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CASE REPORT / ПРИКАЗ БОЛЕСНИКА

An unperformed autopsy does not exclude the possibility of proving a physician's error

Slađana Anđelić
Municipal Institution for Emergency Medical Care, Belgrade, Serbia

SUMMARY
Introduction/Objective Clarifying cases involving suspicious natural death and all forensic problems connected to such cases is possible only with the aid of a timely and adequately performed autopsy. The objective of this paper, however, is to point out the fact that it is possible to prove the existence of a physician's error, even when an autopsy had not been performed.
Case report The Emergency Medical Service (EMS) team had been dispatched to respond to a call for help by a 53-year-old woman, complaining of chest pain, shortness of breath, and dizziness. The pain was located in the center of her chest and would increase in response to palpation, change of body position, and deep breathing. The physical examination was normal. The EMS physician concluded that it was not necessary to perform electrocardiography (ECG). Forty minutes later, the EMS team was dispatched to see the same patient again, this time for suspected cardiac arrest. Protocol-based cardiopulmonary resuscitation (CPR) for asystole was performed, without success. After 30 minutes, CPR was discontinued and the patient was declared deceased. Although the patient's relatives did not allow an autopsy to be performed, they did send a claim to the Health Inspector at the Ministry of Health of Serbia, demanding an internal review of the physician's professional work. It was concluded that the physician should have performed ECG, but that the true cause of death could only have been determined through a timely and adequately performed autopsy.
Conclusion An unperformed autopsy does not exclude the possibility of proving a physician's error.
Keywords: absence; evidence; autopsy; physician's error

INTRODUCTION

A physician's error is defined by the Law on Health Care of the Republic of Serbia, Article 186, Paragraph 1 [1]. According to the Law, a professional error implies unconscientious treatment, neglecting of professional duties in providing healthcare, failure to comply with defined rules and professional skills in providing healthcare which leads to injury, damage, deterioration of health or loss of body parts in a patient. [1]. This legal norm represents the basis for assessment of possible ethical and legal responsibilities of doctors whose errors had caused a worsening in patients' health or lethal outcomes. In Germany, the Robert Koch Institute proclaimed that 40,000 complaints on suspected physician's errors are made yearly and that of those more than 12,000 remain unconfirmed. They also concluded that more people are affected by physician's errors than by traffic accidents each year [2, 3]. Researchers in the USA concluded in the year 2000 that 44,000–98,000 patients die annually as a result of physicians' errors [4, 5].

The only way to truly discover the manner and cause of sudden death is through autopsy findings [6]. In cases where a person had asked for medical help, which was then followed by a lethal outcome, a question is sometimes put forward whether the physician had done everything, diagnostically and therapeutically, that was within his power and in accordance with the principles of modern medical science and practice [7, 8]. Accordingly, it is possible to initiate a criminal justice procedure for the criminal offence of medical malpractice (Article 251 of the Criminal Code of the Republic of Serbia). Clarifying cases involving suspicious natural death and solving forensic problems connected with such cases is possible only with the aid of a timely and adequately performed autopsy [9]. However, if an autopsy had not been performed, that does not necessarily testify that a medical error did not exist [10]. In such cases, the judicial decision is mostly based on forensic evaluation, and the duration of the judicial process and correctness of the verdict mostly depend on the quality of performed medical expertise [11].

The objective of the paper is to point out that even if an autopsy had not been performed, there are still possibilities to prove that a physician's error did occur.

CASE REPORT

The Emergency Medical Service (EMS) team was dispatched at 2:40 p.m. to respond to a call for help by a 53-year-old woman, suffering from asthma, chronic gastritis, and cholecystitis. On team arrival, the patient was conscious, alert and oriented. She complained of chest pain, shortness of breath, and dizziness. Her pain was located in the center of her chest

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Correspondence to:
Slađana ANĐELIĆ
Municipal Institution for Emergency Medical Care
Franše d`Eperea 5
11000 Belgrade
Serbia
novizivot94@gmail.com

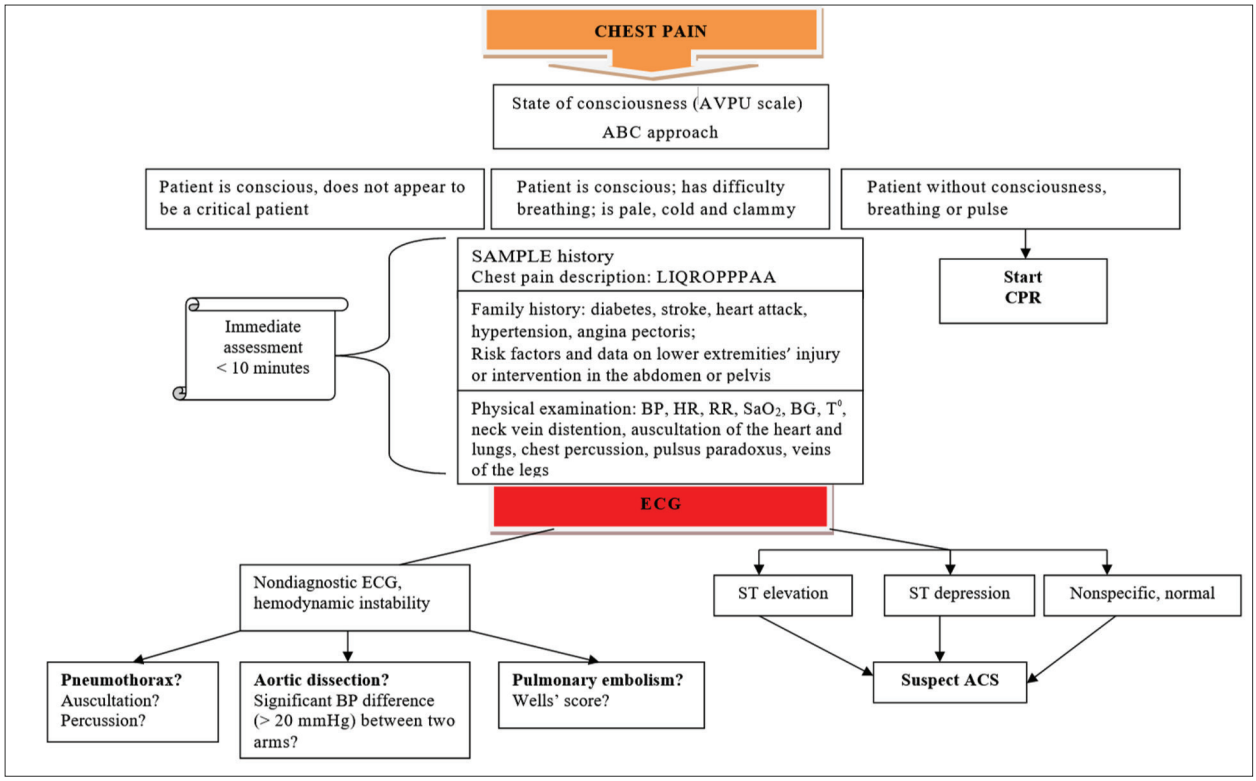

Figure 1. Prehospital assessment of chest pain; AVPU (A – alert; V – verbal response; P – response to pain; U – unresponsive); ABC (A – airway, B – breathing, C – circulation); SAMPLE [S – signs/symptoms, A – allergies, M – medications, P – past illnesses, L – last oral intake (last menstrual cycle), E – events leading up to present illness]; LIQROPPPAA [L – location, I – intensity (on the scale 0–10), Q – quality, R – region and radiation, O – onset, P – precipitation events, P – progression, P – previous episodes, A – alleviating factors, A – aggravating factors]; BP – blood pressure; HR – heart rhythm; RR – respiratory rate; SaO_2 – oxygen saturation

and would increase in response to palpation, change of body position and deep breathing. The patient was of unchanged skin color, afebrile, eupneic, normofrequent (pulse 88 beats/minute) and normotensive (BP 130/80 mmHg). On auscultation, her heart was of regular rate and rhythm, with normal S1 and S2, without murmurs, rubs, or gallops. Her breath sounds were diffusely decreased bilaterally with prolonged expirium, without crackles, rhonchi, or wheezes. Her abdomen was soft, non-tender and non-distended, with normoactive bowel sounds and without hepatosplenomegaly. Her extremities were symmetric in appearance with preserved motor and sensory function, without deformities or edema. Neurological findings were within normal limits. Based on many years of experience, the physician evaluated that it was not necessary to perform an electrocardiogram (ECG). The patient was treated with intramuscular injections of diclofenac and dexasone and advised to call the EMS again should her condition deteriorate. They left at 3:10 p.m. At 3:46 p.m. the EMS team was dispatched to the same address again, this time to deal with a suspected cardiac arrest. The patient was now unconscious, not breathing, and had no pulse. The defibrillator monitor presented asystole. Cardiopulmonary resuscitation (CPR) was performed adhering to non-shockable rhythm protocol, but it was unsuccessful. At 4:05 pm, CPR was discontinued and the patient was declared deceased.

At the time, the patient's family did not allow an autopsy, but later they did send a claim to the Healthcare Inspector at the Ministry of Health of the Republic of Serbia demanding an internal review of the physician's professional work. Complete documentation was analyzed: the order for review issued by the Healthcare Inspector, the complaint of the patient's family, transcripts of the recorded conversation with the EMS 194 Dispatch Center, the physician's reports, the physician's statement and the statement given by the Head EMS Technician in charge of equipment, who testified that the EMS team were in possession of all the necessary equipment to perform an ECG and that the equipment was in working order. It was concluded that the physician should have performed an ECG, but that the true cause of death remains unknown since the autopsy had not been performed.

DISCUSSION

Physician's errors are defined by the Criminal Code (CC) of the Republic of Serbia under the heading of Medical Malpractice (CC, Article 251) [12]. According to this CC article, "a doctor who in providing medical services uses an evidently inadequate means or an evidently unsuitable treatment or fails to observe appropriate hygiene standards or evidently proceeds unconscientiously and thereby causes deterioration of a person's health, shall be punished by imprisonment of three months to three years." "Evidently inadequate means or evidently unsuit-

able treatment" covers anything that the physician might have done or not done that is drastically contrary to the generally accepted contemporary principles of medical science and practice, in other words all that represents a cardinal mistake which falls outside the frame of medical tolerance [13]. As chest pain can signify an urgent medical condition, according to the contemporary guidelines for healthcare of patients with chest pain, a 12-channel ECG (Figure 1) is the most significant method for reaching the true diagnosis and applying adequate therapy [14].

The charge of medical malpractice can also be put forward in cases when an undiagnosed disease results in lethal outcome at a hospital, particularly when it is estimated that the death could have been prevented by using timely and adequate therapeutic measures. Inability to reach a correct diagnosis can sometimes be the consequence of non-specific clinical features of the disease or it can be the result of the physician's failure to correctly interpret the patient's complaints [15]. However, it is most commonly the case of failing to apply all the necessary diagnostic procedures available (ECG in this case) in order to make a specific diagnosis. Pejaković [9] states that superficiality and incompleteness are elements of medical negligence. On the other hand, even when the physician had obviously acted with negligence, a deterioration in the patient's health could occur for completely different reasons, for example an unrelated undiagnosed disease, etc. It can also happen that the deterioration of the patient's health occurred only partially due to the physician's error and partially as a result of some other causes that were not influenced by the physician's incorrect diagnosis or treatment. It is very difficult to determine to what extent the deterioration in the patient's health was influenced by the physician's error and to what extent by other factors [10]. All these and other circumstances must undergo evaluation and if criminal responsibility is to be sought, undeniable proof must be found.

According to an earlier analysis of legal records, it was discovered that out of 147 cases in which patients had died, which underwent analysis for suspected medical malpractice, autopsy was performed in only 36% [10]. Bove and Iery [16] found that information gained as a result of an autopsy can be helpful to either the plaintiff or the defendant or can even be neutral in a given case. Especially noteworthy is the finding that in 61% of all the cases in which the reviewers concluded that the information provided by the autopsy favored the plaintiff, the defendant was none the less acquitted of the charge of medical malpractice. Conversely, in 100% of all the cases in which reviewers thought that the autopsy findings favored the defense, the defendants were acquitted.

The definitive judgement on the presence or absence of the criminal act of medical malpractice is made by the court. Occasionally, due to insufficient evidence or being subject to the statute of limitations, the public prosecutor can abandon criminal pursuit of the physician [11].

In the presented case, an error was made to accept the request of the relatives and no autopsy had been performed. It should be emphasized that the will of the members of the deceased's family has no bearing on the decision to perform an autopsy, regardless of whether it is a medico-legal or clinical autopsy. Unfortunately, our current medical practice has often acted contrary to the regulations, because doctors unjustifiably decided that, on the basis of a personally signed request by one of the family members, a clinical autopsy would not be performed. Namely, there was an erroneous presumption that family members cannot forbid a medico-legal autopsy, but do have the right to ban a clinical autopsy, which is not at all true. In other words, according to current legal provisions, the family of the deceased has no legal right to suspend an autopsy if it is indicated by medical and/or legal criteria.

According to legal regulations in Serbia, each deceased is to be examined by a medical doctor, who is to determine the time and cause of death (Law on Health Care of the Republic of Serbia, Article 203, Paragraphs 1 and 2) [1]. The said medical doctor is obligated to immediately contact the police should he not be able to determine the cause of death based on available medical records, as described by the Law on Health Care of the Republic of Serbia, Article 204, Paragraph 1. [1]. The police would then notify the public prosecutor, whose obligation it is to determine the need for an autopsy. According to the Law on Health Care of the Republic of Serbia, Article 206, Paragraph 2, an autopsy should be obligatorily performed at the request of a member of the immediate family of the deceased person or if a death occurs in the course of a diagnostic or therapeutic procedure or even after the procedure if there is reason to believe that the death occurred in connection with the said procedure [1].

The family refused to allow an autopsy to be performed, but later put in a request for a review of the physician's performance to the Health Inspector at the Ministry of Health. Since only a timely and adequately performed autopsy can determine the cause of death, as well as the elements of alleged medical malpractice as described in Article 251 of the CC of Serbia, the fact that the autopsy had not been performed ruled out the possibility of proving a cause and effect relationship between the actions of the physician and the deterioration of health of the deceased [17]. Therefore, the physician in question could not be charged with a crime.

However, through analysis of all available documentation, it was possible to determine that the physician had not complied with generally accepted contemporary guidelines of medical science and practice in diagnosis and treatment of chest pain, which state that a 12-channel ECG (Figure 1) is the most significant method for making the right diagnosis and applying adequate treatment when dealing with chest pain.

Therefore, on the basis of medical records and other collected evidence, it was possible to conclude that this was a case of a physician's error, even though the autopsy had not been performed and it was not indisputably proven that this error had anything to do with the patient's deterioration of health and ultimately death.

Conflict of interest: None declared.

REFERENCES

1. Law on Health Care of the Republic of Serbia. (Official Gazette of the Republic of Serbia No. 25/2019). (Serbian)
2. Počuča M, Šarkić N, Mrvić-Petrović N. Medical error as a basis for legal responsibility of physicians and health facilities. Vojnosanit Pregl. 2013; 70(2):207–14.
3. Schröder B. Meine Rechte als Patient – Was Patienten heute wissen sollten. Berlin: Verlag Logos; 2004.
4. Bates DW, Singh H. Two Decades Since To Err Is Human: An Assessment Of Progress And Emerging Priorities In Patient Safety. Health Aff (Millwood). 2018; 37(11):1736–43.
5. Kohn LT, Corrigan JM, Donaldson MS. To Err Is Human: Building a Safer Health System. Washington: National Academy Press; 1999.
6. Basso C, Aguilera B, Banner J, Cohle S, d'Amati G, de Gouveia RH, et al. Association for European Cardiovascular Pathology. Guidelines for autopsy investigation of sudden cardiac death: 2017 update from the Association for European Cardiovascular Pathology. Virchows Arch. 2017; 471(6):691–705.
7. Raveesh BN, Nayak RB, Kumbar SF. Preventing medico-legal issues in clinical practice. Ann Indian Acad Neurol. 2016; 19(Suppl 1):S15–S20.
8. Stepić D. Krivična odgovornost lekara za nesavesno pružanje lekarske pomoći. Strani pravni život. 2009; 2:189–214. (Serbian)
9. Pejaković S. Sudskomedicinska ekspertiza i lekarska greška pred društvom i sudom. Beograd: Naučna knjiga; 1991. (Serbian)
10. Buja LM, Barth RF, Krueger GR, Brodsky SV, Hunter RL. The Importance of the Autopsy in Medicine: Perspectives of Pathology Colleagues. Acad Pathol. 2019; 6:2374289519834041.
11. Savic S. Forensic medicine – textbook for medical students. Belgrade: School of Medicine, University of Belgrade; 2002.
12. Criminal Code of the Republic of Serbia (Official Gazette of RS, Nos. 85/2005, 88/2005, 107/2005, amended 2012). (English)
13. Savić S. Krivična dela u vezi sa obavljanjem lekarske delatnosti. NČ urgent med HALO 94. 2010; 16(2):54–65. (Serbian)
14. Hoorweg BBN, Willemsen RTA, Cleef LE, Boogaerts T, Buntinx F, Glatz JF, et al. Frequency of chest pain in primary care, diagnostic tests performed and final diagnoses. Heart. 2017; 103(21):1727–32.
15. Savic S, Pavlekic S, Alempijevic Dj, Jecmenica D. Death Caused by Heat Stroke: Case Report. Srp Arh Celok Lek. 2014; 142(5–6):360–4. (Serbian)
16. Bove KE, Iery C; Autopsy Committee, College of American Pathologists. The role of the autopsy in medical malpractice cases, I: a review of 99 appeals court decisions. Arch Pathol Lab Med. 2002; 126(9):1023–31.
17. Law on Health Care ceased to apply (Official Gazette of the Republic of Serbia, no.107/2005, 72/2009 – other law, 88/2010, 99/2010, 57/2011, 119/2012, 45/2013 – other law, 93/2014, 96/2015, 106/2015, 113/2017 – other law, and 105/2017 – other law). (Serbian)

Неизвршена обдукција не искључује могућност доказивања лекарске грешке

Слађана Анђелић

Градски завод за хитну медицинску помоћ, Београд, Србија

САЖЕТАК

Увод/Циљ Разјашњење случајева нејасне природне смрти и решавање свих судскомедицинских проблема у вези са тим случајевима могући су само на основу благовремено и адекватно извршене обдукције.

Циљ рада је да укаже на чињеницу да неизвршена обдукција не искључује могућност доказивања лекарске грешке.

Приказ болесника Екипа хитне медицинске помоћи упућена је на интервенцију код болеснице старе 53 године због бола у грудима, отежаног дисања и несвестице. Бол је био локализован у средњем делу грудне кости, појачавао се на додир, при промени положаја тела и са дубоким дисањем. Физикални налаз по системима је био уредан. Лекар хитне медицинске помоћи је проценио да не треба урадити ЕКГ. После 40 минута екипа је поново била упућена код ове болеснице због сумње да је дошло до срчаног застоја. Кардиопулмонална реанимација спроведена по протоколу за асистолију била је безуспешна, те је после 30 минута проглашен смртни исход. Иако породица није дозволила обдукцију, поднела је жалбу Министарству здравља Србије, које је одредило унутрашњу проверу квалитета стручног рада доктора. Закључено је да је требало да лекар уради ЕКГ, али да је једино обдукцијом могао бити утврђен прави узрок смрти.

Закључак Неизвршена аутопсија свакако није доказ непостојања лекарске грешке.

Кључне речи: одсуство; доказ; обдукција; лекарска грешка