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ORGAN DONATION AWARENESS

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ABSTRACT

Organ transplantation is a medical procedure which a healthy organ is removed from the living or cadaver donor to be transplanted into the recipient whose related organ is no more functioning properly. There are two types of organ transplantation: living-donor and cadaver-donor transplantation. After the donation, related organs are taken from the patient following the brain death in the ICU and transplanted to the recipient. Organs can be used only when the brain death is confirmed and declared in the ICU. Brain death is the irreversible state of loss in the brain functions. According to the article 14 of the law No 2238, when a patient is officially brain-dead, the organs or tissues can be taken with the consent of their spouse, children of age, mother/father, siblings in order or an acquaintance of any of them if the rest is not present. Organ donation is when an individual gives their consent by documentation, with free will, and allow their tissues and organs to be donated for the treatment of other patients after the end of their life medically. According to the law no 2238, any citizen who is mentally healthy and above 18 years of age, can donate their organs and obtain an organ donation card. Organ transplantation is a very serious medical issue in Turkey as it is in other countries and the donation rates should be increased by informing the public and getting more participation. Success in organ transplantation can be obtained by a higher number of organ donations

Keywords: Organ Transplantation, Organ Donation, Brain Death

ORGAN DONATION AWARENESS

Organ transplantation is a medical procedure which a healthy organ is removed from the living or cadaver donor to be transplanted into the recipient whose related organ is no more functioning properly. In our country, transplantation of kidney, skin, liver, heart, lungs, pancreas, small intestine is permitted. Bone, bone marrow and cornea are the tissues for transplantation. There are two types of organ transplantation: living-donor and cadaver-donor transplantation. A living-donor transplantation is a procedure where the donor can donate one of the kidneys, a portion of liver or bone marrow providing that the blood and tissue type of the organ donor and the organ recipient match, while still alive. The donor must be the spouse of the recipient for at least two years or they must be fourth degree of relatives. The success rate of living-donor transplantation is higher compared to cadaver-donor transplantation.

After the donation, related organs are taken from the patient following the brain death in the ICU and transplanted to the recipient. These patients are called cadaver donors. Organs can be used only when the brain death is confirmed and declared in the ICU. Organs cannot be used under any other conditions of death.

Brain death is the irreversible state of loss in the brain functions. In brain death, blood circulation completely stops and the person is considered dead by medical and legal descriptions. The patient lacks reflexes such as: light reflex, cornea reflex, - oculocephalic and oculovestibular reflexes, oropharyngeal reflex as well as being unresponsive to facial nerve along with a positive apnea test.

Brain death is not a persistent vegetative state. In brain death, the patient is connected to a ventilator and has no brain function or possibility to revive in any way. However, when a patient is in a vegetative state, he/she usually still has respiration and there is still a slight possibility of reviving. The blood circulation and brain functions are still in place.

The most common causes of brain death are severe head injuries, aneurysmal subarachnoidal and intracerebral hemorrhage, cerebral edema and herniation, extended cardiac resuscitation and asphyxia.

Two physicians are required for the assessment and declaration of brain death. A Neurosurgeon or a Neurologist- an Anaesthesiologist or an Intensivist. The physicians will do physical examination, radiological and lab tests to determine whether the patient meets brain death criteria. If so, the patient is pronounced brain dead along and it is officialized with a certificate. Without the certificate, brain death is not finalized and the organs cannot be taken away. Physicians listed above, decide independently upon the declaration of brain death within the boundaries of medical possibilities.

According to the article 14 of the law No 2238, when a patient is officially brain-dead, the organs or tissues can be taken with the consent of their spouse, children of age, mother/father, siblings in order or an acquintance of any of them if the rest is not present.

Organ donation is when an individual gives their consent by documentation, with free will, and allow their tissues and organs to be donated for the treatment of other patients after the end of their life medically. After filling out an application form on E-nabiz, anyone who wishes to donate their organs can obtain their donation cards before two witnesses by applying to local health authorities, organ donation units in the hospitals, family physicians. The person who has an organ donation card must carry it with themselves at all times.

According to the law no 2238, any citizen who is mentally healthy and above 18 years of age, can donate their organs and obtain an organ donation card.

In Turkey, organ donation is often refused due to several reasons: the unclarity of people on the concept of brain death, anxiousness about the appearance of their body or physical integrity after donation, social, cultural and religious perceptions, unreliability of who the recipient will be, anger towards the hospital/staff, fear of delay or not getting the body back.

The person is not obliged to have all their organs donated. On the organ donation card, there are options to choose from regarding which organ is to be donated. In this section, the donor may tick up the ones he/she wishes to donate and no other organs can be taken under any

circumstances. If the death of the donor occurs at home, the scene of the accident or on the way, the organs cannot be taken. Only the organs of those who are medically declared as brain dead in the hospital can be taken.

If one wishes, they can change their mind just by ripping up the donation card or informing their family regardless of whether they have the card or not. The donation card is never sufficient on its own in any case. The organs cannot be taken without the consent of the family or acquaintances. Therefore, if one wishes to donate their organs, they must inform and let their family know about their decision.

The donated organs cannot be given to anyone with the purpose of any interest or benefits. According to the law no 2238, giving away one's organs in exchange for profit/interest is prohibited.

The recipients are determined primarily according to their compatibleness of blood and tissue groups and medical urgency by National Coordination System of Organ and Tissue Transplantation. There is no discrimination of gender, race, economical status. The organ is transplanted to the recipient who is the most available in terms of distance.

Organ transplantation surgery is done meticulously by surgical teams in operating conditions with the skin covered by blind stitch so that the body integrity is preserved upon delivery to the family.

The waiting lists are made according to the types of transplant patients applied to organ transplantation centers in the framework of the formats presented by the Ministry following the suggestions of Scientific Council Institution. Organ and tissue transplantation centers make the transplant waiting list and inform the Regional Coordination Center (RCC) and National Coordination Center (NCC) in cases of urgent organ and tissue needs. A committee, which was established by RCC, an agency of Ministry of health and its agency NCC, decides upon each kidney transplant recipient by the standards of organ sharing criteria.

According to the decision no. 396, dated 6.3.1980 by Turkish High Board of Religious Affairs (under the Turkish Presidency of Religious Affairs), the organ transplantation is approved (as long as there is no material benefit or payment). The same institution also describes the organ donation as "the biggest favor one can do to the other".

Statistically, the total number of patients declared brain dead in 2017 was 1969 while the number of cadaver donors was 472. In 2018, 472 patients were declared brain dead with the number of 479 donated cadavers within the same year.

If we happen to answer the question of "Why do we need to increase organ donation?" with the number of patients waiting for organs: among the total of more than 60 thousand patients with chronic renal failure, there are 22062 waiting on the kidney transplant list, 2236 on the liver list, 729 on the heart list, 272 on the pancreas list and 2628 waiting on the cornea list. Approximately 6000-7000 patients die while waiting for an organ transplantation annually.

In our country, the number cadaver donors is much lower than living-donor transplantation compared to that in other countries. For instance, %80 of the organs in England is obtained from cadaver donors while %70 of the total is obtained from living-donor transplantation in our country.

Organ transplantation is a very serious medical issue in Turkey as it is in other countries and the donation rates should be increased by informing the public and getting more participation. Success in organ transplantation can be obtained by a higher number of organ donations. In our country, the living-donor transplantations are at a very high rate due to "traditional close-knit family relations" while cadaver donors are much fewer in comparison with other countries. Healthcare professionals bear great responsibilities and duties on this issue. The awareness of the public should be raised strategically by detecting the factors negatively affecting organ donations and clarifying any questions in people's minds to change the negative attitudes towards it.

This study was presented at the 2nd International Awareness Congress on 13-15 December 2018.

RESOURCES

- 1. T.C. Saglik Bakanligi, https://www.saglik.gov.tr/, https://organ.saglik.gov.tr/
- 2. Turkiye Organ Nakli Dernegi, http://www.tond.org.tr/tr/

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