

Case Report: Filicide by Electrocutation



Fares Najari^{1*} , Leila Soleimani¹ , Dorsa Najari²

1. Department of Forensic Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

2. School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.



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ABSTRACT

Background: Filicide is the term to describe the homicide of the child performed by one of the parents or both. Many different methods and devices may be used for these types of murders, for example, asphyxia, planned car accidents, stabbing by knife, battering, electricity, and so on. Most deaths due to electrocutation are categorized as accidental in domestic and industrial environments. Murder by electrocutation is reported very rarely. This case presents the murder of the child by his father in the way which is not usually applied in either filicide or homicide.

Case Presentation: The body of a dead eight-year-old boy was brought to the Legal Medicine Organization center for autopsy with the history of separated parents and father with bipolar disorder. The coroner noticed the boy's toes wired directly to an electric socket at the scene of the crime so the deceased was referred for further evaluation.

Conclusion: Although filicide by electrocutation is a rare method, especially for familicide according to literature, it should be considered in such murders.

1. Introduction

Filicide is the deliberate killing of a child (under the age of 18) by his or her own biological parents or stepparents [1]. Paternal filicide in the domestic violence field is considered rare and unpredictable [2]. These deaths can occur as a result of infant abandonment, starvation, medical neglect, drowning, being left alone in cars, and firearms [3]. According to the literature, biological parents usually use methods which result in a rapid and painless death, while the stepparents'

methods are more violent. The children who were killed by mothers (maternal filicides) are apparently younger than the children killed by fathers (paternal filicide) [4].

Many different methods may be applied for these types of murders, such as asphyxia, planned car accidents, stabbing by knife, battering, electricity, and so on. The most common method of homicide was stabbing. Paternal homicidal methods were more violent than maternal ones. Some filicidal fathers may try to kill their wives too, which is called "familicide" and is not usually seen among the female offenders. All the male murderers had

* Corresponding Author:

Fares Najari, MD.

Address: Department of Forensic Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Tel: +98 (912) 3195140

E-mail: fares.hospital@yahoo.com

some kind of psychiatric disorder, mostly personality disorders, while they attempted to commit such a horrible crime [5].

According to one study in Iran, most death rates from electrocution among all medico-legal cases were work-related and accidental. Ten cases (out of 295 deaths due to electrocution) of suicidal electrocution were reported between 2002 and 2006 [6].

There is a case report from India, in 2015. A twenty-year-old man who was intoxicated by alcohol to the state of unconsciousness, so the offender could wrap the wire around his toes and connect it to the electric power [7]. The other homicide by electrocution was also reported in India. In 2003, two Sikh old men were tortured and killed by electricity. Six men wined the wires around victims' hands and connected them to electrical sources. Although they unwrapped the wire, the police recovered small pieces of insulation materials of wire [8].

One case of familicide by electrocution was reported in 1990 in Britain. A man killed his son and ex-wife by wrapping the wire around their limbs and told his ex-wife that it was safe because the circuit was not complete. So the woman was deceived and stayed without any resistance, then the man connected the wire to electrical power [9].

This case presents filicide of an 8-year-old boy by electrocution which is not usually applied in either filicide or homicide. Regarding the criminal and social aspect of the case, the autopsy was performed and reported by judicial order with no need to obtain consent.

2. Case Report

In March 2018, the body of the deceased 8-year-old boy was brought to the Legal Medicine Organization autopsy center in Kahrizak, Tehran, Iran, for further evaluation. His parents were separated and he lived with his father. The coroner noticed the boy's toes wired directly to the electric socket at the scene of the crime. To keep the crime scene investigation team safe, they were ordered to leave the scene and electrical technicians were called to clean the area of any electric hazard. Technicians unwrapped the wires before providing any photography.

He was dressed in home clothes, well nourished, normal height, and weight appropriate for his age. There was normal hypostasis in the posterior parts of the body and complete rigor mortis. There was no peripheral edema, congestion, and cyanosis. Defense or resistance sign was not seen.

Non-insulated copper wire wrapped around the base of the toes. In right toe, the pale area which was measured 2×1 cm extends below the right toe in the palmar surface with large blister and hyperemia in margins. When the wire was removed, 1×2 cm, brownish and red, second degree burning with pale margins along singed hair on the right toe appeared (typical characteristic for electric mark) (Figures 1 and 2).

In left toe, the red colored second-degree burning area which was measured 1×3 cm in the medial side of the left toe was seen which extended below the wire. There was also a charred burned hole in the center of the foot surface which was measured 3 mm in diameter, sugges-



Figure 1. Electrical mark in the anterior view of right toe



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Figure 2. Electrical mark in the dorsal view of right toe

tive for the exit site of electrical current passage (typical characteristic for electric mark) (Figures 3 and 4).

Internal examination (body cavities): Scalp, skull, spine, membrane, and brain were normal. Trachea and larynx were normal. No fracture or pathology or hemorrhage was detected. The pleural cavities had no fluid or adhesion.

Heart weighted 110 g and appeared normal. Fibrosis, hyperemia, or any sign of infarction or hypertrophy

were not detected. The valves appeared intact. The coronary arteries were patent. There was no abnormality in large vessels. In the posterior surface of the heart, petechial like spots were noticed. Each lung weighed 150 g, parenchyma was pink without any congestion or hemorrhage. The bronchi appeared normal. Liver and Spleen looked normal in size and shape. Each Kidney weighed 100 g; the cortex, medulla, and parenchyma appeared normal in cuts. In stomach and intestines, their mucous was intact and contained ingested food.



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Figure 3. Electrical mark in the Lateral view of Right Toe



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Figure 4. Lectrical mark in the Lateral view of Right Toe and bed

Toxicological samples from vitreous, gastric content, urine, liver, and bile were obtained, analyzed, and reported negative for alcohol (by Gas Chromatography-Mass Spectrophotometry on vitreous), narcotics and other drugs (by Thin Layer Chromatography on gastric content, urine, and liver).

Histopathology report of the victims' toes involved skin with the vacuole formation in the epidermal and dermal layers; the epidermal cells were elongated with horizontally stretched nuclei. Histologic examination of the heart showed a few diffuse contraction bands within the fibers.

By analyzing autopsy, histopathology, toxicology report, and history data, the commission of three board-certified forensic specialties declared "cardiac complications of electrocution" as the cause of death. Later the father confessed to the murder of his son and wife. He was diagnosed with bipolar disorder in the past and underwent treatment by medications such as sodium valproate on and off, though never completed the course of treatment. He explained the process of his crime in details; after killing (throttling) his wife in the other house during an arranged meeting to decide the joint custody of their son, he came back to his flat where he lived with his son. While the boy was asleep, father wired his son's toes to domestic (220 V) electric socket.

3. Discussion

Filicide is the term to describe the homicide of the child performed by one of the parents or both. According to the literature, biological parents usually use methods which result in a rapid and painless death, while the stepparents' methods are more associated with violence and battering [4]. We believed that although this case is compatible with previous studies with aspect to the psychiatric background of the father as the murderer and the method of killing which he considered as quick and painless, it is also very rare and under-reported in the field of homicide (including filicide) by electrocution.

Most deaths due to electrocution are categorized as accidental, both in domestic and industrial environments. Although suicide by electricity has been already reported, the murder by electrocution is very rare [7]. The type of murder can show the picture of the murderer who contemplates the method of crime long before. The most reported way to kill a person by electricity is to put a plugged-in electrical device in the room which contains the victim in contact with the water such as bath-tub [8].

In two cases reported in India and one case reported in Britain [7-9], like our case, the limbs of the victims were tied by wire and connected to electricity. In Indian reports, the victims were adults and the murderers planned the crime and tried to conceal and tort the manner of death by collaboration and toxicity in contrast to Britain case and our report which shared a lot of characteristics such as no restraining method which showed the trust of family members to the murderer.

The main difference between the present case and a previous case reported 28 years earlier is the age of the victim which is older in our report; the father murdered his son in different method, place and time from his spouse. Although in both studies, the separation, spousal issue, and psychiatric problems can be raised as main factors to commit the crime, in earlier report there was no recognized past psychiatric history and treatment regimen for the murderer before committing the murder despite the obvious psychiatric background of father in the present report who was under insufficient treatment and control.

Paternal filicide in the domestic violence field is an unpredictable rare issue [2]; however, we believe that we can reduce such tragedies in the society by regular follow up of the patients in psychiatry. Nevertheless, there is a big concern over custody issues in Iran Judicial system. The father is the unquestionable absolute guardian of the children in all cases [10] and it will take a lot of effort to question this right over psychological health issues.

Ethical Considerations

Compliance with ethical guidelines

Ethical approval was obtained from Department of Forensic Medicine, School of Medicine, Shahid Beheshti University of Medical Sciences, Iran.

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Authors contributions

All authors contributed in preparing this article.

Conflict of interest

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