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Absence of autopsy evidence is not absence of medical error

Одсуство аутопсијских доказа није доказ непостојања лекарске грешке

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SUMMARY

Introduction Solving cases with unclear natural death and solving all forensic medicine problems connected with such cases is possible only based on timely and adequately performed autopsy.

The aim of the paper is to point out the fact that the absence of evidence at autopsy is not the evidence of absent medical error.

Case report Emergency medical team (EMS) was dispatched for intervention of a younger patient with chest pain, shortness of breath and dizziness. The pain was localized in the center of the chest, increasing on touch, on change of body position and with deep breathing. A detailed overview was made. Based on extensive experience, the physician evaluated that it is not necessary to perform ECG. After 40 minutes, the EMS team was again dispatched to the patient due to suspected cardiac arrest. CPR performed according to the protocol for non-shockable rhythm arrest was 30 minutes, death unsuccessful. After pronounced. The patient's next of kin have sent an appeal to the Ministry of Health of Serbia which demanded an internal evaluation of the physician's expert work. It was concluded that the physician should have performed ECG, and that only an autopsy can determine the true cause of death. The family did not allow the autopsy. After a two-year process, the First Instance of the Court of Honor of the Serbian Medical Chamber declined criminal pursuit due to the fact that the statute of limitations had expired.

Conclusion Unperformed autopsy certainly is not evidence of the nonexistence of medical error.

Keywords: absence; evidence; autopsy; medical error

Сажетак

Увод Разјашњење случајева нејасне природне смрти и решавање свих судско-медицинских проблема у вези са тим случајевима могуће је само на основу благовремено и адекватно извршене аутопсије.

Циљ рада је да укаже на чињеницу да неизвршена судско-медицинска обдукција није доказ непостојања лекарске грешке

Приказ болесника Екипа хитне медицинске помоћи (ХМП) упућена је на интервенцију код млађег пацијента због бола у грудима, отежаног дисања и несвестице. Бол је локализован у средњем делу грудне кости, појачава се на додир, при промени положаја тела и са дубоким дисањем. Физикални налаз по системима је био уредан. основу дугогодишњег Лекар на процењује да ЕКГ не треба урадити. Након 40 минута, екипа поново бива упућена код овог пацијента због сумње да је дошло до срчаног застоја. КПР је спроведена по протоколу за овај ритам ареста. Након 30 мин. проглашена је смрт. Родбина подноси жалбу Министарству здравља Србије која належа унутрашња провера квалитета стручног рада доктора. Закључено је да је лекар требао да уради ЕКГ а да би једино аутопсија утврдила прави узрок смрти. Породица није дозволила обдукцију. Првостепени суд части Лекарске коморе је након двогодишњег процеса одустало од кривичног гоњења због застарелости предмета.

Закључак Неизвршена аутопсија свакако да није доказ непостојања лекарске грешке.

Кључне речи: одсуство, доказ, аутопсија, медицинска грешка

INTRODUCTION

The definition of medical error is contained in the chapter 3 of the Act 107 of the Republic of Serbia Healthcare Law [1]. Thus, according to this Act, the expert error implies conscientious treatment, i.e. neglecting of professional duties in providing healthcare, i.e. failure to comply with defined rules and professional skills in the provision of healthcare that leads to breaching, worsening, injury or damaging of health or parts of the patient's body [1]. This legal norm is the basis in the assessment of possible ethical but also legal responsibility of the doctor whose error has caused disordered patient's health or lethal outcome. There are

no data on physicians' errors in the world. In Germany, 40.000 complaints are made on the physician's error, among which 12.000 remain unconfirmed [2]. In the USA it is considered that from 44.000 to 98.000 patients die annually due to the physician's error [3].

A reliable disclosure the origin and cause of prehospital sudden death is possible exclusively based on the autopsy finding [4]. In cases where the person has turned to a physician which was followed by lethal outcome, sometimes a question is put whether the physician has done all, diagnostically and therapeutically, that is within his power in accordance with the principles of the modern medical science and practice [5,6]. Accordingly, it is possible to start a criminal justice process for criminal offence of neglect or ill-treatment of the patient. Solving the cases of unclear natural death and clarifying all forensic medical problems is possible only based on timely and adequately performed autopsy [7]. Non-performed autopsy is not the evidence of non-existent physician's error. As judicial decision in such cases is mostly based on forensic medical examination, the duration of judicial process and whether the judicial decision will be correct mostly depends on the quality of performed medical expertise [8].

The aim of the paper is to point at the fact the absence of evidence at autopsy is not the evidence of absent medical error.

CASE REPORT

Emergency medical service (EMS) team was dispatched for intervention of a younger patient with asthma, chronic gastritis and cholecystitis. On team arrival, the patient was conscious, alert and oriented. Of subjective problems the patient complained of chest pain, shortness of breath and loss of consciousness. The pain was localized in the center of the chest, increasing on touch, on change of body position and with deep breathing. The patient was of normal skin color, afebrile eupnoic, normofrequent (pulse 88/min) and normotensive (BP 130/80 mmHg). On auscultation, cardiac rhythm rhythmic, with clear tones and without murmurs. Breath sound weakened, vesicular, with prolonged expirium. On palpation, a soft abdomen, painless and without organomegaly were detected. Extremities without edema or deformities and with preserved motor and sensory function. Neurological findings were within normal limits. Based on a long-term experience, a physician evaluates that it is not necessary to perform ECG. Treatment with amp. diclofenac and dexason i.m. were

administered. The patient was advised to call EMS again in case of the deterioration of condition. After 40 min. the EMS team was again dispatched to the patient due to suspected recurrence of cardiac arrest. This time the patient has loss of consciousness, without breathing and pulse. Defibrillator monitor showed asystole. CPR performed according to the protocol for this rhythm arrest was unsuccessful. After 30 min. of CPR death was pronounced. Relatives of the patient have sent a complaint to the Ministry of Healthcare of Serbia which demanded an internal check-up of the physician's expert work so as to determine whether all available (diagnostic and therapeutic) measures had been applied in order to make an adequate prehospital diagnosis. It should have been precisely defined whether it was necessary to use ECG so as to accomplish the necessary diagnostics in accordance with the specified symptoms. All documentation was analyzed: the order issued by healthcare inspection, complaint by the patient's family, phonograph record transcripts of emergency dispatch center 110, physician's reports, physician's statement and the statement given by the head technician of healthcare service storage department. It was concluded that the physician should have performed ECG, and that the ECG apparatus was working properly, and that only an autopsy could have determined the true cause of death and the proper procedure performed by the physician. The family did not allow autopsy. After a twoyear process the Judicial Council of the First instance of the Court of Doctors Chamber declined criminal pursuit due to the obsoleteness of the case.

DISCUSSION

In numerous judicial processes in trial courts, the question of physician's responsibility due to errors and ness at work. The Criminal Law (CL) of the Republic of Serbia of 2005, in the group of "criminal acts against health against people and people's environment" also involves "physician's negligent aid" (CL, Article 231) [9]. According to this CL act, the physician who, when giving medical aid, evidently applies an inadequate method of treatment or evidently does not perform conscientiously thus causing a deterioration of the person's health condition is an offence punishable by imprisonment of 3-months to 3-years in a jail. The application of an evidently inadequate method of treatment implies all that in the physician's profession drastically contrary to the accepted, valid and generally accepted principles of medical science and practice, i.e. all that represents a visible mistake which falls outside the frame of medical tolerance [10]. As chest pain can be a prediction of emergent

condition, according to the up-to-date guidelines for healthcare of patients with chest pain, a 12-channel ECG (Figure 1) represents the most significant method in reaching the true diagnosis and applying a corresponding therapy [11].

The charge of physician's negligent aid is also possible in cases of undiagnosed disease at hospital that resulted in lethal outcome, particularly when there has been a possibility to prevent death of the patient by using timely and adequate therapeutic measures. Failing to pass a correct diagnosis, as in this patient, can be sometimes the consequence of non-specific clinical features of the disease, but on the other hand it can sometimes be the result of failure of the physician to correctly interpret the patient's complaints [12]. However, it is most often the result of failure to apply all necessary diagnostic procedures (ECG in this case) in order to make a specific diagnosis. Pejaković [7] states that the element of negligence is superficiality and incompleteness. On the other hand, although the physician has acted evidently with negligence, deterioration can occur, not due to such action of the physician's but because of some other reasons (for example, some other hidden disease, and similar). Also, it can happen that the deterioration of health condition has partially occurred due to a negligent action of the physician and partially due to some other reasons that could not have been fully influenced by an incorrect diagnosis, i.e. treatment. It is very difficult to determine to what measure is the influence of negligent action of the physician, and to what measure of other circumstances [8]. All these and other circumstances should undergo proving and be proved so as to determine legally criminal responsibility for negligent physician's aid applied on the patient.

In all cases where suspected death, as in this patient, occurred due to negligent procedure that can have characteristic of a criminal act, the investigating judge is obliged to issue forensic medical autopsy of the dead patient's body in accordance with Act 136 of the Criminal Procedure Law. However, the family of the patient refused autopsy. Without autopsy it is impossible to put forth the question of the physician's responsibility, even if the treatment outcome is unfavorable. But, it can neither be said that there is no physician's error. By an earlier analysis of legal records it was revealed that of 147 cases which underwent analysis of dead cases due to negligent treatment, autopsy was performed in only 36% of dead patients [8]. Bove and Iery [13] found that information from the autopsy can be helpful to either the plaintiff or defendant, or can be neutral in a given case. Especially noteworthy is finding that in 61% of all cases in which the reviewers concluded that information provided

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by the autopsy favored the plaintiff, the defendant physicians were acquitted of medical error.

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Conversely, in 100% of all cases in which reviewers thought that the autopsy findings

favored the defense, the defendants were acquitted. They have found little evidence that a

finding by a court for the plaintiff in a medical malpractice case is influenced by the existence

of an autopsy report in which a major discrepancy exists with the working clinical diagnosis.

On reflection, this should not be a surprise.

The definitive decision (judgement) on the presence, i.e. absence of criminal act of

negligent physician's aid is made by the court. Occasionally it happens that due to insufficient

proof or case obsoleteness, as in this case, the public plaintiff abandons criminal pursuit of

the physician [9].

However, absent elements of criminal responsibility in cases of unperformed autopsy

certainly does not imply that the confirmed physician's negligent act should not be guilty of a

certain professional responsibility [14], from socioeconomic disgrace up to the loss of license

for performing physician profession. It remains on the consciousness of each physician how

to diagnose and treat chest pain.

Only based on timely and adequately performed autopsy it is possible to confirm

whether the performed measures of diagnostics and treatment there are elements of criminal

act of negligent medical act or absent physician's aid. Certainly, absent autopsy is not the

evidence of absent medical error.

Conflict of interest: None declared.

REFERENCES

- 1. Official Gazette of the Republic of Serbia No. 107/05,109/05, 72/09, 88/10, 99/10, 57/11. (Serbian)
- 2. Schröder B. Meine Rechte als Patient Was Patienten heute wis-sen sollten. Berlin: Verlag Logos; 2004.
- 3. Kohn LT, Corrigan JM, Donaldson MS (Eds). Institute of Medicine (US) Committee on Quality of Health Care in America; To Err is Human: Building a Safer Health System. Washington (DC): National Academies Press (US) 2000
- 4. Aljinović J, Novak K, Mirić L, Grandić L, Kunac N, Pisac VP. The epidemiology of non-traumatic prehospital sudden death in Split-Dalmatia County. Coll. Antropol. 2013;37(4):1127–31.
- 5. Ćirić J. Nesavesno lečenje bolesnika: problemi utvrđivanja krivične odgovornosti lekara. Pravni život. 1995; 9(4):211–22.(Serbian)
- 6. Stepić D. Krivična odgovornost lekara za nesavesno pružanje lekarske pomoći. Strani pravni život.2009; 2:189–214.(Serbian).
- 7. Pejaković S. Sudskomedicinska ekspertiza i lekarska greška pred društvom i sudom. Beograd: Naučna knjiga, 1991.(Serbian)
- 8. Savic S. Forensic medicine textbook for medical students. Belgrade: School of Medicine, University of Belgrade; 2002.
- 9. Krivični zakonik Republike Srbije. ("Sl. glasnik RS", br. 85/2005, 88/2005 ispr., 107/2005 ispr., 72/2009, 111/2009, 121/2012, 104/2013 i 108/2014).(Serbian).
- 10. Savić S. Krivična dela u vezi sa obavljanjem lekarske delatnosti. NČ urgent med HALO 94. 2010 Aug; 16(2):54–65.(Serbian)
- 11. Erhardt L, Herlitz J, Bossaert L, Halinen M, Keltai M, Koster R, et al.Task force on the management of chest pain. Task force on the management of chest pain. European Heart Journal. 2002;23:1153–76. doi:10.1053/euhj.2002.3194.
- 12. 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)
- 13. Bove K, and Iery C. The Role of the Autopsy in Medical Malpractice Cases, I. Arch Pathol Lab Med, 2002; 126(9):1023–31.
- 14. 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. (Serbian) DOI: 10.2298/VSP1302207P.

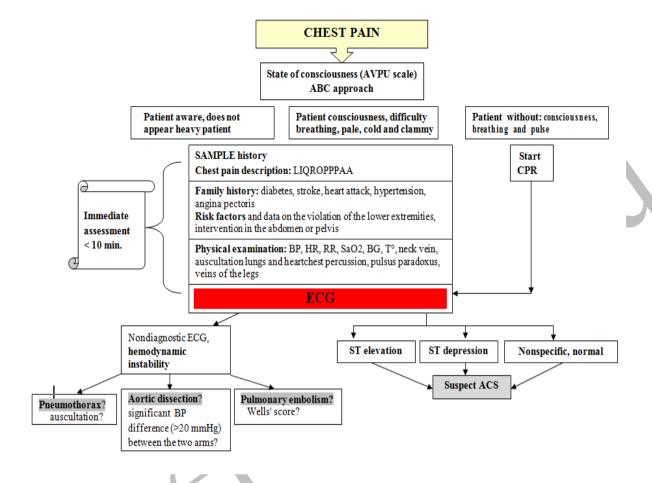


Figure 1. Prehospital assessment of chest pain

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 a 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; SaO₂ – oxygen saturation