

THEMES FOR THE PROMOTION EXAM FOR THE POSITION OF PROFESSOR

DISCIPLINES:

- ELECTROTHERAPY (Balneophysiotherapy and Recovery, 2nd year, lectures)
- ELECTROTHERAPY (Balneophysiotherapy and Recovery, 2nd year, practical training)
- PHYSITHERAPY IN DENTAL MEDICINE (Dental Medicine, 3rd year, lectures)
- REHABILITATION AND FUNCTIONAL RE-EDUCATION TECHNIQUES. ORTHESIS. PROSTHETICS (Balneophysiotherapy and Recovery, 2nd year, lectures)

position 4 of the scheme of positions of the Psycho, Neurosciences and Recovery Department, University of Oradea

ELECTROTHERAPY

1. INTRODUCTION. The physiological basis of electrotherapy. Resting potential (membrane potential). Action potential. Characteristic elements of the electrical exciters with conditions the reaching point of cell membrane. Electrotonus. The law of polar excitability. Accommodating. Frequency of stimuli. Excitability changes.
2. GALVANIC CURRENT. Biological actions of the galvanic current. Physiological effects of galvanic current. Methods of applying galvanization. Indications and contraindications of galvanotherapy.
3. LOW FREQUENCY CURRENTS. Notions about low frequency current therapy. Classification of low-frequency currents according to physical parameters and therapeutic effects. Methods of electrostimulation in low frequency range. Applications purposes analgesic low frequency currents. Methods analgesics "conventional" in the low speed range: diadynamic. Formulas prescribing effects and mode of action, implementing measures, indications and contraindications.
4. LOW CURRENT CURRENTS. Methods analgesics "conventional" in the low speed range: Trabert current. "Conventional" analgesic methods in the field of low frequencies: TENS, Stochastic currents. Prescription formulas. Stimulating normally innervated skeletal muscle contraction: mode of action, forms, methodology and application technique, indications, contraindications. Stimulation of denervated skeletal muscle: forms of current use, mode of action. Electrodiagnosis, application methodology and technique, indications, contraindications. Electrostimulation of spastic muscles: principles of action, methodology of application, contraindications.

5. MEDIUM FREQUENCY CURRENTS. Biological actions of MF currents. The main physiological effects of MF currents. The possibilities of applying the currents of MF. Indications. Contraindications. Prescribing formulas.
6. HIGH FREQUENCY THERAPY. Definition. Classification. How to produce high frequency currents for therapeutic purposes. Short-wave devices. The physical properties of high-frequency currents. The physiological properties of the high frequency currents and their main biological and physiological actions.
THE TECHNIQUE AND METHODOLOGY OF SHORTWAVE THERAPY. Method in the condenser field. Inductive field method, technique and methodology of shortwave therapy. Recommendations and rules to be taken into account in short wave applications. Indications. Contraindications. Prescription formulas. High frequency pulsatile therapy: therapeutic action and effects, indications, advantages of application. Decimetric waves: biological and physiological action and effects, application technique, indications and contraindications.
7. ULTRASOUND THERAPY. Forms of ultrasound used in therapy. The biological actions of ultrasound and the physiological effects of ultrasound. Methodology of ultrasound applications. The technique of ultrasound applications; combination therapy, ultrasound with low frequency forms of electrotherapy. Indications. Contraindications. Prescribing formulas.
8. MAGNETOTHERAPY. The actions of magnetic fields; physiological bases and therapeutic effects. Methods of application of low frequency magnetic fields. Rules to be followed when applying magnetoflux treatment. indications and contraindications of magnetodiaflux applications.
9. PHOTOTHERAPY, infrared radiation, ultraviolet radiation. Physical properties in phototherapy. The biological and physiological effects of light. Therapeutic effects of phototherapy, depending on the type of radiation. Methodologies of application, mode of action, indications, contraindications in phototherapy.
10. NOTES OF LASER THERAPY. Mechanisms of action, therapeutic effects, indications, contraindications.

REFERENCES

1. Cristina Daia, Electroterapie. Principii practice, editia a II-a, Editura Universitara, 2022, ISBN: 9786062813932
2. Radulescu Andrei. Electroterapie. Editura Medicala, Bucuresti, 2018, ISBN:9789733917640
3. Cevei Mariana Lidia, Elemente de electroterapie practica, Editura Universității din Oradea, 2009, ISBN 978-973-759-753-3
4. Vicas Lucia, Carmen Cseppento „Curs practic de fizioterapie”, februarie 2006 ISBN 973-9268-47-1, Oradea Convex 2006
5. Cevei Mariana Lidia, Mihailov Mariana – Ghid de electroterapie, Editura Universității din Oradea, 2004, ISBN 973-613-703-1

PHYSIOTHERAPY IN DENTAL MEDICINE (Dental Medicine, 3rd year, lectures)

1. Definition and brief history of physiotherapy. Therapeutic principles: classification.
2. Physical factors used in medical rehabilitation. Classification.
3. Direct current therapy, low frequency, medium frequency currents: definition, mode of action, physiological and biological effects, application technique. Indications and contraindications.
4. High frequency therapy. Ultrasound: physico-chemical, physiological and biological effects of ultrasound. Application technique. Indications and contraindications.
5. High frequency therapy. Short waves: physico-chemical, physiological and biological effects. Application technique. Indications and contraindications.
6. Low frequency magnetic field therapy. Application technique. Indications and contraindications.
7. Phototherapy. RIR. UVR. Physico-chemical, physiological and biological effects. Application technique. Indications and contraindications.
8. Biostimulation with laser radiation: mechanisms of action, therapeutic effects, indications, contraindications in dentistry.
9. Thermotherapy: concepts of thermoregulation, physiological and therapeutic effects of local and general applications of hot and cold. Hyperthermia and cryotherapy - therapeutic effects, mechanisms of action, indications and contraindications.
10. Types of bioclimate. Acclimatisation.
11. Hydrotherapy: definition, procedures, mode of action, indications, contraindications.
12. Role and objectives of physiotherapy. Physical therapy modalities. Applications in oral rehabilitation.
13. Temporomandibular algodysfunctional syndrome. Notions of anatomy, biomechanics of the temporomandibular joint. Etiology of temporomandibular algodysfunctional syndrome.
14. Objectives and means of treatment of temporomandibular algodysfunctional syndrome.

REFERENCES:

1. Ovidiu Aghiorghiesei, Roxana Bordea, Radu Septimiu Câmpian, Bogdan Crişan, et al. Fizioterapie. Aplicaţii în medicina dentară. Şcoala ardeleană de medicină, 2020, ISBN 978-606-797-603-8
2. Cristina Daia, Electroterapie. Principii practice, editia a II-a, Editura Universitara, 2022, ISBN: 9786062813932
3. Radulescu Andrei-Electroterapie-Editura Medicala Bucuresti, 2018, ISBN:9789733917640
4. Nistor Cseppento Carmen Delia, Bochis Călin Florin, Fizioterapie aplicată în medicina dentară, Curs practic pentru studenţi, Editura Universitatii din Oradea, 2021, ISBN 978-606-10-2160-4
5. Cevei Mariana Lidia, Elemente de electroterapie practica, Editura Universităţii din Oradea, 2009, ISBN 978-973-759-753-3
6. Enciclopedie laser BTL

REHABILITATION AND FUNCTIONAL RE-EDUCATION TECHNIQUES. ORTHESIS. PROSTHETICS (Balneophysiotherapy and Recovery, 2nd year, lectures)

1. Introduction to rehabilitation and functional rehabilitation techniques.
2. Neuroprioceptive facilitation techniques.
3. Staging the rehabilitation programme in an orthopaedic-traumatic condition
4. Williams program. McKenzie program.
5. Neuromotor education-rehabilitation methods. Kabat method.
6. Neuromotor education-reeducation methods. Frenkel method. Vojta method.
7. Neuromotor education-reeducation methods. Bobath method.
8. Recovery techniques in patients with spinal cord injury.
9. Rehabilitation techniques in patients with spinal static disorders
10. Recovery techniques in patients with multiple sclerosis
11. Rehabilitation techniques in patients with Parkinson's disease
12. Recovery techniques in patients with spasticity, post stroke
13. Recovery techniques in peripheral nerve disorders
14. Orthotics. Prostheses.

REFERENCES

1. Kinetologie - Tudor Sbenghe, Mihai Berteanu, Simona Elena Savulescu. Editura medicala, 2023.
2. Sbenghe T., Kinetologie. Editura Medicală, București 2019.
3. Dogaru G. Tehnici de reabilitare și reeducare funcțională, Editura Medicală Universitară Iulius Hațieganu Cluj Napoca, 2023, ISBN: 9786060751434
4. Kiss I., Fiziokinetoterapia și recuperarea medicală. Editura Medicală, București 2021
5. Lazăr L., Marcu F., „Probleme speciale ale recuperării,, curs ediția a-I-a format electronic, ISBN: 978-606-10-2031- 7, Editura Universitatii din Oradea, 2019
6. Gelu Onose, Aurelian Anghelescu. Ghid de diagnostic , tratament si reabilitare in suferinta dupa traumatisme vertebro- medulare. Editura Universitara "Carol Davila", Bucuresti, 2011
7. Sbenghe T.-Kinetoterapie profilactica, terapeutica si de recuperare-Editura Medicala Bucuresti 1987.
8. Randall L. Braddom: Physical Medicine & Rehabilitation, Third Edition, Saunders Elsevier, 2007.

4.12.2023

Department Director,

Conf. univ.dr. ANDRONIE-CIOARĂ FELICIA

