2) estimated age of the baby intra uterina, (3) whether the baby was born alive or stillborn, (4) estimated age of the baby is extra uterina, (5) what is the cause of death, (6) blood type examination, and (7) whether the baby has been treated or not [5].

Live birth is the expulsion of the result of complete conception that breath or showing other signs of life regardless of gestational age, whether the umbilical cord has been cut off or not and the ari are born. Several signs of life in newborns are that the chest expands and the diaphragm has already dropped to the sidelines of 4<sup>th</sup> – 5<sup>th</sup> ribs. On deep examination, the lungs fill the chest cavity and partially cover the epicardium. The lungs color is pink unevenly distributed with a tense pleura and show a mosaic picture due to the air-filled alveoli. Slicing of the lungs in water emits air bubbles and blood with the weight of the lungs increases up to 2x or 1/35 times due to blood and pulmonary-heart circulation. A pulmonary buoyancy test with a *no touch* technique is performed to find out if the baby was breathing. Negative results do not yet mean that the baby was born death because of the possibility of the baby being born alive but then respiratory arrest happened, despite of the heart beats that the air in alveolus was reabsorbed. If it is clear that there is decay, then the pulmonary buoyancy test is less reliable. Besides, the determination whether the baby born alive or not can also be done by middle ear test, intestinal buoyancy test/ Breslau's second life test and microscopic lungs.

Stillbirths must be more than 24 weeks of pregnancy and upon complete removal from the mother, not breathing or showing signs of life under the 1953 Birth Registration Act and Death that was later amended by the 1992 Still-Birth Act. Signs of life other than breathing and heartbeat, are also interpreted as movement, crying, or the beat of the umbilical cord [2, 6]. As for the evidence of death in the womb are ante partum rigor mortis and maceration, which is characterized by brownish-red skin color, white cuticles, bones that are flexible and detached from soft tissues.

Viability has several conditions, namely: age  $\geq 28$  weeks in the womb, body length  $\geq 35$  cm, weight  $\geq 2500$  grams, no severe congenital defects and the fronto-occipital circle  $\geq 32$  cm [3, 5]. In addition, it is also seen that there are congenital abnormalities that can affect the survival of babies [2].

The sign of treatment that can be found in the baby is (1) the umbilical cord has been tied, disconnected with scissors or a knife approximately 5 cm from the center of the baby and given antiseptic drugs. When put into water, it will appear that the tip is cut evenly. (2) Verniks kaseosa (baby fat) has been cleaned along with traces of blood. (3) Infants wear clothes or use covers.

The determination of the age of the baby in the womb can be done with the De Haas Formula and the study center by means of a photo of rongent/ radiology (indirect) or by surgical means using a knife (immediately). Measurements of babies quite a month can

be judged from external characteristics, namely auricles, milk, fingernails, foot lines, external genitals, head hair, skin opacity, processus xyphoideus, eye brows, and ossification center. The estimation of gestational age can also be done using Arey's or Finnstorm's formula.

The determination of the age of the baby outside the womb can be assessed by paying attention to the following, namely: changes in the skin, changes in suxadenum lime, changes in the umbilical cord, and changes in circulation.

If it is proven that the baby was born alive (already breathing), then the cause of death must be determined. If it is proven that the baby is stillborn (not yet breathing), then the cause of stillbirth or antenatal death or the cause of fetal death (*fetal death*) must be determined [7]. The cause of death in the murder of the child himself is suffocation (asphyxia). The way the baby meets its death are (1) Negligence that can occur due to inhalation of the blood/blood fluid or immersion in the toilet, being entangled in the umbilical cord, bleeding of umbilical cord, suffocation, and inattentively make warm. (2) Violence, which is divided into violence in the uterus (trauma of the abdominal wall or insertion of the apparatus into the vagina), violence during the birth process (Caput succedaneum) and violence after complete birth (blunt force, suffocation, smothering, gagging, entrapment/strangulation, stab wound, and drowning).

Smothering is a state of mechanical closure of the external openings of the airway (mouth and nose) by a solid object or material consisting of small particles (finely devided materials) such as sand, mud, ash, and snow. Death can occur by accident (most often), murder or suicide. At the autopsy examination, a search for materials suspected to be the cause in the nasal cavity or nostrils is carried out and looks for abnormalities in the form of abrasions and or bruises in the mouth, nose and surrounding area. Pressure abrasions and or bruises on the inner lips facing the teeth and rahan are often found at least in children due to the attempted expansion of the not too big. Abrasions or bruises on the back of the neck muscles can be found if the bending is done with one hand while the other hand presses on the victim's head from rear. This can be proven by making an incision to see the muscles of the neck. Signs of asphyxia can also be found in victims of expansion in the form of dark and diluted blood, cyanotic face, small ecimosis of the galeal skalp, conjunctival hemorrhage (when rapid expansion occurs) or hyperaeration and pulmonary edema (in slow-occurring expansion) [2].

The laws relating to the murder of children themselves are in the form of articles 341 of the Criminal Code (*Kinderdoodslag*), 342 of the Criminal Code (Kindermoord), 343 of the Criminal Code (to those who help), 181 of the Criminal Code (stillbirth then disposed of), whereas for others who do so are subject to Criminal Code articles 338, 340, and 343 [4].

### Case Report

Reported case with the victim of a baby boy was found dead on Wednesday, February 2nd 2022 at approximately 09.30 WIB in a cardboard box on the street around the Malibu Indah Park complex, Kelurahan Sukadamai, Kecamatan Medan Polonia which was subsequently reported by the community to the police.

At examination: an unknown baby boy corpse with body length was 50 cm, head circumference was 33 cm, skin color was yellow, straight black hair with body weight 2650 grams (Figure 1). Sign of death that was found were bruises at posterior neck, back,

buttocks, upper and lower limb that not disappear with pressure, while rigor mortis and decomposition were not found.



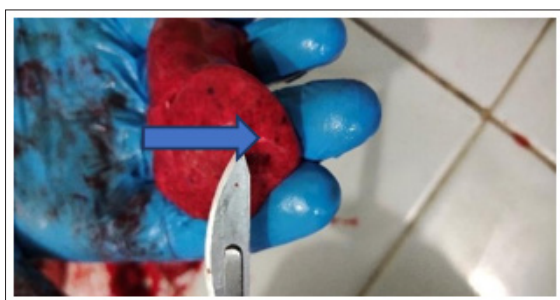
**Figure 1:** a) Body Length; b) Body Weight; c) Head Circumference

At outside examination was found red eyelid and eyeball membrane and cloudy eye membrane. There are bruises at above right lip and below part outside and inside with bluish lip color (Figure 2). A positive middle ear test was found. The chest circumference was 30 cm and the chest expands with widened and flattened. The abdominal circumference was 27 cm and length of umbilical cord was 19 cm, the base of the umbilical cord is pale, the end of the umbilical cord is red, has been cut, the cut edge is uneven and untied. The nails past the fingertips with bluish fingertips. There was also lanugo on forehead, cheek ear, back, upper and lower limbs.



**Figure 2:** a) Bruising Wounds on the Inner Upper Lip; b) Bruises on the Inner Lower Lip

Deep examination found that the lung fills the chest cavity, sponge-like, mosaic red color with blunt edge and the weight of the lungs was 65 grams. It has a positive lung buoyancy test for both lungs. Tardieu spots were found in lungs and heart (Figure 3). Ossification centers were found in femur, tibia, and talus bones (Os kuboid). The stomach buoyancy test was negative.



**Figure 3:** Tardieu Spots on Lungs

Laboratory examination shows that alveoli have been developed, some are dilated and destroyed with dilated and destroyed vessels. From the result of this examination, we found that the baby born alive (viable lung) (Figure 4).



**Figure 4:** a) Blood Vessels Undergo Dilatation and Congestion (HE, 100x); b) The Already Developed Structure of the Alveolus Undergoes Dilatation (HE, 100x)

### Discussion

The results of the external examination on this baby found that the chest has expanded and the inner examination found that the diaphragm height between ribs 5<sup>th</sup> – 6<sup>th</sup>, with the right lung filling the chest cavity and the left lung was in the behind of the heart. Both lungs are mosaic red with dull edges. Bleeding spots were found in the heart and lungs, and a positive pulmonary buoyancy test was found. Based on the result of the examination above, it is concluded that the baby had already breathing.

The weight of the baby was 2650 grams, body length was 50 cm, head circumference was 32 cm and chest circumference was 30 cm, estimated fetal age was 9-10 weeks which was viable. Babies who are not viable are not necessarily stillborn and vice versa. The purpose of determining the viability of the baby is to show the judge a fact that is likely to be used as a consideration in determining the severity of the sentence that will be dropped. It is necessary to know that non-viable live born babies will not survive.

On external examination of this baby, the length of umbilical cord was 19 cm, the base was pale with red end of the umbilical cord, it was cut unevenly, not tied and there was a caseous vernix on the head and thigh folds with no food residue was found in the stomach. From the examination above, it can be determined that the baby has not received treatment.

To determine the estimation of gestational age, we use the Finnstrom formula, a baby boy  $Y = 21.46 + 8.57X (32) = 21.46 + 274.24 = 295.7$  days = 296 days (9.8 months). The results of

the examination are in accordance with the morphology of the fetus at the 10th month (full term).

In determining how long the baby has lived, the baby's age can be seen from the change in the umbilical cord where a few hours after being cut, the umbilical cord withers, dries on the second day then mummified into a stiff and bumpy rope. After a day or so, a reddish ring appears around the base of the umbilical cord and adjacent skin of the abdomen. This indicates the baby is out of the womb for less than 24 hours.

The cause of death in the baby is due to smothering which causes suffocation due to obstruction of air entering the respiratory tract. This is supported by the discovery of bruises on the upper and lower part of the outer and inner lips and the presence of signs of asphyxia such as red color on both membranes of the eyeballs, bluish color on the fingertips of all four extremities and bleeding spots on the heart and lungs. In addition, from the results of laboratory examinations, the pulmonary blood vessels have been dilated and congested. The material used in this smothering is usually fabric, waterproof material or hand.

### Conclusion

An examination of a unknown baby boy, weighing 2650 grams, body length was 50 cm and head circumference was 32 cm. On the results of external, internal and laboratory examinations, it is concluded that the baby born alive, viable, did not get treatment with the estimated age of the baby in the womb 9-10 months (mature) and the age outside the womb is less than 24 hours. The cause of death was due to smothering which causes suffocation due to obstruction of air entering the respiratory tract.

In this case, the baby is a victim of murder, therefore, the perpetrator must be held accountable for his actions and can be prosecuted under articles 341, 342 of the Criminal Code and in the course of the investigation the perpetrator is found is the mother of the kandunnng and if there is anyone who helps/ does it can be prosecuted article 343 of the Criminal Code. This criminal act can also be prosecuted under The Law of the Republic of Indonesia number 35 of 2014 concerning amendments to Law No. 23 of 2002 about child protection article 80 numbers 3 and 4.

### References

1. Hoediyanto A, Hariadi (2012) Forensic Medicine and Medicolegal, Eighth edition, 302-310.
2. Knight B (2016) Forensic Pathology, Oxford University Press, Inc., Fourth Edition, 447-460
3. Satyo Alfred C (1990) judicial medical science, FK-USU.
4. NN Criminal Procedure Code and Criminal Code (2007) Sinar Grafika Publishers. Jakarta 64-16.
5. Budiyanto A, Widiatmaka W, Sudiono S (1997) Forensic Medicine. Department of Forensic Medicine FK- UI. First Edition 165-176.
6. James Jason Payne (2011) Simpson's Forensic Medicine, Hodder Arnold, an Imprint of Hodder Education, 13th Edition 65-74.
7. Budijanto A, Sudiono S, Widiatmaka W (1988) Murder of One's Own Children. Forensic Medical Sciences Series. Afiat Foundation – Indonesian Association of Pathologists 1-88.

**Copyright:** ©2022 Asan Petrus. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.