

DISCIPLINE ANNOTATION:

TRANSPLANT COORDINATION AND SURGICAL ASPECTS OF TRANSPLANTATION

THE GOAL OF THE COURSE: to acquire theoretical and practical knowledge on the etiology, pathogenesis, clinical manifestations of vital organ dysfunction, stages of surgical treatment – removal of the donor organ, the affected organ, implantation techniques, anesthetic support, conservative and medical stages of recipient support, development of skills in clinical, laboratory and instrumental examination of potential donors and recipients in compliance with the principles of medical ethics and deontology, to explore working methods and medical documents, to develop knowledge in the application of technologies of the transplant service and a separate team.

OBJECTIVES OF THE COURSE: to identify the most common clinical symptoms and syndromes in the clinic of surgical diseases of internal organs requiring transplantation; to know the moral and ethical principles of a medical specialist and the principles of professional subordination in transplantation; to interpret the general principles of donor and recipient treatment, rehabilitation and prevention of surgical complications, especially in the most severe and common surgical diseases, in particular dilated cardiomyopathy, cirrhosis and liver tumors, renal failure of various genesis, etc.; to classify and analyze the typical clinical picture of the most common surgical diseases leading to persistent decompensation of the function of the most important human organs; to conduct primary and secondary prevention of the most common diseases causing complications after the transplantation stage; to know mechanisms and principles of hemodialysis, plasmapheresis, artificial circulation; interview and physical examination of patients with organ and system failure; to determine management tactics (principles of surgical interventions and conservative treatment, rehabilitation measures) in transplantation; to diagnose complicated and atypical forms of surgical diseases leading to a decision to transplant an organ.

PROGRAM LEARNING OUTCOMES AND COMPETENCIES: skills of interviewing and clinical examination of the patient, ability to establish a preliminary and clinical diagnosis of the disease and to diagnose emergency conditions, skills of providing emergency medical care; ability to carry out sanitary and hygienic and preventive measures; to assess information regarding the diagnosis using a standard procedure based on the results of laboratory and instrumental research; to identify the leading clinical symptom or syndrome, to estab

lish the most likely or syndromic diagnosis of the disease, to prescribe laboratory and/or instrumental examination of the patient, to perform differential diagnostics of diseases.

EXPECTED LEARNING OUTCOMES:

To know: The main provisions and principles of transplantology, types of transplantation, concepts of donor, recipient, principles of donor and recipient selection; features of organ transplantation; methods of diagnosing diseases of the liver, pancreas, intestines, kidneys, lungs, heart, in which the transplantation of respective organs is performed; requirements for donors during transplantation; contraindications, risk groups for transplantation; the use of immunosuppressants in transplantation; pathological and physiological changes in the body during transplantation.

To be able to: interpret phenotyping data of donor-recipient pair in preparation for organ and cell transplantation; justify the use of immunosuppressive therapy in the post-transplant period; determine clinical and laboratory signs of development of ultra-acute, acute and chronic rejection crises; possibilities of transplantation of various organs and tissues; identify possible local and general complications during transplantation, determine the scope of surgical interventions during transplantation; use the principles of preservation and storage of donor organs; identify the main types of immunosuppressive drugs used in transplantation; determine the main legal and regulatory standards for transplantation of organs, tissues and cells.

CONTENT OF THE TRAINING COURSE:

SECTION 1. CHARACTERISTICS OF THE CONCEPT OF TRANSPLANT COORDINATION AND ITS MAIN ASPECTS.

Organization of transplant care for the population. Legal issues of transplantation. National program of transplantation development in Ukraine. Organization of transplant coordination service in Ukraine and the world. Donor support for transplantation. Organization and coordination of transplantation from living donors. Organization and coordination of transplantation from deceased donors. Medical support of the organ donor. Brain death. Medical, legal and psychological aspects.

SECTION 2. FEATURES OF SURGICAL TRANSPLANTATION OF INTERNAL ORGANS.

Renal failure: etiology, classification, symptoms, diagnostics, treatment. Liver failure: etiology, classification, symptoms, diagnostics, treatment. Transplantation of the intestine, pancreas and islets of Langerhans. Enteral failure and total

parenteral nutrition. Transplantation of the heart, blood vessels and heart valves. Classification of heart failure, indications for heart transplantation. Lung and cardiopulmonary transplantation.

SECTION 3. COMPLICATIONS AND REHABILITATION OF PATIENTS AFTER TRANSPLANTATION.

Bioethics in transplantation: ethical, social, legal and religious aspects. Management of patients after organ transplantation. Surgical aspects of organ harvesting. Infectious complications after organ transplantation and their treatment. Rehabilitation of patients after transplantation. Quality of life, social interactions.

