TOPIC № 1.

The General bases of medical rehabilitation. Features of rehabilitation examination.

The concept of rehabilitation. Types of rehabilitation. The definition of medical rehabilitation. The concept of the impact of the disease. Types of functional disorders of the model on the ICIDH.


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.

Psychological research in rehabilitation. Study and evaluation of their daily activities. Scale of functional independence, the scale of Bartel, Katz. Tables of functional state estimation. The concept of functional class.

TOPIC № 2.

Functional stress tests

The classification of the stress tests. Indications for load testing. Contraindications to the tests with physical activity. Evaluation of the stress tests. 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.

The General basics 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.
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


Aeroionotherapy. The concept of the air ions and hydronaeroions. 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.


Assosiate Professor
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