

Multiple Sharp Force Injuries to the Head – The Crime of Passion

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SUMMARY

Introduction The Institute of Forensic Medicine was founded by Professor Milovan Milovanović (1884–1948) in 1923 as part of School of Medicine of the University of Belgrade, and also established the Institute's forensic collection worthy of a museum. This paper illustrates the way Professor Milovanović made this collection into a teaching aid for student education. We present a case of crime of passion from the year 1931, from our Institute's collection.

Case Outline The victim was a 30-year-old woman with multiple stab wounds of the head, neck and arms. It was noted in the case history that the deceased woman was a maid with a wealthy merchant, as well as that she had "dubious morals" for that time, with three wooers at the same time. Injuries to the forearms and the index finger prove that the victim tried to defend herself. In the autopsy record there is a drawn figure of a kitchen knife with a rounded blade tip, which explains the absence of stab wounds to the skull, and the presence of the impression skull fractures and crushed skull bones. It was concluded that the death occurred due to exsanguination, in turn due to transection of the left carotid artery, probably caused by sharp force, while the manner of death was homicide. Some of the most prominent autopsy findings were multiple mutilating overkill sharp force injuries, localized on the head, indicated sexually motivated murder.

Conclusion Combining the museum specimen, diagrams with injuries, drawn figure of the kitchen knife used, and photographs taken during the autopsy and the police investigation, Professor Milovanović was able to properly illustrate this intriguing case to students without a computer or a PowerPoint presentation.

Keywords: forensic medicine; sharp force injury; multiple injuries; homicide; overkill; sexually motivated murder

*A maiden with many wooers
often chooses the worst.*

INTRODUCTION

The Institute of Forensic Medicine was founded by Professor Milovan Milovanović (1884–1948) in 1923 as part of School of Medicine of the University of Belgrade. Professor Milovanović also established a small forensic museum as part of the Institute, as well as the archive, which has been in the possession of the majority of the Institute's forensic autopsy records since 1920. Some records are missing due to the military occupation of Belgrade during the Second World War. Fortunately, an autopsy report is existent for this museum exhibit.

Professor Milovanović founded the Institute's library as well, with its collection of approximately 1,300 textbooks. In addition to several medical textbooks, he published as much as 48 papers in Serbian, German and French medical journals [1].

This paper illustrates the way Professor Milovanović was able to shape all of the aforementioned into a teaching aid for student education.

CASE REPORT

Museum reference

Museum specimen No. 566 is a jar containing skin and subcutaneous tissue removed from the head and neck, marked as, "L No. 834, M No. 566, Vulnera lacera et puncta. Homicidium. Date: July 26, 1931," (Figures 1 and 2). The case has been identified in the record-keeping journal as forensic case No. 246.

Case history

The heading of the autopsy record contains lines handwritten by Professor Milovanović (Figure 3), as he would commonly collect data from the police and relatives. In this case he noted that the deceased woman was a maid

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Figure 1. Label of the museum specimen M No. 566, from the year 1931

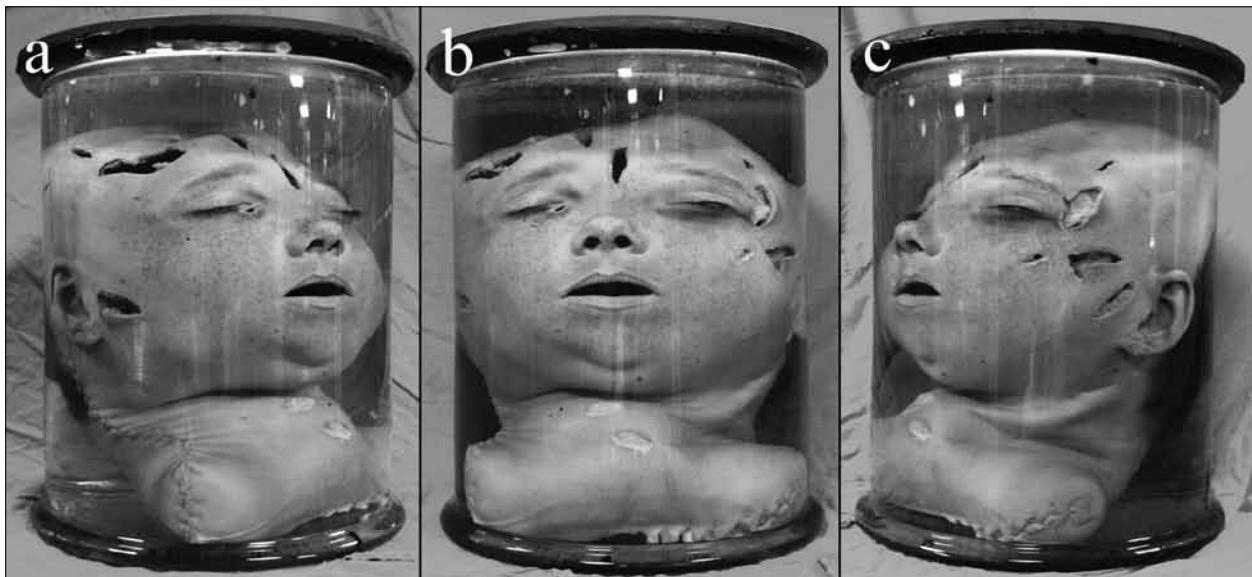


Figure 2. Museum specimen M No 566. a) The right-side aspect of the specimen; b) The frontal aspect of the specimen; c) The left-side aspect of the specimen

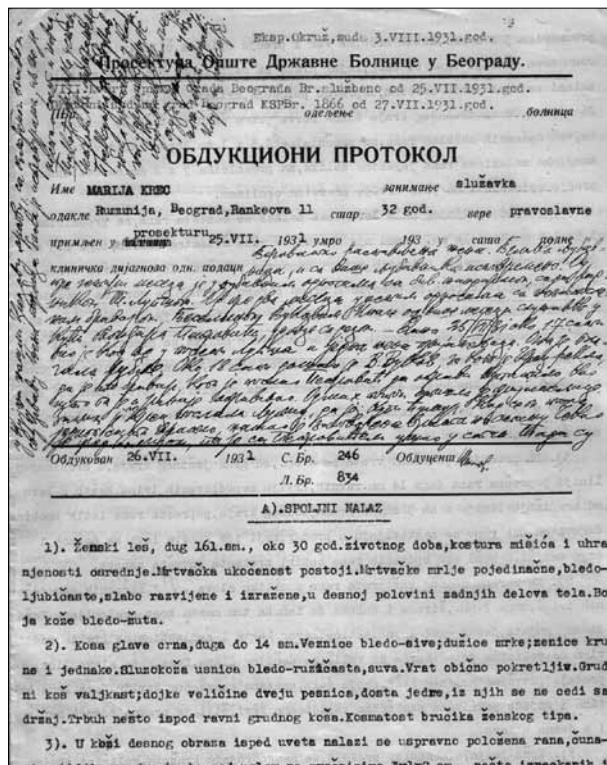


Figure 3. The first page of the original autopsy report for forensic case No. 246 from 1931

with a wealthy merchant, a widower with two little children. She was a woman of "dubious morals", with three wooers at the same time. Professor Milovanović performed the autopsy a day after the body was found.

Politika, the most popular daily newspaper in Serbia at the time, published an article with a photograph of the deceased and an intriguing text about a wealthy widower, his poor maid, and her three lovers (Figure 4) [2]. As usual, the journalist knew more about the event than the police did. The body was found on the kitchen floor, lying on its back in a pool of blood. The blood traces and drops

were all over the kitchen walls and furniture. "The iron on the table was still steaming." Even today, we can see a police photograph taken at the scene, framed together with several photos of the deceased taken during the autopsy (Figure 5). Professor Milovanović put them together to illustrate the case to students.

Autopsy findings

"Female, length of the body 161 cm, age of about 30 years..." There were five more or less regular wounds on the right side of the head, one below the right eye, two in the middle part of the forehead, and five on the left side of the head. There were two wounds on the anterior part of the neck and four excoriations, three of which were longitudinal and parallel. There was a wound on the right index finger with a broken bone, as well numerous bruises on the forearms. Skull bones were with "multiple impression fractures ... crushed," and "right frontal brain lobe with multiple contusions." The left carotid artery was "completely cut off." All internal organs were anemic, with regular size and structure, and without injuries. There was no blood aspiration. There were "5 pro mille of ethanol in the gastric contents and 0.9 pro mille in the urine." There were no spermatozoa in the vaginal discharge.

All external injuries are still clearly visible in the museum specimen, and could be compared with the photographs taken during autopsy. The autopsy record also includes two diagrams of the head and two of the skull (Figure 6). Professor Milovanović marked the wounds and the fracture lines to make the reconstruction of the injuries easier.

Cause of death

Professor Milovanović concluded that death occurred due to exsanguination, in turn due to transection of the left



Figure 5. Black-and-white photographs of the deceased woman taken during the police investigation and autopsy, combined to illustrate the case to students

carotid artery. He stated that the wounds were probably caused by sharp force, but he could not exclude that some of them might be due to blunt force. The manner of death was homicide. On the margins of the autopsy record he had written that the deceased was injured by a knife, or with "brass knuckles, crowbar or monkey wrench": after the autopsy he was, obviously, not sure.

DISCUSSION

The use of sharp force is the most frequent method of homicide. The perpetrators are usually younger males. Usually the perpetrator and the victim know each other [3, 4] and are usually closely or intimately related, and in the absence of psychiatric disorder in the assailant, the motive is of a passionate type [4, 5]. Most frequently the death scene is the victim's home [3, 4]. This applies especially to the constellation of a female victim and a male perpetrator [3]. While a large number of wounds usually suggest the involvement of another person, this may not always be the case [6-9]. Multiple mutilating injuries localized only on the head and neck are typical for homicides [4, 5] (Figures 2, 5 and 6) and indicate the victim's closer relationship with the offender [10].

The most frequently used object is a knife, but the shape of a wound does not necessarily provide information as to the weapon used [3]. Differences in wound morphology are mainly the result of the dynamics of the fight, and not so much a consequence of the shape of the knife [3]. Depending on the instrument used and the course of movements, a combination of stab and incised wounds may be seen [11]. If the victim moves at the moment the knife penetrates, the stab wound may demonstrate a large dovetail defect [11]. Langer's lines can also influence the appearance of a wound [12, 13]. The extent of gaping will depend on the anatomical situation, and whether the axis of the stab is in line with or across the tension of Langer's lines or underlying muscle bundles [14] (Figures 2, 5 and 6). Therefore, sometimes it can be difficult to establish how many different injury objects were used.

Depending on the force of the stabbing action and the stability of the instrument used, fractures to the face and skull, piercing stab wounds to the skullcap and impression fractures (Figure 6), or even punctures involving fractures to the skullcap are possible [11].

Passive defense injuries may occur when the victim raises hands for protection, and preferential sites are forearms [3, 11]. These prove that the victim was conscious and able to ward off the assault to a certain degree [3].

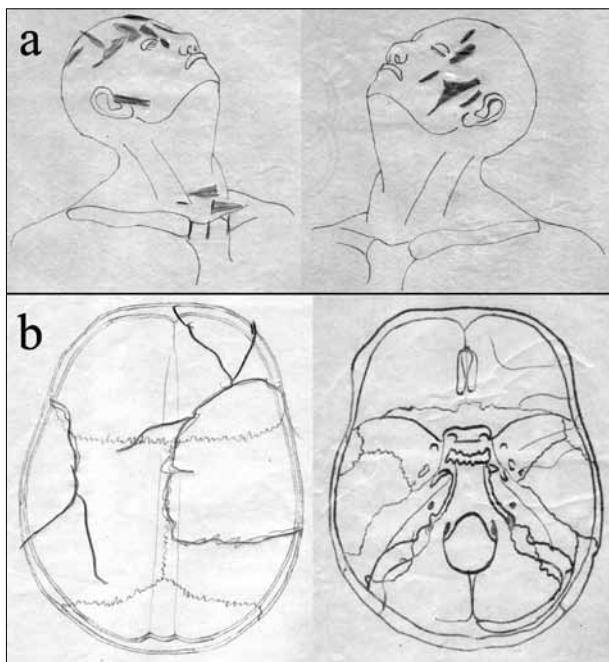


Figure 6. a) The two diagrams of the right and left aspect of the head with marked wounds; b) Two diagrams of the vertex and the base of the skull with marked fracture lines

The term “overkill” refers to the infliction of massive injuries by a perpetrator by far exceeding the extent necessary to kill the victim. Overkill indicates that the offender was in a state of strong excitement, especially in sexually motivated homicides [3], as in the case presented here. The absence of blood aspiration despite skull base fractures (Figure 6) supports such assumption.

In all cases of stab wounds, the pattern of injury, i.e. length of the wound track, length of the stab wound, possible blade marks, sharpness of the blade, and serrated edges, need to be compared where possible with a crime instrument [11].

The most frequent cause of death in homicides perpetrated by sharp force is exsanguination because of injuries of major vessels [3].

In the case presented here, there were multiple mutilating overkill sharp force injuries localized on the head, indicating sexually motivated murder. Injuries to the forearms and the index finger (Figure 5) prove that the victim tried to defend herself. The irregular shape of the head wounds (Figure 2) with absence of the piercing stab wounds to the skull or bone incision marks, on the one hand, and the presence of the impression skull fractures (Figure 6), on the other hand, implied the use of a blunt force object as well, i.e. brass knuckles, a crowbar or a monkey wrench. But it seems that the police investigation revealed what was the object used for the murder. In the autopsy record, there is a drawn figure of "the kitchen knife in life-size used for murder" (Figure 7). The knife was with a rounded blade tip (such as a bread knife): the length, width and

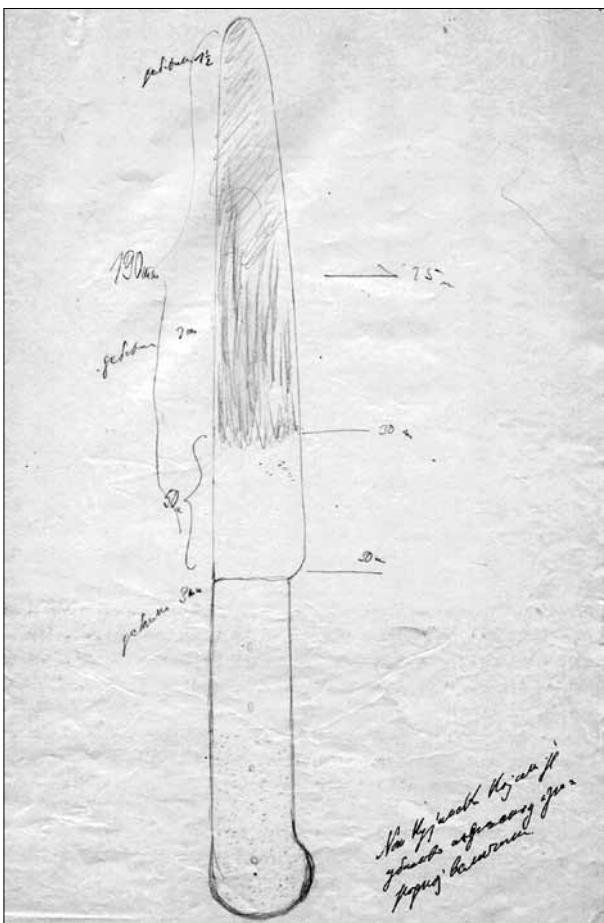


Figure 7. Life-size drawing of the kitchen knife used to inflict injuries, with measurements

thickness of the blade are clearly marked in the figure. Rounded blade tip explains the absence of stab wounds to the skull, and the presence of the impression skull fractures and crushed skull bones.

CONCLUSION

Combining the museum specimen, diagrams with injuries, drawn figure of the kitchen knife used, and photographs taken during the autopsy and the police investigation, Professor Milovanović was able to properly illustrate this intriguing case to students without a computer or a PowerPoint presentation.

Two is company, three is a crowd.
Four is hiding a murderer.

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Вишеструке убодине и секотине главе – злочин из страсти

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КРАТАК САДРЖАЈ

Увод Професор Милован Миловановић (1884–1948) био је 1923. године формални оснивач Института за судску медицину Медицинског факултета Универзитета у Београду. У оквиру Института он је основао и малу медицинску фorenичку колекцију, која је касније прерасла у скоро прави музеј. Професор Миловановић је користио медицинске препарate из колекције као једно од помоћних средстава у настави на факултету. Приказујемо један његов занимљив случај – злочина из страсти – из 1931. године.

Приказ случаја Жртва је била млада жена, која је нађена са више секотина и убодина у пределу главе, врата и руку. Она је била служавка у једној богатој трговачкој кући. Иначе, била је „сумњивог морала“ и у емотивно вези с три мушкарца, практично истовремено. У обдукционом протоколу налазио се и цртеж ножа којим је ова жена убијена. Овај кухињски

нож имао је туп врх, што је објашњавало зашто на костима лобање жртве није било пробоја, већ само утиснутих вишеструких прелома. Узрок смрти био је искрварење из пресечених крвних судова врата. У обдукционом налазу описано је више одбрамбених повреда на рукама жртве, као и више повреда главе нанесених жртви после њене смрти, што је све указивало на то да је реч била о тзв. злочину из страсти. **Закључак** Спајајући међусобно препарат из музејске колекције, схеме региона тела с уцртаним повредама, цртеж предметног повредног оруђа и фотографије снимљене током увиђаја и обдукције, професор Миловановић је могао својевремено да прикаже овај интересантан случај студентима медицине на прави начин и без данашњих техничких помагала, компјутера и компјутерских презентација. **Кључне речи:** судска медицина; убодине; секотине; вишеструке повреде; убиство из страсти

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