

THEMATIC PLAN OF PRACTICAL CLASSES
5th YEAR STUDENTS FACULTY OF FOREIGN STUDENTS
(10th SEMESTER)
(2022-2023 ACADEMIC YEAR)

TOPIC № 1.

General Fundamentals of Medical Rehabilitation.

Features of rehabilitation examination. The concept of rehabilitation. Types of rehabilitation. The definition of medical rehabilitation. International classification of functioning, disability and health. Components of functioning and disabilities, components of context factors. The aims of medical rehabilitation. The concept of «quality of life», the definition of the components. Differences of rehabilitation and treatment. Principles of rehabilitation. Criteria of disability. Study of motor functions. Methods of research of physical development. The methods of evaluation of physical development. Assessment of physical development with the method of indices. Tables of functional state estimation. The concept of functional class.

TOPIC № 2.

Functional stress tests.

The classification of the stress tests. Indications for stress testing. Contraindications to the tests with physical activity. Evaluation of the stress test results. Anthropometry and somatoscopy. Definition of physique, posture. Forms of the chest, legs, identification of possible asymmetries, curvature of the spine, flat feet. The degree of physical capacity on the results of tests with physical activity. Tests with muscular activity. Methods of carrying out and evaluation of the standard test (20 squatting, 2-minute running), test PWC170 max. Types of the cardiovascular system reactions to a standard of physical exercise. Tests with breath-holding, methods of their realization and evaluation. Vegetative tests. Tests with the change of the position of the body, methods of their realization and evaluation.

TOPIC № 3.

General foundations of physiotherapy. Constant current and its treatment and prophylactic application. Pulse electrotherapy.

The most important directions of the use of physical factors in medicine (medical, rehabilitation, preventive, diagnostic). Classification of means and methods of

physiotherapy. Safety rules while working with the physiotherapeutic equipment. Modern view of the mechanisms of physiological and therapeutic effect of natural and artificial physical factors. The physical, physico-chemical and biological stage of their effect on the organism. Local, segmental and general reactions of the organism due to physiotherapeutic impacts of their relationship. Principles of physiotherapy. The union and the combination of physiotherapeutic factors. Physico-chemical principles and mechanisms of physiological and therapeutic effect on the organism of constant current. Constant current dosage. Medicinal electrophoresis, the general basics and the most important features of the method. New methods and techniques of medicinal electrophoresis. Pulse electrotherapy. Electrosleep therapy. Diadynamic therapy. Amplipulse therapy. Transcutaneous electrostimulation. Electrodiagnosis and electrostimulation. Transcranial electrostimulation. Mechanism of physiological and therapeutic actions. Indications and contraindications.

TOPIC № 4.

High-frequency, ultrahigh-frequency and infrahigh-frequency therapy. Mechanotherapy, aeroionotherapy.

General characteristic of the methods of high-frequency electrotherapy. Thermal and oscillatory components of action of high-frequency factors. The physical characteristics of factors. Mechanism of physiological and therapeutic actions. Indications and contraindications. Mechanotherapy. The concept of the ultrasonic therapy. Physical and biophysical principles of the method. Mechanism of physiological and therapeutic effect of ultrasound. Indications and contraindications for ultrasonic therapy. Equipment. The methodology of the procedures. Safety. Phonophoresis of medicinal substances. The mechanism of therapeutic action, the methodology of the procedures, indications and contraindications. Aeroionotherapy. The concept of the air ions and hydroaeroions. Peculiarities of action of positive and negative aero - and hydroaeroions.

TOPIC № 5.

Light therapy. Magnetotherapy.

Physical and biophysical characteristics of the light, the concept of the spectrum of light emissions. Physiological and therapeutic effect of infrared and visible radiation. BIOPTRON therapy. Physiological and therapeutic effect of flat polarized light. The ultraviolet rays. Physiological and therapeutic effect of the ultraviolet rays with different wavelengths (LUV, MUV, SUV). The ultraviolet

erythema, its dynamics and the biological role. Indications and contraindications. Laser therapy. Physical and biophysical characteristics of the laser radiation. Mechanism of physiological and therapeutic actions. The concept of laserpuncture and laser irradiation of the blood. Indications and contraindications. Magnetotherapy. The biophysical basis of magnetic therapy. Types of magnetic fields (constant, variable, running, pulse). Physiological and therapeutic effect of magnetic fields. Indications and contraindications. Paraffin and ozokerite treatment, cryotherapy. Physiological and therapeutic effect. General characteristics of the physical means. The mechanism of action. The basic methods of the treatment. Mud treatment. Physiological and therapeutic effect. Structure and classification of mud (silt, peat, sapropelic). Therapeutic factors of the mud-treatment procedures: thermal, chemical, mechanical. Technique and methods of procedures. Indications and contraindications for mud therapy.

Department's Head,
Associate Professor
30.08.2022

A handwritten signature in blue ink, consisting of stylized, overlapping loops and strokes, positioned between the department head's name and the date.

Vasileuski S.