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Legal and moral aspects of transplantation

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Summary

January 26, 1966 r. In the Department of Surgery, Medical University of Warsaw, a team of doctors in Poland made the first successful kidney transplant. It was the beginning of a difficult path Polish transplantation.

The increase in demand for services of transplantation medicine, the dynamic development of this field and the lack of alternative treatments for end-stage organ failure makes transplants are still hotly debated.

The author discusses the legal regulations in Poland transplantation, ethical issues and presents the possibility of transplantation medicine and its importance in the light of the teachings of the Church. From the outset, the sine qua non of organ transplantation was a statement the death of a potential donor. This requirement, referred to in the literature dead donor rule (called. Dead donor rule, DDR) is a legal and ethical justification for thousands of transplants. However, according to some authors, this rule has a greater potential to undermine confidence in transplants than to promote them. In their opinion, better solution to protect the transplant the alleged abuse would be to obtain informed consent from patients or their families for organ donation and therefore to stop life-sustaining treatment in situations of irreversible neurological injuries.

This position is confirmed by studies that suggest that reliable information related to the degree of neurological damage potential donor consent and respect for his family or for society are more important than concerns about its vital status.

The aim of this paper is to discuss the issue of transplants in the dimension of legislative and legal and ethical.

Keywords: transplantation, bioethics, the principle of a dead donor brain death

Introduction

Ex morte vita - someone has to die in order to be able to live someone else - this sad motto incumbent on transplants ex mortuo makes transplantologiczna medicine is for many people a difficult bioethical issue. The theologians, ethicists, philosophers try to find answers to the following questions: Is the transplantation of organs is a matter of positive moral? Is therapy based on man's death is ethically correct? Is it compatible with the dogmas of religion? Can a

man with a transplanted organ is the same person? Another problem is the number of rules governing the award recipients explants or determining the waiting list [1.2].

Of all these questions, the biggest problem is the dilemma of whether a person is diagnosed with brain death can be considered dead?

Transplantation medicine is a rapidly developing branch of medicine. The increase in demand for its services, the dynamic development of this field and the lack of alternative treatments for end-stage organ failure makes transplants are still hotly debated.

Increasing the scale of transplants performed is also one of the priority activities of the Ministry of Health. Pursuant to the Resolution of the Council of Ministers of 12 October 2010 established a multiannual program for 2011-2020 under the name of "The National Program for the Development of Transplantation Medicine." The program is being implemented since 2011 and its completion is the end of 2020 years [3].

The aim of this paper is to discuss the issue of transplants in the dimension of legislative and legal and ethical.

Legal regulations transplantation in Poland

In Poland, in the 60s, when he began the first transplant in the country, there was no comprehensive regulation of the conditions of admissibility transplants. The first of a successful transplantation from a deceased donor organ (kidney) was made in 1966 when it was still legal regulations on organ procurement and transplantation. It was only in 1995, has been declared a proclaimed law on the collection and transplantation of cells, tissues and organs, which determined when and from whom you can download cells, tissues and organs, what conditions should be met when downloading and implantation of who has the right to download and implanted organs and tissue. Currently in force concerning the donation is an act of Proclamation of the Marshal of the Polish Sejm of 11 May 2017 on the publication of the consolidated text of the law on procurement, storage and transplantation of cells, tissues and organs [4]. Under this Act download cells, tissues or organs from human corpses for transplantation or to download their cells or tissues for their use in humans can be made if the deceased person did not express opposition for life. Objection can be expressed in the form of an entry in the central register objections written statement of the signature or Oral statements made in the presence of at least two witnesses their writing confirmed. The objection can be withdrawn at any time. tissues or organs from human corpses for transplantation or to download their cells or tissues for their use in humans can be made if the deceased person did not express opposition for life. Objection can be expressed in the form of an entry in the central register

objections written statement of the signature or Oral statements made in the presence of at least two witnesses their writing confirmed. The objection can be withdrawn at any time. tissues or organs from human corpses for transplantation or to download their cells or tissues for their use in humans can be made if the deceased person did not express opposition for life. Objection can be expressed in the form of an entry in the central register objections written statement of the signature or Oral statements made in the presence of at least two witnesses their writing confirmed. The objection can be withdrawn at any time. Poland has therefore called principle. presumed consent or otherwise registered opposition. In this case, the consent of the deceased's family for organ donation is not mandatory, although it should always inform the family. Nevertheless, the firm opposition of the family of the deceased is - despite the existing legislative solutions - respected and in this case withdraws from the procedure eksplantacyjnej [2].

Under Article. 12. Act 1 of that cell, tissue or organ for transplantation or cell or tissue in order to apply another person may be taken from a living donor when download takes place relative to the straight line, siblings, person or spouse adopted to another person if They justified by exceptional personal reasons. Due to this provision, it is possible to transplant kidneys from unrelated donors in the framework of the Exchange Program Par.

Cash cells, tissue or organ from a living donor to a person who is not a relative in a straight line, siblings, person adopted or spouse requires the consent of the district court with jurisdiction over the place of residence or stay donor, issued in non-litigious proceedings, after hearing the applicant, and after hearing the opinion of the Ethics Committee of the National Council of Transplantation. Consent district court N bone marrow harvesting, and other regenerating tissues or cells [4].

Therapeutic options transplantation in Poland

Transplantation is a therapeutic approach, which could save the lives of many seriously ill with irreversible organ damage, for having exhausted all other treatment methods.

In Poland in 2017. From deceased donors were transplanted organ in 1531; the most common were: kidney (1004), liver (349) and heart (98). 1290 also performed corneal transplants. By contrast, transplantation of living donors was performed 80 (56 downloads including kidney and liver fragments 24) [5].

The results of transplantation are getting better so you expand the indications for treatment by this method. An increasing number of people waiting for transplantation and extended their time waiting for an operation that can pose a threat to the lives of these patients.

Because of the significant disparity between the number of patients waiting for kidney transplantation therapy and the availability of organs established the National Program for the Development of Transplantation Medicine Ministry of Health for 2011-2020, one of whose goals is to increase the number of kidney transplants from living donors. It is expected that after the program number of recipients of kidneys from living donors will increase to at least 115 per year, or at least 500% relative to the number transplantation in 2009., When Poland kidneys from living donors were transplanted 23 patients [6].

Moreover, in the framework of the National Program for the Development of Transplantation Medicine Ministry of Health plans to modernize and retrofit equipment and medical equipment medical entities, and other entities that work for the benefit of transplantation. Thanks to the program can be financed from public funds new types of transplantation: the face, throat, intestines and upper limb transplants and patients who have had a high risk of rejection [4].

Since 2015 Poland started the so-called execution. transplants cross and chain, involving the removal of organs (kidneys) from a living donor. Chain transplanted kidney is a modern system of transplants known and led the world for over 20 years, based on the fact that at least three pairs (in the case of two talking about cross-transplant) donor-recipient "swap" kidney, when the direct transplantation in pairs it is impossible due to blood group incompatibility AB0 system or immune incompatibility. This type of kidney transplantation lets you download all three of donors and transplant each of them "nieswojemu" recipient, reaching in effect three kidney transplant from a living donor. It is a hope for the sick, allowing to shorten the waiting time for the body and increasing the median survival time from the moment of the transplant recipient. What's more, the kidneys from living donors have a longer life due to the shorter duration of ischemia authority.

Although the idea Par Exchange Program was established in 1989. In the United States, the first cross-transplant was performed in 1991. In South Korea, where he now this method has become a common method of kidney transplantation. In Europe, the first transplant in the framework of the Exchange Program Par was held in Switzerland in 1999., Then in Romania in 2001. And 2004. In the Netherlands. In 2015, Poland joined the countries using this method of transplantation, when the Infant Jesus Clinical Hospital in Warsaw performed the first transplantation cross and chain [6].

A person who lives the longest organ transplant in Poland was the 91 - year-old Tadeusz Żytkiewicz. He died last year, September 18, at the age of 91. In 1986. Prof. Religa made a decision about the transplant, even though the patient had been 61 years and the treatment seemed to have little chance of success [7].

Ethical aspects of transplantation

The ethical aspect of the problem is very complex transplant. Because we have to deal with transplants from non trivial ethical objections. They are predominantly aesthetic treatments or do not generate a conflict of interest. In the case of organ problem it is even somewhat more complex, but the vital status of the donors not satisfactory. The biggest ethical dilemma relates to a single organ transplantation: heart, pancreas and liver.

From the outset, the sine qua non of organ transplantation was a statement the death of a potential donor. This requirement, referred to in the literature dead donor rule (called. Dead donor rule, DDR) allows download organ only after finding an unquestionable death of the donor. Organ donation can not be the cause of death [8].

The concept evolved and death significantly over the years. For many years medicine has used the classic criterion of death. A fact acknowledged the death of cessation of circulatory and respiratory. The fixed Loss of blood circulation in the form of a cooling body of the deceased, stain precipitation, rigor mortis, visible with the passage of time, give any assurance that we are dealing with dead, the delay must be buried.

Dissemination in the 60s of the twentieth century methods of resuscitation and the use of a respirator revealed the inadequacy of cardio-respiratory death criterion. Circulation or breathing in many cases is impossible to restore. Established on the basis of this criterion Clinical death has become a kind of reversible. In addition to the indicators used so far should therefore look for other, more reliable signs of death. The center of attention was the human brain and its forms dying [9].

Progress in establishing a new definition of death, the report was established in 1968 Extraordinary Commission Harvard Medical School to Examine the Definition of brain death. Its chairman Henry Beecher proposed a new definition of death is not standing in contradiction to the principle of a dead donor. The new criterion of death defined as irreversible, permanent cessation of whole brain activity, reported by comprehensive research. According to the report confirms that brain death:

- a) a lack of response to stimuli,
- b) a lack of spontaneous or in response to a stimulus muscle movement.
- c) absence of spontaneous respiration.
- d) lack of reflex of the brain stem and deep tendon reflexes [10].

The definition of brain death, in which the brain stem death means death of the organism as a whole, was adopted by most countries. Soon as possible, because in March 1972, it was

legalized in Finland. In Poland, it was introduced on July 1 1984 years Communication Ministry of Health and Welfare. Modified it slightly twice - in 1994 and 1996 [9].

The basis for it is unacceptable to ensure that death is a phenomenon dissociated. This means that the death of the tissue and embraces systems at different times. This results in disintegration of the system as a whole and more functional, permanent loss of individual functions in a different time sequence. Therefore, some functions of the body or parts thereof, may persist for some time in isolation from other, already dead. Dissociated character of the phenomenon manifests itself in a special way in situations where the death took longer brain while blood circulation is still preserved. In these cases, the state of the brain determines the life or death of a man. In most cases, the clinical brain edema resulting from damage arises from the supratentorial space, and the brain stem dies as the last part of it.

Permanent damage to the brain stem is determined by the absence of certain nerve impulses and the absence of spontaneous respiration. Such procedure is based primarily on clinical trials, in most cases it is possible, and the result - sure. In special circumstances the study of nerve impulses is not fully feasible (e.g.. Facial injuries) and their interpretation difficult (eg. Intoxication, drug). Moreover, originally podnamiotowych brain injury, his death requires a specific diagnostic, because the clinical signs of permanent damage to the brainstem not mean in this case, simultaneous irreparable damage to the entire brain. In such cases, the suspected brain death must be confirmed by tests instrumental. Before disconnecting the equipment should consider the possibility to download some organs for transplantation. It remains then only a few hours to make sure of the will of the deceased on the donate tissues and organs after death (check the Central Register of the Opposition or the person is not registered objections to check whether the deceased had with him personally written statement of objection organ donation after death ? if not objected to the organ donation after death, orally in the presence of two witnesses for organ donation after death) and arrange to collect the organs, tissues and cells for transplantation need. [12]

Propose in the 70s of the twentieth century equivalent of three definitions of death by Henry Becher (Chairman of the aforementioned Committee Harvard), more revived the debate on human biological death. The first definition is mentioned the death of the brain stem. Another classic definition of death is understood as a loss and the inability to restore the natural circulation or breathing -what is in contradiction with the principle of a dead donor. [9] This understanding of death is problematic on several levels. The definition of cardiac death requires the irreversible cessation of cardiac activity. This interpretation generates a paradox, because the hearts of patients who have been declared dead on the basis of irreversible cardiac, have

been transplanted and successfully function in the body of another person [8]. The most controversial and unacceptable was the third definition tied to the death of the cerebral hemispheres and the irretrievable loss of consciousness. According to this "no longer the death of the entire brain, which also includes the brain stem, but just the death of the cerebral cortex (...) is already sufficient criterion to rule that the death occurred." Death is predicated when neurons in the cerebral cortex are destroyed (speech, thinking, memory, emotions), even though the function further deeper structures such as the thalamus, brain stem and cerebellum (breathing, vegetative activity, blood pressure). According to this concept is not the death of the brain stem, but irreversible loss of consciousness enough to the ruling of death [9].

The latter, too broad and dangerous definition of death, aiming to exclude the growing group of people from among the living, is particularly promoted by thinkers extremely altruistic.

Define biological death as brain death against the other two seem to be the most careful and honest approach. The current Polish guidelines on the criteria for brain death are quite refined.

According to American researchers from Harvard Medical School, the concept of brain death being well served transplantation legal and ethical justification for thousands of transplants. However, questions arose as to undermine the ethical criteria of brain death as well.

How to explain American scientists at birth transplant medicine dead donor rule has been accepted as a somewhat arbitrarily „ protective shield "in the discussion on the ethical aspect of the transplantation. Therefore, constant revisions modify the definition of death and brain death criteria. Paradoxically, despite these measures, according to the R Truog and inn., this principle has a greater potential to undermine confidence in transplants than creates conditions for their implementation. According to these scholars a better option to protect transplant the alleged abuse would be to obtain informed consent from patients on organ donation and discontinuation of life-sustaining treatment in cases of debilitating and irreversible neurological injury [8].

This position is confirmed by studies that suggest that the issues related to the degree of neurological damage and respecting the consent of the patient or his family is more important than the public concern about the status of the vital potential donor. In the United States conducted a nationwide survey, which was attended by 1,096 participants (n = 1096). In the survey described a scenario that clearly violate the principle of a dead donor. The subjects had to comment to what they thought about the removal of organs which cause the death of the donor in an irreversible coma. Approximately 71% corresponded to the measures described in

the scenario, and as much as 67% said they would like to donate organs in a similar situation. Based on the survey can be concluded.

These results of research show that the public lacks honesty and open discussions on this issue. Many scholars claim that the current system of organ transplants is imperfect because of the lack of transparency. Information concerning the evidence, doubts, disputes between scientific experts on man's death are not routinely disclosed. This raises - according to researchers - justified distrust of public opinion [13,14,15].

The position of the Catholic Church

Ignorance of the position of the Catholic Church by the public on this issue, according to the late surgeon, transplant W. Rowiński, also affects the shaping of attitudes of society. Meanwhile, the Catholic Church takes a positive attitude towards the treatment of transplant what evidence can be found in the Catechism of the Catholic Church. Pope John Paul II, a representative of the ideology of personalism, repeatedly stressed the importance of organ donation in the name of Christian love. During the audience the members of the World Transplantation Society said: „ Man expressing consent to organ donation after your death certificate shows Christian love, which gives life to others. " A few years after this audience in Rome, during the session of the World Society of Transplantation, again confirmed the positive attitude of the Catholic Church against the transplant. During this meeting made it clear that the Church accepts the medical criteria for death and recognizes the concept of brain death, assuming that death occurs when a man dies, his brain as a whole [16,17].

Despite this proclamation transplant world expects greater involvement of the Catholic Church (through the work of hospital chaplains, parish priests) in activities to promote the donation of the parish, so that the Church's position on this matter was known to every faithful [16].

In shaping social attitudes play an important role given media, which in a way overly emotional problems represent individuals, not moving essentially social problem.

St. Basil, Doctor of the Church, who lived in the fourth century, he said „ would not be appropriate to give up the gift of God, which is the medical knowledge, but because of its wrong use by the few [...], but we have to illuminate what they spoiled "[17].

Summary

Transplants arouse anxieties. They are raised primarily commercial aspects relating to the allocation principles (separation of organs) or sell explants.

The increasing incidence of organ failure in life and insufficient supply of organs, in particular through transplantation of ex mortuo, have created a big difference between supply and demand of organs for organ, which resulted in a very long time waiting to receive an organ, as well as the growing number of deaths while waiting. These events caused a lot of ethical, moral and social rules regarding the supply and allocation of organs. It also led to the practice of selling organs for entrepreneurs to obtain financial gains in some parts of the world by exploiting the poor for the benefit of wealthy individuals. The difference between demand and supply of organs for transplantation has led to organ trafficking, commercialism and tourism organ.

According Altinorsa N. and M. Haberal, the problem seems to be the most important issue. Fighting organ trafficking and commercialization should include legislation, efforts to increase organ donation donor donors and international cooperation. China's policy consists in obtaining organs from prisoners sentenced to death is unethical, and the international community should exert more pressure on the Chinese government to stop this practice. Each specific ethical dilemma be dissociated [18].

The current progress in the field of immunology and tissue engineering and the use of animal organs, xenotransplantation, while offering promising solutions to many of these problems also cause additional medical and ethical issues that must be taken into account by both the medical profession and society.

When considering the issue of transplantation from the recipient side, we see, first of all, positives: transplants save lives, restore health, allow to return to a normal family and professional life. It is much harder to talk about them when we consider the other side. Most of the transplanted organs come from donors of the deceased, above all young people who left suddenly, mainly as a result of accidents. For the joy of saving human life, he puts his shadow on the death of another human being. The joy of life is connected with the tragedy of death. And here the most problems arise - most of all moral nature. A lot of questions arise - whether the organ (organs) that are being collected are sure to come from the deceased. The fact is that the collection should be carried out as soon as possible from the date of death, in order to increase the chances of accepting the transplant. So, is it possible to be absolutely sure that the donor is dead, is not the organ being given a verdict, are the medical death criteria certain [19]? Explanation of the details of the procedure determining brain death is desirable because, contrary to appearances, it turns out that awareness in this area, even in the medical community is appallingly low.

Z. Włodarczyk, transplant surgeon, believes that the primary care physician knows very little about the transplant is often the case that they do not understand the concept of brain death.

A similar view is W. Rowiński transplantation surgeon, who stressed the importance of education of society: „ There is nothing more important than education. Education of the medical community, which is the most ignorant in this regard. I'm talking about his colleagues. Education of the public, which must begin in the schools, education on the principle of promoting the idea of associations of people after the transplant. While the third element is the activity of the media "[17].

According to W. Noszczyk surgeon in society It is common belief that they must not violate human autonomy. Why not download the organs after his death only for his consent for life or lack of opposition. However, with the limited autonomy of man we encounter in everyday life more often. Most of them are introduced in the so-called. the public interest (compulsory vaccinations, military service, bans on cigarette smoking in certain places, quarantine compared to healthy individuals with suspected infection). Noszczyk W. therefore asks the question: Is „in the interest of public health really should not get organs from a deceased person, regardless of whether a man for life expressed their consent (and thus limiting the autonomy of the dead man)?". However, as further reports such a solution would likely be realized with a total public acceptance. According to the same author, medicine transplantologiczna victim of its own success [20].

To increase the number of donors is proposed several solutions:

- acquiring body genetically engineered (genetically modified animals „, manufactured by "human organ.
- transplanting isolated cells, such as. Beta cells
- the introduction of an incentive (financial or otherwise) to the families of deceased persons
- development of molecular biology, resulting in the possibility of organ cloning.

No matter how you struggle with an insufficient number of organs for transplant legislators and the public will have to face more and more new ethical problems. In view of the ethical dilemma will become more [22].

With the current state of knowledge of transplantation is the only hope for more than 1.5 thousand people each year are faced with an extreme form of organ failure [5], in the hope of waiting for the call to the procedure. Hoping paid for someone else's suffering. So is it worth it? Is medical knowledge in this case zabrnęła too far? The key to finding the answers to these questions might be a large group of people after a transplant now living in Poland. If extend this problem on their families, this group would be much higher. The allegations in the procedure transplantologicznej impinge on the public perception of this method of treatment.

Receipt, which is a significant transformation depending on what role (donor or recipient) is an individual or a person close to her. [22]

Dr. Thomas Kubik, an anesthesiologist and Donation Coordinator at the Central Clinical Hospital of the Medical University of Warsaw in an interview in 2014 he said: „In Japan not collected organs from people who have no heart had stopped. Waiting to arrest: it is sometimes a few hours, sometimes a few days, weeks - even so the heart can work, despite the death of the brain. However, such a man never regained consciousness and began to breathe. In 40 years, from when diagnosed with brain death, there was no case of reversal of brain death. [...] *There is a small groupskeptics in the world that does not accept brain death. But I repeat: there was no case of "wake up" after brain death* [21].

Evidence of this are the words already mentioned Z. Włodarczyk: „*Death is a one-way ticket. In the world literature concerning medicine does not describe a single case in which the recognized that brain death, and could sustain the circulation for longer than several tens of hours. That is, now, in the present state of knowledge the man, in whom there has been the death of the brain stem, is a man dead. Perhaps in the future we will be able to do something about it, but now we can not. This does not mean that all our dead we should freeze, because once we were able to rescue them. Perhaps one day we will be able to revive the heart cells, which stopped in myocardial infarction, but now it can not. Maybe in 10 years we will be able already, but that does not mean that all the dead from a heart attack should freeze. They are dead now, in these conditions*"[17].

This ethical position is not closed to further discussion, but it gives us a moral certainty that the current state of knowledge does not commit evil, using the current criterion of death and using them for effective ways to save lives others [23,24].

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