"Brain death" donor. Sampling of organs and tissues with their subsequent transplantation

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Introduction. Organ and tissue transplantation can save lives or significantly improve the quality of life. In order to organize the activity of taking and transplanting organs and tissues from the donor to the recipient on the territory of the Republic of Moldova, the Law no. 42 of 03.06.2008 "Regarding the transplantation of organs, tissues and human cells" was adopted (published on 25.04.2008 in the Official Gazette, no. 81, art. no. 273, date of entry into force 25.10.2008) and revised Law No. 42 on the transplantation of human organs, tissues and cells of 06.03.2020.

Objectives. Steps in sampling of organs and tissues from a "brain death" donor based on the clinical case.

Materials and methods. Description of a clinical case about a patient hospitalized in the Municipal Clinical Hospital "Saint Trinity", Intensive Care department, 2022.

Results. A man, 67 years old, was hospitalized in extremely serious condition, from the anamnesis (collected from relatives) - the patient had several comorbidities, including hypertension. The clinical diagnosis: Ischemic stroke. Arterial hypertension grade III very high additional risk. Mixed cardiomyopathy (hypertensive, ischemic, dysmetabolic). Heart failure III NYHA. Despite the complex treatment administered, "brain death" was found, which was confirmed according to the Standardized Clinical Protocol. Following the discussion with the relatives, consent was received for the removal of organs and tissues. The kidney transplant recipient was selected based on HLA typing, Cross-match, pre-existing antibody titer, general condition and lack of contraindications for surgery. 2 kidneys, liver, 2 corneas, 4 vessels were taken from the donor, but one kidney was not transplanted due to the presence of suspicious lesions, after histopathological examination it was established: Atherosclerotic nephropathy. Multiple renal infarcts. Atherosclerosis of the renal artery st. IV, degree II.

Conclusions. 1. In the given case, organ removal was possible after the consent of the donor's relatives; 2. Organs, tissues and cells can be taken from the deceased person only if the death has been confirmed according to the criteria established by the Standardized Clinical Protocol (which were confirmed in this case); 3. Following investigations and complex compatibility tests, a patient with liver failure and another with end-stage renal failure were transplanted, other tissues taken (cornea-no.2, vessels-no.4) were processed and stored at the Bank of tissues.

Keywords. Donor, recipient, "brain death", transplant