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The analysis of dyadic deaths

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SUMMARY

In the work we analyze three cases of unusual dyadic deaths when the perpetrator of homicide committed suicide shortly after the murder. In the first case a man stabbed his girlfriend with a knife and subsequently committed a car crash suicide. In the second case an apparent simultaneous hanging of a married couple turned out to be homicide-suicide act. In the last case a man shot his ex-wife while she was on a walk with their dog and in a short time turned the gun against himself.

Keywords: dyadic death – homicide – suicide

Analýza diadických úmrtí

SOUHRN

V práci analyzujeme tri nezvyčajné prípady spoločných úmrtí, pri ktorých nie vždy od začiatku bola jasná spojitosť. V daných prípadoch páchateľ vraždy spáchal samovraždu v krátkom časovom úseku po násilnom čine, a to v jednom prípade odlišným a v dvoch prípadoch rovnakým spôsobom, akým spôsobil smrť svojej obeti. Vo všetkých prípadoch bola vykonaná pitva s kompletným makroskopickým, mikroskopickým a toxikologickým vyšetrením a fotodokumentáciou. V prvom prípade išlo o napadnutie ostrým predmetom, keď muž spôsobil svojej priateľke spolu 18 bodných a rezných rán, po čom nasadol do auta a o niekoľko obcí ďalej účelovo, bez akéhokoľvek brzdenia, priamo vrazil do betónového oplotenia rodinného domu, pričom utrpel poranenia nezlučiteľné so životom. V druhom prípade bol bulharský manželský pár nájdený obesený vo svojej garáži. Zdanlivo klasické simultánne obesenie so zanechanými listami na rozlúčku sa po dôkladnej vonkajšej a vnútornej obhliadke pri pitve, ktorá odhalila najmä rozdielne štádium posmrtných zmien a obranné poranenia u ženy, ukázalo byť vraždou s následnou samovraždou. V treťom prípade muž zastrelil svoju bývalú manželku, ktorá bola na prechádzke so psom, a v krátkom časovom úseku v inej časti mesta otočil zbraň proti sebe. Dané kazuistiky boli vybrané v snahe poukázať na násilie, ktoré je páchané na blízkych osobách a ktorému je v mnohých prípadoch možné zabrániť zo strany kompetentných orgánov.

Kľúčové slová: spoločné úmrtia – vražda – samovražda

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The evidence which harmonizes with other evidence can sometimes confuse law enforcement authorities, as well as forensic experts in many ways. Isolated evidence not always points to the same thing as when presented in the context of other evidence (1,2). Forensic medicine plays a substantial role in detecting such links. The work of forensic pathologists is inherently linked to the process of inquiry and providing proofs (3,4). Cooperation of law enforcement authorities and forensic pathologists is necessary to fulfill the purpose of evidence proceedings – to reveal facts that are beyond reasonable doubt. To meet this objective, interdisciplinary approach is often required (5).

The responsibility of forensic pathologist in connection with death is not only to determine, and often certify the medical "cause of death" and category of death, but for legal and statistical purposes further classification is necessary. We talk about the manner of death; whether the death was the result of homicide, suicide, accident or due to natural causes. In many jurisdictions, legal officials rely heavily on the statement of forensic pathologists, especially if autopsy is performed. Autopsy provides evidence which helps to make a decision about the manner of death, especially if eye-witness or other circumstantial evidence is lacking (6-8). Therefore, law enforcement authorities, especially in the cases where the available evidence is not strong enough, highly appreciate the work of forensic pathologists, which helps them to come to a definite decision (9).

In daily work of forensic pathologists, we sometimes see cases of dyadic deaths or deaths that are somehow linked together. In this work we present three cases of dyadic deaths, when the perpetrator of homicide committed suicide shortly after the malefaction. These cases are special not because of category or cause of death, but due to unusual circumstances that showed that these deaths are somehow related, even though in some cases it was not obvious at first sight.

The first case focuses on a man who stabbed his girlfriend, who then died due to hypovolemic shock. Altogether, she had 18 knife wounds of chin, neck, thorax, dorsum, and upper extremities. After her death, the perpetrator committed suicide by crashing his car against a concrete wall. In the second case a married couple was found hanged in their garage. The circumstances at first suggested that it was a typical simultaneous suicide; however, detailed external and internal examination of the corpses showed that the woman was murdered by her husband, who then finished the violent crime by his own death. The

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last case deals with a divorced couple, in which the man shot his ex-wife while she was on a walk with their dog, and in a short time in another part of the town turned the gun against himself.

METHODS

In all of these cases autopsy and complete macroscopic, microscopic and toxicological examination were conducted.

CASUISTICS

Case 1 – Stabbing followed by car crash suicide

A 29-year old woman was stabbed by her 36-year old boyfriend after a quarrel, which took place in a pub. A kitchen knife with one sharp edge and 15 cm long blade was used. Maximum width of the blade was 25 mm and the thickness of the blade was 1.5 mm. The woman ran out of the pub and her boyfriend reached her on the street. He stabbed her 18 times in the upper parts of the body, including the face, neck, thorax, upper extremities, and dorsum. The victim was trying to defend herself with hands, running into the grocery store next door, where she fell on the ground. Consecutive cardiopulmonary resuscitation provided by an emergency ambulance team failed. Upon the arrival of the medical examiner, the woman was lying on her back on the floor inside the grocery store with a considerable amount of blood on the floor around her.

The autopsy revealed altogether 18 knife wounds – 1 incised wound of the chin, 1 incised wound of the neck, 4 stab wounds of the front side of the thorax, 6 stab wounds and 1 superficial incised wound of the back, 1 superficial incised wound of the right antebrachium, 1 incised wound of the back of the right hand, 1 stab wound of the left hand, and 2 incised wounds of the fingers of the left hand.

Internal examination findings included 3 stab wounds of left and 1 stab wound of right lungs, 4 stab wounds of intercostal muscles and ribs, bleeding into the pleural cavity, and ischemia of internal organs. Toxicological examination of the blood sample was negative for ethanol; only the presence of salicylates in blood and kidney was detected. It was concluded, that the cause of death was hypovolemic shock due to massive bleeding.

Approximately 10 minutes after the woman died, the perpetrator drove his car for about 30 km to a nearby village, where he drove the car intentionally through a fence made out of concrete blocks and then the car collided with a wall of a family house. According to the witnesses and experts analysis, the car hit the wall without any sign of braking or deceleration. The driver suffered severe internal and external injuries and died on the spot. Traumatic-hypovolemic shock due to several injuries was alleged as the cause of death after the autopsy. Toxicological examination detected the presence of ethanol in blood in concentration 1.42 g/kg, as well as in urine, in concentration 1.80 g/kg.

Case 2 – Simultaneous hanging that turned out to be homicide – suicide act

A Bulgarian couple (45-year old woman and 51-year old man) was found hanged in their garage in a free-swinging position with a rope tied to a joist in the ceiling (Fig. 1). The garage was locked from the inside. Farewell letters in Bulgarian language written by the handwriting of the deceased man were found on the scene. According to the information the police was able to provide, the woman left her husband about a month before her



Fig. 1. Bulgarian couple found hanged in their garage.



Fig. 2. Abrasions and bruises on the neck of the woman.



Fig. 3. Bruises on the woman's right upper extremity.

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death and lived with another man. Her husband was not able to handle the situation.

In both cases 1 cm wide plastic rope was used as a ligature. External examination of the body of the man during autopsy revealed closed ligature mark around the neck with a rising peak in occipital area and stiffness of the whole body. Internal examination showed typical signs of asphyxia; no signs of assault or self-defense were found on the body. Toxicological examination detected ethanol in the blood of the man in a not significant concentration - 0.19 g/kg. No other toxicological substances were detected. The cause of death was stipulated as hanging in suicidal intention.

In the case of the woman, the rising peak of the ligature mark was more on the left side of the neck. Furthermore, external examination showed abrasions and contusions around ligature mark, accentuated petechial hemorrhages in conjunctives, hemorrhages in the skin in the subclavian area and in the area of shoulders, abrasions and contusions on the head, thorax, upper and lower extremities, and incised wounds of fingers of both hands (Fig. 2,3). Rigor mortis was present only in lower extremities and moreover eggs of insects were already laid in eyelid openings. Internal examination revealed hematoma in the scalp of the left temporal area and in the left temporal muscle, contusions and hematomas in the neck muscles, and the beginning putrefaction of internal tissues and organs. Similarly, toxicological examination revealed only insignificant concentration of ethanol in blood – 0.21 g/kg.

Taking into consideration abrasions, contusions, hemorrhages, and also unequal post-mortem changes in woman and man, it was concluded that the woman was attacked and then hanged by her husband. The time of death of the woman was estimated at approximately 36–48 hours before the death of her husband.

Case 3 – A desperate deed when two lives were ended by a short arm gun

In the last case a woman was shot dead by her ex-husband with an automatic pistol on the street in Bratislava when she was on a walk with their dog. Approximately 1 hour later, the man turned the gun against himself in another part of Bratislava. The woman had problems with her ex-husband for a long time, he was threatening her, and she contacted various competent authorities; however, none responded by an appropriate action.

External examination of the woman revealed entrance-exit firearm injury – entrance wound was located on the right cheek and exit wound was in the left side of the occipital area. Abrasions were found on the left wrist, probably from the fight with her ex-husband. Internal examination showed loss defects of gingiva and tongue, fractures of dental arch, fractures of the first and second cervical vertebra, contusions of cervical part of spinal cord, medulla oblongata and cerebellum, and bleeding into brain ventricles. Toxicological examination of blood was negative.

External examination of the perpetrator's body resulted in the discovery of entry wound with barrel impression to the skin and wide margin of soot deposition in the right temporal area and exit wound in the left temporal area. Internal examination corresponded with the external examination. In both cases, the immediate cause of death was cerebral death due to firearm injury of brain. Toxicological examination of blood and urine samples taken during the autopsy of the man was negative, only traces of caffeine, paracetamol and salicylates were found.

CONCLUSION

These three cases of dyadic deaths were chosen to demonstrate the silent violence around us. In all of these three cases the violent crime was committed against the closest person; nevertheless, in each case the homicide was followed by remorseful feeling that led to committing a suicide. By choosing these three cases we wanted to reveal desperate situation of certain individuals that can result even in such a terrifying and hopeless deed as homicide followed by suicide. Beside, we wanted to emphasize that in many cases competent authorities have the capacity to prevent such incommutable consequences.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interests regarding the publication of this paper.

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