

DOI: 10.15225/PNN.2018.7.1.6

Legal Determination of Brain Death — Polish Perspective

Prawne aspekty stwierdzenia śmierci mózgu — regulacje polskie

Jakub Mąkosa¹, Mariusz Wysokiński², Wiesław Fidecki², Kamil Kuszplak²

¹Solicitor's Office in Lublin, Poland

²Chair of Development in Nursing Medical University of Lublin, Poland

Abstract

The beginning of 2017 brought major changes in the legal norms concerning the declaration of permanent irreversible cessation of brain activity (brain death) and irreversible cardiac arrest before organ donation. The article presents changes that have occurred in this area and compares them with the previous regulations. As part of this study, a legal interpretation was also presented along with instructions on how to correctly apply the new regulations. (JNPN 2018;7(1):46–49)

Key Words: brain death, cardiac arrest, law

Streszczenie

Początek 2017 r. przyniósł duże zmiany w normach prawnych dotyczących stwierdzenia trwałego nieodwracalnego ustania czynności mózgu (śmierci mózgu) oraz nieodwracalnego zatrzymania krążenia poprzedzającego pobranie narządów. Artykuł przedstawia zmiany jakie zaszły w tym zakresie oraz porównuje je z poprzednio obowiązującymi przepisami. W ramach przedmiotowego opracowania została również przedstawiona interpretacja prawna wraz ze wskazówkami jak poprawnie stosować nowe przepisy. (PNN 2018;7(1):46–49)

Słowa kluczowe: śmierć mózgu, zatrzymanie krążenia, prawo

Introduction

The necessity of legal changes in the identification of permanent, irreversible cessation of brain function (brain death) and irreversible cardiac arrest prior to organ procurement has been repeatedly signalled by experts from the anaesthetist community. Correspondingly, the National Transplant Council, consisting of specialists in various fields of medicine and an advisory and opinion-making body of the ministry of health, pointed to the need for legislative changes. The new regulations are designed to change the social attitude to transplantation and create broader possibilities for the development of transplantology in the Republic of Poland.

Review

People have always struggled with death, they attempted to look for a way to define it and describe it.

Initially, the death of a human being was identified with the occurrence of clinical death, when circulating and breathing were not detectable [1]. One of the first definitions of brain death was established in 1959, in France. The definition introduced the term “coma dépassé”, meaning an irreversible deep coma, the so-called central nervous system death [2,3]. It was not until 1968 during the meeting of the World Medical Assembly that the “Communication on the subject of death” was announced, the so-called declaration of Sydney. The declaration replaced the term “death due to the cessation of cardiac function” with the word “cerebral death” [4].

In Poland, the legislator introduced the definition of cerebral death in 1984. The cerebral death was defined as the permanent termination of all integrative activities of the central nervous system with artificially sustained or spontaneous circulation and respiration [5].

Regulation of 26 June 1984 did not consider the application of the criterion of brain death in minors under

the age of ten. The Minister of Health's announcement of 9 August 1994 on the guidelines of the National Special Teams in the fields of anaesthesiology and intensive therapy, neuroscience, neurosurgery and forensic medicine regarding the criteria for brain death increased the age limit for the detection of cerebral death to the age of twelve [6].

Subsequent modifications were introduced by the Announcement of the Minister of Health and Social Welfare of 29 October 1996 on guidelines regarding the criteria for permanent and irreversible cessation of cerebral cortical function (brain death), which lowered the limit allowing the detection of cerebral death in newborns from the 7th day of life [7]. The Bill of 1 July 2005 on the Collection, Storage and Transplantation of Cells, Tissues and Organs in article 9 par. 1 introduced the definition of brain death as a permanent and irreversible cessation of brain function [8].

Act of 24 February 2017 amending the bill on professions of physician and dentist and the bill on the collection, storage and transplantation of cells, tissues and organs of the legislature abolished nearly entirely the article 9 and art. 9a of the act of 1 July 2005 on the procurement, storage and transplantation of cells, tissues and organs (Dz.U.2017.767).

Presently in art. 9 of the Act of 1 July 2005 on the collection, storage and transplantation of cells, tissues and organs (Dz.U.2017.767) remains only par. 6, which stipulates: "In the procedure involving the collection and transplantation of cells, tissues or organs from a deceased person, may not participate the physicians referred to in art. 43a par. 5 of the act of 5 December 1996 on the professions of a doctor and dentist, who concluded in the person permanent irreversible cessation of brain function (brain death)" [8].

The Act of 24 February 2017 on the amendment of the Act on the professions of doctor and dentist and the act on the collection, storage and transplantation of cells, tissues and organs annulled almost entirely art. 9 and art. 9a of the Act of 1 July 2005 on the collection, storage and transplantation of cells, tissues and organs (Dz.U.2017.767). Currently in art. 9 of the Act of 1 July 2005 on the collection, storage and transplantation of cells, tissues and organs (Dz.U.2017.767) remained only par. 6, providing: "In the procedure involving the collection and transplantation of cells, tissues or organs from a deceased person, may not take part the physicians referred to in art. 43a par. 5 of the Act of 5 December 1996 on the professions of a doctor and dentist, who concluded in this person permanent irreversible cessation of brain function (brain death) prior to organ retrieval" [8].

At the same time, the prerogative to determine the death of the brain or irreversible cardiac arrest has been included in art. 43a of the Act of 5 December 1996 on

the profession of doctor and dentist (further referred to as a.p.d.).

In accordance with Article 43a. a.p.d. concluding:

1. permanent irreversible cessation of brain function (brain death),
2. irreversible cardiac arrest prior to organs procurement after conducting proceedings by specialists in accordance with current medical knowledge, including the manner and criteria set by the minister of health [9].

According to the latest legislation, the determination of a permanent irreversible cessation of brain function is completed by two specialist doctors, and not, as it happened during the previous regulation by three specialist doctors; their opinion must be unanimous. Doctors of medicine concluding the death of the brain should complete a second degree of specialization or should already be a medical specialist. An additional requirement is the necessity of different specialties by doctors of medicine (MD) confirming the cessation of brain function. One MD must be a specialist in the field of anaesthesiology and intensive care or neonatology, and the other in the field of neurology, paediatric neurology or neurosurgery.

According to art. 43a par. 6 a.p.d.: "Irreversible cardiac arrest prior to organs collection is unanimously stated by two specialist doctors holding the second degree of specialization or a title of specialist, including one specialist in anaesthesiology and intensive care or neonatology, and the second in the field of emergency medicine, internal diseases, cardiology, paediatric cardiology or paediatrics" [9]. In this respect, the amendment also introduces changes compared to the previous legal norms. Presently, irreversible cardiac arrest preceding the procurement of organs states unanimously two doctors, and not, as in the old regulations, one physician. When comparing legal norms regarding the statement of permanent irreversible cessation of brain function and the determination of irreversible cardiac arrest prior to organs procurement, it is worth noting that in both cases these activities are performed by two specialist doctors, but the scope of specialization in relation to the other doctor varies. In the case specified in art. 43a par. 5 a.p.d. a specialist is defined as a doctor of medicine, specialized in the field of neurology, paediatric neurology or neurosurgery, and in the case of irreversible cardiac arrest prior to organ procurement, one specialized in emergency medicine, internal medicine, cardiology, paediatric cardiology or paediatrics.

Criteria and the manner of determining permanent irreversible cessation of brain function (brain death) or irreversible cardiac arrest prior to organ procurement are determined by the minister competent for health matters. The Minister set those principles by means of an announcement published in the Official Journal of

the Republic of Poland, “Monitor Polski”. Art. 43a par. 2 a.p.d. states that: “The method and criteria referred to in par. 3, are determined in accordance with current medical knowledge by specialists in relevant medical fields appointed and dismissed by the minister competent for health” [9]. Therefore, it is not the minister of health alone establishing the above-mentioned manner and criteria. They are entrusted to experts in relevant fields of medicine who, considering current medical knowledge, characterize them. The minister for health, not less frequently than once every 5 years inspect the criteria and the method of determining the permanent irreversible cessation of brain activity (brain death) or irreversible cardiac arrest before organ donation. As a part of the checking operations, minister for health entrusts specialists in the relevant fields of medicine with an audit of compliance concerning the method and criteria with current medical knowledge.

Currently, there is no legislature passed on the basis of Article 43a a.p.d. concerning a novel method and criteria for the determination of permanent irreversible cessation of brain function (brain death) and irreversible cardiac arrest prior to organ procurement.

Therefore, pending the adoption of new criteria, the criteria and methods based on the art. 9 par. 3 and art. 9a par. 3 of the Act of 1 July 2005 on the collection, storage and transplantation of cells, tissues and organs, as previously worded have the force of law [10].

Thus, as still relevant should be considered the notice of the Minister of Health of 9 August 2010 concerning the criteria and method of determining the irreversible cardiac arrest and notice of the Minister of Health of 17 July 2007 on the criteria and method of determining the permanent irreversible cessation of brain function [11,12].

Finally, it should be highlighted that the determination of permanent irreversible cessation of brain function (brain death) or irreversible cardiac arrest prior to organs procurement is tantamount to the declaration of death in accordance with art. 43a par. 7 a.p.d.

Conclusions

The amendment of 24 February 2017 primarily transfers the provisions regarding the procedure for determining permanent irreversible cessation of brain function (brain death) and irreversible cardiac arrest prior to procurement of the organs on the Act of 5 December 1996 on the professions of the doctor and the dentist. So far, they were included in the Act of 1 July 2005 on the collection, storage and transplantation of cells, tissues and organs.

In addition, according to the amendment, two doctors of medicine are required to conclude brain death. One of them should be a specialist in the field of anaesthesiology and intensive care or neonatology, and the other — neurology, paediatric neurology or neurosurgery. So far, the death of the brain has been decided by a commission of three doctors of medicine.

The novel regulations also modify the rules for determining irreversible cardiac arrest in cases where organs are to be removed from the deceased. Currently, the procedure will be carried out by two doctors, and not as it was previously done by one.

References

- [1] Iwańczuk W. Harwardzkie kryteria śmierci mózgu. *Anest Ratow.* 2008;2:265–273.
- [2] Mollaret P, Goulon M. Le coma dépassé mémoire préliminaire. *Rev Neurol.* 1959;101:3–15.
- [3] Davies M. *Medical law.* London 1998:380.
- [4] Dunn H.P. *Etyka dla lekarzy, pielęgniarek i pacjentów.* Tarnów 1997:48–49.
- [5] Komunikat w sprawie wytycznych Krajowych Zespołów Specjalistycznych w dziedzinach: anestezjologii i intensywnej terapii, neurologii i medycyny sądowej w sprawie kryteriów śmierci mózgu (Dz.U. MZiOS z 26.06.1984 r., nr 6, poz. 38).
- [6] Komunikat Ministra Zdrowia i Opieki Społecznej z dnia 9 sierpnia 1994 r. w sprawie wytycznych Krajowych Zespołów Specjalistycznych w dziedzinach: anestezjologii i intensywnej terapii, neurologii, neurochirurgii oraz medycyny sądowej w sprawie kryteriów śmierci mózgu (Dz.U. MZiOS z 05.09.1994 r., nr 11).
- [7] Komunikat Ministra Zdrowia i Opieki Społecznej z dnia 29 października 1996 r. o wytycznych w sprawie kryteriów stwierdzenia trwałego i nieodwracalnego ustania funkcji pnia mózgu (śmierci mózgowej) (Dz.U. MZiOS z 30.11.1996 r., nr 13).
- [8] Ustawa z dnia 1 lipca 2005 r. o pobieraniu, przechowywaniu i przeszczepianiu komórek, tkanek i narządów (Dz.U. z 2005 r., nr 169, poz. 1411).
- [9] Ustawa z dnia 5 grudnia 1996 r. o zawodzie lekarza i lekarza dentystry (Dz.U. z 1997 r., nr 28, poz. 152).
- [10] Ustawa z dnia 24 lutego 2017 r. o zmianie ustawy o zawodach lekarza i lekarza dentystry oraz ustawy o pobieraniu, przechowywaniu i przeszczepianiu komórek, tkanek i narządów (Dz.U. z 2017 r., poz. 767).
- [11] Obwieszczenie Ministra Zdrowia z dnia 9 sierpnia 2010 r. w sprawie kryteriów i sposobu stwierdzenia nieodwracalnego zatrzymania krążenia (M.P. z 2010 r., nr 59, poz. 784).
- [12] Obwieszczenie Ministra Zdrowia z dnia 17 lipca 2007 r. w sprawie kryteriów i sposobu stwierdzenia trwałego nieodwracalnego ustania czynności mózgu (M.P. z 2007 r., nr 46, poz. 547).

Corresponding Author:

Jakub Mąkosa
Solicitor's Office
12 Niecała Str., 20-080 Lublin, Poland
e-mail: jakubmakosa@wp.pl

Conflict of Interest: None

Funding: None

Author Contributions: Jakub Mąkosa^{A-H}, Mariusz Wysocki^{A-H}, Wiesław Fidecki^{A-G}, Kamil Kuszplak^{F-H}

(A — Concept and design of research, B — Collection and/or compilation of data, C — Analysis and interpretation of data, D — Statistical analysis, E — Writing an article, F — Search of the literature, G — Critical article analysis, H — Approval of the final version of the article)

Received: 08.01.2018

Accepted: 02.02.2018