

ЛД-21 ИИ

Federal State Budgetary Educational Institution of
Higher Education
"NORTH OSSETIAN STATE MEDICAL ACADEMY" of the
Ministry of Health of the Russian Federation

Department of Psychiatry with Neurology, Neurosurgery and Medical Rehabilitation

APPROVED by
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EVALUATION FUNDS FUND

in the discipline "Medical rehabilitation"

the main professional educational program of higher education - specialty program in the
specialty 31.05.01 General Medicine, approved on "24" may, 2023

for 4th year students of the Faculty of Medicine

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STRUCTURE OF THE APPRAISAL FUND

1. Title page
2. The structure of the FOS
3. Passport of evaluation tools
4. Set of evaluation tools:
 - test tasks
 - questions to prepare for the test

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Passport of the fund of evaluation funds for the discipline "Medical rehabilitation" for the Faculty of Medicine

№ p/p	Name of the supervised section (topic) of the specialty/module	Code of the competence (stage) being formed	Name of the evaluation tool
1	2	3	4
Type of control			
	Medical rehabilitation	UK - 1 OPK - 2 OPK - 5 OPK - 8 PC - 3 PC - 4	- Questions to prepare for the test - Test tasks

Questions for preparation for the medical rehabilitation test for the Faculty of Medicine

1. Rehabilitation. Definition of the concept, purpose and objectives of rehabilitation. List the main areas of rehabilitation, briefly explaining the essence of each.
2. Medical rehabilitation. Three-dimensional concept of the disease as the theoretical basis of medical rehabilitation.
3. Stages of medical rehabilitation, tasks of each stage. Principles of medical rehabilitation measures.
4. Definition of physiotherapy, classification of physical factors. Universal mechanisms of action on the human body (physico-physical, physico-chemical, physico-biological).
5. Galvanization. Physico-chemical bases of direct current action, physiological and therapeutic effect of direct current. Indications and contraindications for use.
6. Medicinal electrophoresis. Advantages and disadvantages of this method of drug administration.
7. Pulse currents. Physical characteristics (parameters) of currents, mechanisms of action, main indications and contraindications. The concept of transcranial electrotherapy.

8. Alternating currents. Give a brief description of SMT, fluctuating current, interference current, D'Arsonval currents, explain the mechanisms of action, the main indications and contraindications.
9. Low-frequency and high-frequency magnetic fields. Physico-chemical bases of action, physiological and therapeutic effect on the body. The main indications and contraindications.
10. Phototherapy. Physical characteristics of the factor, the basic principles of therapeutic and preventive use of phototherapy.
11. Massage. The mechanism of action. Classical massage techniques. Types of massage.
12. Factors of mechanical nature. The main mechanisms of action on physiological reactions in the tissues of the body, indications for use.
13. Factors of thermal nature. The main mechanisms of action on physiological reactions in the tissues of the body, indications for use.
14. Hydrotherapy. List the methods of the method, explain the mechanisms of therapeutic and restorative effects on the body.
15. Therapeutic mud, classification. Mechanisms of therapeutic action. Indications and methods of mud treatment.
16. Mineral waters, origin. The main physical and chemical characteristics used in the classification of waters.
17. External use of mineral waters. Mechanisms of action of baths. The main indications for their use.
18. Drinking use of mineral waters. The mechanism of therapeutic action, the rules of appointment.
19. Physiological mechanisms of the influence of physical therapy on the human body.
20. List the main mechanisms of the damaging effect of physical inactivity on the human body.
21. Means and methods of physical therapy. A brief description of each.
22. Climatotherapy. Acting factors, mechanisms of action on the example of 2-3 types of climatic resorts.

Test tasks on the subjects of the discipline "Medical rehabilitation"

1. The active factor in the galvanization method is

- a) alternating current of low power and high voltage
- b) constant current of low voltage and low power c
-) constant pulse current of low frequency, low power
- d) high frequency and voltage current

2. All the listed devices are used for electroplating, except

- a) Flow - 1
- b) GR - 2 c
-) GC - 2
- d) ASB-2

3. the maximum duration of the local galvanization procedure is

- a) 3-5 minutes

- b) 6-10 minutes c
-) 15-20 minutes
- d) 20-30 minutes

4. The biophysical effects of galvanic current include all of the above, except

- a) changes in ionic concentration
- b) the occurrence of polarization currents c
-) the phenomenon of the catelectron
- d) the formation of free radicals

5. The methods of general impact include

- a) according to Vermel
- b) frontal-occipital c
-) four-chamber galvanic bath
- d) only a) and c)
- e) all of the above

6. The methods of predominantly reflex-segmental exposure include all of the above, except

- a) Bergonier half masks
- b) galvanic collar according to Shcherbak c
-) according to Kellat-Znamensky
- d) galvanic "underpants" by Shcherbak

7. Of the following diseases for galvanization, all listed are shown, except

- a) acute purulent otitis media
- b) chronic hepatocholecystitis without exacerbation c
-) eczema in remission
- d) traumatic neuritis of radiation neuritis in the recovery stage

8. Medicinal electrophoresis is indicated for all the listed diseases, except

- a) Bekhterev's disease of moderate activity
- b) exacerbation of chronic osteoarthritis of the shoulder joint c
-) acute stage iridocyclitis
- d) traumatic encephalopathy, epilepsy

9. Of the following diseases, galvanization is contraindicated for all of the above, except

- a) individual intolerance to galvanic current
- b) pyoderma c
-) eczema in remission
- d) disorders of skin sensitivity
- e) hypertension 1 art.

10. When writing a prescription for prescribing medicinal electrophoresis on a cliché, it is necessary to indicate

- a) the area of application of the electrodes
- b) the concentration of the medicinal substance c
-) the area of the electrodes
- d) the polarity of the electrodes
- e) all of the above

1. The active factor in the electrosna method is
 - a) direct current
 - b) sinusoidal current
 - c) pulsed current with a semi-sinusoidal pulse shape
 - d) pulsed current with a rectangular pulse shape

2. The main effects in the therapeutic effect of electrosone are all, except
 - a) sedative
 - b) trophic c
 -) analgesic
 - d) anti-stress

3. The main mechanisms in the operation of electrosna are all listed, except
 - a) cortical
 - b) cortical-subcortical
 - c) neuro-reflex
 - d) direct direct action of current on brain formations
4. In the mechanism of the analgesic action of electrosine, the main role belongs to
 - a) the formation of endorphins in the limbic system
 - b) formation of biologically active substances (histamine, serotonin c
 -) increase in globulin fractions of blood proteins
 - d) increase in the function of the sympathetic-adrenal system

4. All the listed diseases are indicated for the appointment of electrosone, except
 - a) hypertension of the III art., chronic sinusitis
 - b) neurasthenia c
 -) obliterating endoarteritis
 - d) peptic ulcer of the stomach and duodenum 12
5. All the listed diseases are contraindicated for the appointment of electrosin, except
 - a) bronchial asthma
 - b) acute inflammatory eye diseases c
 -) retinal detachment
 - d) eczema and dermatitis of the face in the acute stage of the disease
6. The following frequency range is used in the electrosna method
 - a) up to 160 Hz
 - b) 170-500Hz
 - c) 600-900Hz
 - d) 1000-2000Hz

1. In modern devices for electrosna, a pulse duration equal to
 - a) 0.2 ms
 - b) 0.3 ms
 - c) 0.4 ms
 - d) 0.5 ms
 - e) 1, 0 ms
2. Traditional electrosna devices include
 - a) "electrosone"
 - b) "electrosone" c

) "LANAR"

d) "electroson-5"

d) correct a) and d)

3. The main methods of electroson are

a) ocular-mastoid and frontal-mastoid

b) segmental and frontomastoid

c) extracerebral and ocular-mastoid

d) frontal-mastoid

1. The active factor in the amplipulstherapy method is

a) direct current

b) pulsed current of high frequency and voltage, low strength c

) pulsed sinusoidal current modulated by low frequency oscillations

d) pulsed current with a rectangular pulse shape

2. The therapeutic effect of SMT is explained by all of the above, except

a) analgesic effect

b) stimulation of the neuromuscular apparatus c

) improvement of peripheral blood circulation

d) reduction of tissue trophism

1. All the listed factors play a role in the mechanism of the analgesic effect of SMT, except

a) the formation of a dominant in the central nervous system

b) blockade of peripheral nerve endings c

) increase of globulin fractions of blood proteins

d) improvement of blood supply to tissues

2. SMT is indicated for all of these diseases, except

a) gastric ulcer and duodenal ulcer

b) acute thrombophlebitis c

) acute lumbosacral radiculitis

d) bronchial asthma

5. SMT is contraindicated in all of these diseases, except

a) kidney stone disease

b) violation of the heart rhythm c

) rupture of ligaments in the acute period

d) obliterating endarteritis

6. To perform amplipulstherapy, use the device

a) SNIM-1

b) Tone-1 c

) amplipulse-4T

d) interdine

7. The main parameters for the appointment of SMT are all listed, except

a) mode

b) the type of work c

) the frequency and depth of modulations

d) the duration of the parcels

e) voltage

8. During amplipulstherapy, the current strength for the treatment of acute pain syndrome is prescribed

- a) to a weak vibration
- b) to a moderate vibration c
-) to a contraction of the stimulated muscle
- before the burning sensation under the electrodes

1. In the method of interference therapy,

- a) two constant low-frequency pulsed currents are used
- b) constant current of low voltage and low power c
-) alternating sinusoidal currents with frequencies ranging from 3000 to 5000 Hz
- d) alternating sinusoidal current of low strength and low voltage, randomly varying in amplitude and frequency within 100-2000 Hz

2. Interference. currents cause all of the above, except

- a) reactions from deeply located organs and tissues
- b) hyperemia of the skin c
-) sensations of vibration in the affected area
- d) analgesic effect

3. Interference. currents

- a) activate peripheral blood circulation
- b) improve the functional state of the neuromuscular apparatus c
-) have a parasympathicotropic effect
- d) have an antispasmodic effect
- e) all of the above

4. Interference therapy is indicated for all the listed diseases, except

- a) acute and purulent inflammatory processes
- b) vegetative-vascular dystonia with increased blood pressure
- c) vascular diseases of the extremities
- d) neuralgia

5. Interference therapy is contraindicated

- a) in feverish conditions
- b) with fresh intra-articular injuries with hemarthrosis c
-) with a tendency to bleeding and bleeding
- d) with Parkinson's disease
- e) with all of the above

6. Interference therapy is dosed

- a) by current strength
- b) by frequency c
-) by power
- d) by intensity
- e) correctly a) and b)

In the method of therapeutic effect, called "darsonvalization" is used

- a) alternating electric field
- b) low-frequency alternating current
- c) low voltage direct current
- d) alternating high-frequency pulse current of high voltage and low power
- e) electromagnetic field

When exposed to Darsonval current , they always apply

- a) two electrodes
- b) three electrodes
- c) four electrodes
- d) solenoid
- e) one electrode

Darsonval current is capable of

- a) reduce the sensitivity of the nerve receptors of the skin
- b) cause irritation of receptors in the muscle, causing its contraction
- c) to suppress the processes of exchange
- d) reduce regeneration
- e) cause hypothermia of the skin

The active factor in the method of magnetotherapy is

- a) electric alternating current
- b) constant or variable low-frequency magnetic field
- c) the electromagnetic field of the midrange frequency
- d) ultra-high frequency electromagnetic radiation
- e) ultra-high frequency electric field

There is no low intensity magnetic field in the therapeutic effects

- a) decongestant
- b) vasodilator
- c) increasing the tone of striated muscles
- d) hypotensive
- e) hypocoagulating

When a high - frequency alternating magnetic field is applied in human tissues ,

- a) vibrational vortex motions of electrically charged particles
- b) processes of stable polarization of charged particles
- c) the movement of electrically charged particles in one direction
- d) resonant absorption by water molecules
- e) cavitation processes

With inductothermy , energy absorption is most active

- a) in muscles and parenchymal organs
- b) in the bones
- c) in the skin
- d) in adipose tissue
- e) in connective tissue

Inductothermia is contraindicated for treatment

- a) prolonged pneumonia
- b) coronary heart disease in functional class III-IV
- c) chronic salpingoophoritis in the stage of infiltrative-spastic changes
- d) chronic hepatitis
- e) arthrosis of the knee joint

The active physical factor in UHF therapy is

- a) direct current

- b) alternating ultra-high frequency electric field
- c) pulse current
- d) constant high voltage field
- e) alternating electric field of low frequency

The ultra-high frequency electric field penetrates into the tissues to a depth of

- a) up to 1 cm
- b) 2-3 cm
- c) 9-13 cm
- d) through penetration
- e) 13-15cm

The optimal combination of two physical factors: 1. ultrasound - after 30 min. medicinal electrophoresis; 2. exposure to UHF electric field and ultraviolet irradiation after a few minutes; 3. decimeter range microwaves - ultrasound after a few minutes; 4. thermal procedures and bathing in cold water; 5. electrophoresis of sedatives and Charcot shower

- a) if the answers 1,2 and 3 are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the answers are correct 4
- e) if the answers 1,2,3,4 and 5 are correct

The depth of ultrasonic energy propagation mainly depends on the following parameters

- a) frequency and wavelength
- b) intensity
- c) fabric density
- d) duration of exposure
- e) the area of the voiced surface

The physical essence of ultrasound is

- a) the flow of quanta
- b) electromagnetic waves
- c) high frequency current
- d) mechanical vibrations
- e) direct current

The maximum number of voicing fields for one ultrasound procedure is

- a) one
- b) two
- c) three
- d) four
- e) five

Ultrasound can be prescribed to children from the age of

- a) 2 years
- b) 1 year
- c) 3 years
- d) 5 years
- e) 6 years

The device used for ultrasound exposure is

- a) inductor
- b) the electrode
- c) the reflector

- d) emitter
- e) condenser plates

The concept of "indirect piezoelectric effect" provides for the following

- a) the formation of electric charges on the surface of some substances during mechanical deformation
- b) the formation of mechanical deformation of some substances under the action of electric current
- c) propagation of electromagnetic oscillations in the medium
- d) changes in the ionic structure of tissues under the action of current
- e) the transition of a body from a solid state to a liquid state

Ultrasound has the following effect: 1. increases the permeability of tissue structures; 2. increases the release of free hormones into the blood; 3. increases the formation of biologically active substances; 4. causes an increase in antiplasmic micro-flows in cells; 5. has a vegetotropic effect

- a) if the answers 1,2 and 3 are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

The features of the pulsed ultrasound mode are as follows: 1. it is prescribed in the acute period of the disease; 2. it has the best effect in cicatricial-adhesive processes; 3. it is recommended to use in pediatrics; 4. it has a sedative effect;

5. it is prescribed for chronic inflammatory process

- a) if the answers 1,2 and 3 are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

The physical essence of light is

- a) electromagnetic waves with a wavelength from 0.4 to 0.002 microns
- b) directional motion of electrically charged particles
- c) mechanical vibrations of medium particles
- d) electromagnetic waves with a length of 1 m from 1 mm
- e) directed ion flow

The depth of penetration into the tissues of electromagnetic waves of the optical range depends to a greater extent

- a) from the power of the luminous flux
- b) wavelengths
- c) optical properties of the absorbing medium
- d) irradiation time
- e) the type of irradiator

Sodium chloride baths are indicated for the following diseases: 1. osteoarthritis;

2. polyneuritis in the subacute stage; 3. chronic salpingoophoritis; 4. hyperthyroidism; 5. chronic ischemic heart disease 3 functional class

- a) if the answers 1,2 and 3 are correct
- b) if answers 1 and 3 are correct

- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

Iodromic baths are indicated for the following diseases: 1. atherosclerotic cardiosclerosis without angina and cardiac rhythm and conduction disorders; 2. hypersthenic neurasthenia; 3. neuritis in the subacute stage; 4. ovarian dysfunction; 5. scaly lichen

- a) if the answers 1,2 and Z are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

Taking mineral water with a temperature of 40-45 ° C, mineralization of 1.5-Zg / l, 3-4 times a day 40 minutes before meals slowly, in small sips is indicated for the following diseases: 1. chronic colitis with increased motor activity; 2. chronic pancreatitis; 3. intestinal dyskinesia with increased motor activity; 4. chronic gastritis with normal secretion; 5. chronic pyelonephritis.

- a) if the answers 1,2 and Z are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

Drinking mineral waters are prescribed for the following diseases: 1. peptic ulcer of the stomach and duodenum outside the acute phase; 2. urolithiasis; 3. obesity; 4. viral hepatitis; 5. ulcerative colitis.

- a) if the answers 1,2 and Z are correct
- b) if answers 1 and 3 are correct
- c) if the answers 2 and 4 are correct
- d) if the correct answer is 4
- e) if the answers 1,2,3,4 and 5 are correct

Compatible with sodium chloride baths in one day are the following types of exposure: 1. UHF electric field on the joint; 2. electroson; 3. ultrasound therapy on the tonsils; 4. underwater shower massage; 5. mud application "trousers".

a) if the answers 1,2 and Z are correct

b) if answers 1 and 3 are correct

c) if the answers 2 and 4 are correct

d) if the correct answer is 4

e) if the answers 1,2,3,4 and 5 are correct