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## The Polish State of transplantation

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**Summary** 

Organ transplantation is a life-saving people affected, which the body is unwieldy to live.

This method involves the implantation, the person get an organ from another man. It is

used in the case of end-stage organ failure, among other things, such as the kidneys, heart,

liver, lung, pancreas, intestines. This treatment allows you to return to your health about

1-1.5 thousands of people per year. Currently used in transplantation organs mainly come

from donors. Only the kidneys and portions of livers can be retrieved from living donors,

but the proportion of this kind of downloads is relatively small. It is estimated that in the

world which fourteen minutes another person is qualified for surgery, and a daily fifteen

people die without being able to look forward to.

**Key words:** transplantology, organ transplant, transplantation

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## **Medical aspect of transplantation:**

Serious and irreversible organ damage can occur from birth, for example. as a result of genetic defects, as well as a result of a strong of injury whether the devastating disease. In many cases, the only effective form of therapy is a transplant of a specific organ. About his need to decide the doctor who throws the patient to a specialist the transplantation Centre, in which the patient is subjected to special scrutiny, eligible and then reported to the national Transplant Waiting List.

The ability to transplant organs is caused by many factors. [3] the most important of them are not exclusive to each other blood groups of both donor and recipient, as well as the degree of compatibility between the histocompatibility antigens, which can affect the process of rejection. These antigens are found in white blood cells and are different for each person, with the exception of identical twins. Other restrictions include m.in. overall health of the patient or the body sizes of both donor and recipient.

Currently used in transplantation organs mainly come from donors. Only the kidneys and portions of livers can be retrieved from living donors, but the proportion of this kind of downloads is relatively small. It is estimated that in the world which fourteen minutes another person is qualified for surgery, and a daily fifteen people die without being able to look forward to.

Bodies retrieved from dead donors play a key role in the rescue of human life. Identification of potential donor involves carrying out a range of specialized tests to declare brain death, which is a condition where in the brain there are no vital functions. Brain death is irreversible, and the person in such a State is considered to be dead, although her body can function with the help of medical equipment. To brain death occurs most often as a result of its extensive damage (mainly the brainstem) and stop the blood flow more than a few minutes. After diagnosis of brain death, which occurs most frequently when the lack of blood supply to the brain more than 10-12 hours, and in the absence of contraindications, health physicians are eligible for the deceased to download operation. It is estimated that the organs of one donor can save or extend the lives of seven people.

Modern transplantology has developed nearly all of the transplantation of organs-with the exception, so far, of the brain. Currently, the transplanted bone marrow, heart, lungs, liver,

kidneys, intestines, cornea, limbs and faces-with excellent results. Also transplanted tissues and cells, as well as human embryos allowing independent motherhood that women who are the natural capabilities of the deprived. Is this is just the beginning of a long journey in order to regenerative medicine, which is likely to completely in the future will change the fate of mankind and the face of the world.

Beyond the fascinating progress experimental and clinical transplantation, two from the academic point of view, organ transplantation, in practice, is very complex, logistically very complex and demanding the involvement of large assemblies of people. Organ transplantation is, by definition, teamwork, involving many professionals from multiple disciplines, almost at the same time. Due to the extremely important, the social importance of this treatment, after all, on saving the threatened death of a patient's life with the help of an organ from another man and of the citizen, the proper course of the therapeutic process ensure that the State and its laws, specialized agencies. These include: Health Policy Division of the Ministry of health, the Central Office of Coordination POLTRANSPLANT and accredited by the Ministry of health of transplant centres-academic.

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## The importance of the Centre's activities, organizational and Coordination for transplantation Poltransplant for modern transplantation.

At the present time in Poland the extraordinary importance for the development of retrieval and transplantation has organisation Poltransplant. Minister for health and Social Care by order of 14 June 1996 established the national organizational unit with a range of nationwide under the name Central organizational and Coordination for transplantation

POLTRANSPLANT with its registered office in Warsaw. The most important tasks of the POLTRANSLPANTU include: [4]

- Organization and coordination of the collection and transplantation of cells, tissues and organs in the country
- keeping the central register of the opposition Division (CRS)
- supervision of national lists of recipients awaiting transplantation of cells, tissues and organs and the supervision of harmonization of tissue typing in Poland and quality of tissue typing
- Organization of transplantation coordinators positions and their training and dissemination activities of transplanting tissues and organs.
- collection documentation made organ transplantation procedures, selection of appropriate recipients and results obtained direct and distant, and support for information and communications, organisation of the network coordinators, educational activities, the analysis of the situation related to the medical and social aspects of organ transplantation,
- cooperation with national and international institutions, administrative and technical support of the National Council of Transplant and the other task assigned by the Minister.
- keeping the central register of the opposition Division (CRS)

At the moment, everything that happens in Poland in the field of organ transplantation is under strict State control. Each downloaded and the transplanted organ is closely logged. Documented is his origin and know to whom, when and where it was transplanted. Centres, national coordinators CBK POLTRANSPLANT issue instructions regarding downloads acute critical illness and causes execution download specific organs transplantation centres. Work of national coordinators is a constant and very comprehensive. Sometimes emergency national coordinators CBK POLTRANSPLANT are forced to deal with the coordination of several downloads at the same time, and their monitoring work continues constantly by 24 hours. daily and is performed by the hundreds of telephone calls in order to determine answers to the following questions: What organs are suitable for download from the donor reported that the recipient need these organs at a time most, that transplantation is currently the best prepared to retrieve and transplant organs and when can be made to download the donor hospital organs so as to, not interrupting the operating side Hospital, synchronize the optimal time of arrival of all interested teams procurement organisations, taking into account the possibility of

transport, time directions to the place of transplantation teams and up to a favourable time of cold storage organs such as the heart, lungs and liver after you download them.

The precise coordination of all possible parameters download wielonarządowego requires a huge effort, concentration and voltage dynamism driving the coordination action, and above all, profound knowledge and excellent knowledge of the principles of coordination of procurement, which are earned with great difficulty, after many years of practice in terms of the coordination of procurement.

Similarly, closely observed are transplant recipients selection policies [3]. Potential recipient of the heart, kidney, liver and other organs are proposed to the central list of Recipients (CLB POLTRANSPLANT) waiting for a transplant. Official notification to the CLB POLTRANSPLANT make Regional Qualification Centres (year). The procedure for the official notification to the CLB is long, tedious and requires the delivery of many of the required, detailed data about the patient and his illness. To this end, for each notified the patient is completed by the physician of the patient specific, uniform, nationwide questionnaire is sent in electronic form to the CLB, where is thoroughly checked by highly skilled workers POLTRANSPLANT and only if all the required criteria, the patient's name is placed on the national waiting list (KLO) for a transplant. Therefore, with the exception of the so-called. urgensów (for patients requiring immediate transplantation because of the imminent danger of life), there is virtually no way to transplant any organ in Poland to any patient, whose name is not listed KLO-official Government list of patients waiting for a transplant. If there had been such a transplantation the patient placed previously in the list I would be illegal transplantation and, as such, shall be prosecuted with the letter of the law. To facilitate the work of the coordination list of National waiting list, i.e., a list of patients officially registered in CLB POLTRANSPLANT and waiting for a transplant, are created separately for each organ and divided by, groups of major blood ABO system. This means that for people waiting for a heart transplant are created 4 separate waiting list potential recipients: list of potential heart transplant Group A, Group B, Group AB and the Group of blood groups ABO system according to that effect are divided into a list of potential liver transplant recipients and potential recipients of kidneys.

The order in the list of KLO. the waiting list for an organ transplant, decides the order of notification of a potential recipient. But not only the order of notification to the KLO is important.

If that were the case then many patients oczekiwałoby years on its order of transplantation. Patients selected for a specific Transplant organ selects a computer program based on a points system that takes into account the many different parameters, such as: the compatibility of HLA Antigen, the waiting time for a transplant, the organ donor and recipient, the amount of the previously performed transplants on pending the potential recipient of the organ, the cause of the loss of previous transplants, the current level of immunisation against HLA antigens, i.e., Anti-HLA Antibodies in the serum of the potential recipient of the organ (the so-called. PRA-Panel Reactive Antibodies), the story of a humoral immune response against antigens HLA (historically the highest PRA). Ultimately, the selection of the recipient of the organ out of many possible, potential recipients included in the list of KLO, decide first of all compatibility groups major ABO and negative trial of the cross made between organ donor lymphocytes, and the current potential organ recipient serum. The remaining parameters are important secondary. Computer in your Office CLB POLTRANSPLANT is preparing a printout of the list of potential recipients, the downloaded already, according to the scale point, IE. According to the order specified the amount allocated by the programmed computer system points. From this list, select the first of these potential recipients, who were placed on her head. If one of these recipients is unreachable, or sick, or may not come to transplantation with personal reasons or time to wait for the arrival of a potential recipient may exceed the safe storage time of the organ, then selects the next the next potential recipient of the organ from the printed list that better meets the current criteria logistics Transplant action.

Each one is therefore always potentially a national undertaking transplantation, moving the entire, complex, hardly achieved over the years, the institutional mechanism logistics cooperation of all Resorts Centres in Poland, led through the dispatcher national coordinator, in order to achieve maximum POLTRANSPLANT CBK its success. Transplantation as much donated, with the best result for transplanted patients.

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