MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Faculty of Medicine
Department of General Practice

Confirmed by
Acting Vice-Rector for Scientific and Pedagogical Work
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Methodological recommendations to practical classes on the discipline

Faculty of Medicine, VI year
Academic discipline " General practice of family medicine"

Approved
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Practical classes

Practical lesson 1

Topic: THE PLACE OF FAMILY MEDICINE IN THE OVERALL STRUCTURE OF HEALTH CARE AND THE PRINCIPLES OF FAMILY SERVICES. ORGANIZATION OF THE WORK OF A FAMILY DOCTOR.

Objective: To improve students' knowledge of family medicine, its place in the overall structure of health care, to reveal the principles of family medicine, to acquaint them with the stages and reforms of primary health care (PHC), to acquaint them with the principles of work of a primary care physician – a family doctor, to learn how to fill out primary accounting medical documentation.

Basic concepts: primary health care, family medicine, primary care reform, regulatory framework for PHC, PHC provider, PHC doctor, electronic health care system, medical services within the PHC.

Equipment: Orders of the Ministry of Health of Ukraine, samples of primary accounting documentation, multimedia support

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge - frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to questions.

- What are the levels of medical care?
- What is primary care?
- Modern ideas about the structure of PHC?
- What is family medicine?
- The subject and objectives of family medicine?
- Who is a family doctor?
- Features of the work of a family doctor?

- Principles of organization and provision of services for PHC?
- Deontology and ethics of the family doctor's relationship with the patient and family?
- What is automatization?

3. Formation of professional skills and abilities.

– The applicant for higher medical education must:

- be able to use the site moz.gov.ua to familiarize yourself with the regulatory framework for primary health care,
- know the stages of primary care reform,
- understand the purpose of creation and functioning of the Electronic Health System (EHS), the National Health Service of Ukraine (NHSU), Medical Information Systems (MIS)
- know the basic principles and organization of the work of the PHC Doctor -requirements for the results of work, including for registration
- be able to draw up primary accounting medical documentation
- be able to use the classification of primary care ISRS-2

– Control materials for the final stage of the lesson:

<u>Test tasks.</u>

1. What does a PHC doctor do?

1) Conducts reception of patients
2) Leads the reception of healthy individuals
3) Visits patients at home
4) Engaged in medical prevention
5) Performs surgical interventions

2. Are the duties of a family doctor included?

1) Dynamic surveillance of uncomplicated pregnancy
2) Dynamic monitoring of patients' health
3) Providing counseling assistance aimed at eliminating or reducing habits and behaviors that pose a health risk.
4) Maintenance of primary accounting documentation, registration of certificates, disability certificates and referrals for medical and social examination, as well as medical death certificates.
5) Medical surveillance of a healthy child

4. What should a PHC doctor be able to do?

1) Provide qualified medical care
2) Conduct an examination of temporary disability
3) Provision in cases of need for emergency medical care for simple comorbidities
4) Selection of patients for sanatorium-and-spa treatment
5) Diagnosis and treatment of diseases of internal organs
6) To establish disability groups

5. What skills should a PHC doctor have?

1) Physical methods of examination of patients
2) Determination of visual acuity
3) Maintaining medical records
4) Injection technique
5) Performing ultrasound

6. In what emergency conditions should a general practitioner establish a diagnosis and provide emergency medical care?

1) Acute heart failure
2) Acute vascular insufficiency
3) Hypertensive crisis
4) Hydrothorax
5) Asthmatic status

7. What manipulations should a family doctor have?

1) Injection
2) Puncture of the pleural cavity
3) Tracheostomy
4) Laparoscopy
5) Determination of blood groups

8. What medical documentation do PHC doctors keep?

1) Journal of Registration of Outpatients
2) Disability sheet
3) Medical card of an outpatient patient
4) Help
5) Referral of a patient to MSEC

9. What nosology are included in the early skinning programs carried out by PHC doctors in accordance with Order No. 504, except for:

1) Tuberculosis
2) Viral hepatitis
3) HIV

4) Hypertension and other cardiovascular diseases
5) Diabetes
6) Prostate Cancer
7) Colorectal Cancer
8) Breast cancer

10. Who is the PHC provider according to the order of the Ministry of Health 504

1) Pediatrician
2) Therapist
3) Family doctor
4) Healthcare facility
5) FOP doctor

4. Summing up: Conducting an assessment of students, summing up, answering questions that arose during the lesson, announcing the next topic of the lesson.

List of recommended literature:

Main

1. Actual aspects of higher medical education in the specialty "General practice-family medicine" : Educational sciences. posib. / ed. prof. L.S. Babinets. – Ternopil: Osadtsa Yu.V., 2021. – 652 p.
2. Organization of primary health care outside the hours of reception of patients (guidelines) 01.03.2019 Kyiv, approved by the advisory group on improving legislation in the field of primary health care.
3. Babinets, L.S. "Health of Ukrainians in the hands of a family doctor": not just the name of the next conference, but our strategic goal / L.S. Babinets, I.O. Borovyk // Health of Ukraine. - 2017. - N 2. - pp. 38-39.
4. Babinets, L.S. Place of the family doctor in the health care system of Hungary / L.S. Babinets // Health of Ukraine. - 2017. - N 9. - pp. 40-41.
5. Babinets, L. C. Actual issues of diagnosis, treatment, rational pharmacotherapy, medical examination and rehabilitation in the practice of a family doctor / L. C. Babinets // Health of Ukraine. - 2017. - N 11/12. - p. 44

Additional:

1. Order of the Ministry of Health of Ukraine No. 504 of March 19, 2018 "On approval of the Procedure for the provision of primary health care"
2. Order of the Ministry of Health of Ukraine No. 503 of March 19, 2018 "On approval of the Procedure for choosing a doctor who provides primary health care and the form of declaration on the choice of a doctor who provides primary health care"

Electronic information resources:

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. World Organization of Family Physicians (WONCA) . http://www.wonca.org
3. www.ama-assn.org – American Medical Association / American Medical Association
4. www.who.int – World Health Organization
5. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
6. http://bma.org.uk – British Medical Association
7. www.gmc-uk.org - *General Medical Council* (*GMC*)
8. www.bundesaerztekammer.de – German Medical Association
9. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson 2,3

Topic: MEDICAL AND SOCIAL ASPECTS OF PUBLIC HEALTH. EXAMINATION OF TEMPORARY DISABILITY. THE ROLE OF A FAMILY DOCTOR IN PROMOTING A HEALTHY LIFESTYLE, PREVENTION AND MEDICAL EXAMINATION

Objective: To improve students' knowledge of medical and social aspects of health: to reveal the concepts of health, mortality, the main causes of death in Ukraine, the role of PHC doctors in promoting a healthy lifestyle, combating risk factors, know the principles and types of medical prevention, highlight the state of modern medical examination of the population, familiarize students with the regulatory framework and the state of examination of temporary disability in accordance with changes in the legislation of Ukraine and the transition to electronic disability certificates.

Basic concepts: health, risk factors, prevention, medical examination, e-health system, persistent and temporary disability. examination of temporary disability.

Equipment: Orders of the Ministry of Health of Ukraine, samples of documents on disability multimedia support

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge - frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to questions.
   - What is health? Definition, the concept of individual and group health.
   - What are the main indicators of health.
   - Classification of risk factors, their role in the stratification of prognosis for the patient.
   - What is included in the primary prevention? Basic principles, measures used for primary prevention.
   - What is included in secondary prevention? Basic principles, measures used for secondary prevention.
   - What are the basic principles of medical examination. What is the role of a family doctor.
   - What is the examination of temporary disability and who conducts it.
3. Formation of professional skills.

– The applicant for higher medical education must:

- be able to use the site moz.gov.ua to familiarize yourself with the regulatory framework for primary health care,
- know the basic statistics on morbidity and mortality in Ukraine, World health indicators.
- know what risk factors are, their classification and the importance of dealing with modified risk factors.
- know about medical prevention, its types and the participation of a doctor at every stage of medical prevention
- Know the programs of early screening of certain diseases by primary care doctors in accordance with the order of the Ministry of Health 504 like example
- know the regulatory framework for the examination of temporary disability
- Know the basic concepts and terms regarding temporary disability
  -requirements for the results of work, including for registration
- be able to issue paper disability certificates
- be able to fill in documents confirming temporary disability (certificates f095 / 0.095-2 / 0, certificates of any form)

- Control materials for the final stage of the lesson:

Test tasks.

1.Risk factors are divided into:

- A. External and Internal

- B. Modified and unmodified
- B. Primary and secondary
- D. Hereditary and acquired

2. Modified risk factors for developing diseases include:

- A. Heredity
- B. Age
- B. Tobacco smoking
- D. Alcohol consumption

3. The object of study of the science of valeology is:

- A. Healthy person
- B. Healthy population
- B. Human disease
- G. Public Health

4. Primary prevention is:

- A. Prevention of cardiovascular diseases
- B. Preventing the development of complications of the disease
- B. A set of measures to prevent the occurrence of diseases in healthy people
- D. Timely medical examinations

5. What is secondary prevention

- A. Rehabilitation and quality of life improvement
- B. A set of measures to prevent the occurrence of diseases in healthy people
- B. Combating risk factors for developing diseases
- D. Prevention of exacerbations, complications, chronicity of diseases

6. What is temporary disability

- A. Disability due to illness and/or injury
- B. Disability as a result of illness and other causes, which has temporary feedback and is restored after treatment or rehabilitation measures
- B. Disability that led to disability
- D. Disability due to pregnancy and childbirth

7. What documents confirm the temporary working capacity

- A. Disability Leaflet
- B. Reference f 086/o
- B. Reference f 095/o
- D. References of any form

List of recommended literature:

Main

1. Family medicine: in 3 books. — Book 1. General Issues of Family Medicine: A Textbook for Honey. University IV r. a. Approved by the Ministry of Education and Science / / O.M. Girina, L.M. Pasiyeshvili, G.S. Popik, A.S. Svintsitskyi and others. — K.: VSV "Medicine", 2013. — 672 c

2. Family medicine: in 3 books — Kn. 3: Special part. Polydisciplinary general medical practice: Textbook for honey. University IV r. a. Approved by the Ministry of Education and Science / Ed. O.M. Girina, L.M. Pasieshvili. — K., 2017. — 680 s

3. Actual aspects of higher medical education in the specialty "General practice-family medicine" : Teaching and science. posib. / ed. prof. L.S. Babinets. – Ternopil: Osadtsa Yu.V., 2021. – 652 p.

4. Apanasenko G.L. Valeology in solving a demographic catastrophe in Ukraine // Health of Ukraine. — 2014. — № 10 (95).

5. Davydovych I.E. Medical and social aspects of the problem of health of the population of Ukraine // News of medicine and pharmacy. – 2017. – №19(227). – P.5-6

6. Order of the Ministry of Health of Ukraine No 504 of 19.03.2018 "On approval of the Procedure for the provision of primary health care"
7. Order of the Ministry of Health No. 1066 of 1.06.2021 of Ukraine dated 01.06.2021 No. 1066, revised on 26.01.2022, as amended in Orders No. 1836, 1609, 2086, 2608, 171, 233, 522, 675 (22.04.2022) "Some issues of forming medical opinions on temporary disability and conducting their inspection"8. Order No 1234 of 17.06.2021 "On approval of the Procedure for issuing (forming) disability certificates in the Electronic Register of Disability Certificates"
9. Resolution of the Cabinet of Ministers of Ukraine dated 17.04. 2019 No. 328 "Some issues of organizing the maintenance of the Electronic Register of Disability Certificates and providing information from it"
10. Order of the Ministry of Health No 2136 of 18.09.2020 "On the procedure for maintaining the Register of medical opinions in the electronic health care system of Ukraine

Additional:

1. Kovalenko V.M., Dorohoi A.P. Diseases of the circulatory system in Ukraine: problems and reserves for preserving the health of the population // Health of Ukraine. – 2004. – No. 18 (103). – P. 4-10.
2. Nakaz of the Ministry of Health of Ukraine dated 19.03.2018 No 504 "On approval of the Procedure for the provision of primary health care"
3. Order of the Ministry of Health of 16.09.2011 No 595 " On the procedure for preventive vaccinations in Ukraine and quality control and circulation of medical immunobiological preparations"

Electronic information resources:

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. World Organization of Family Physicians (WONCA) . http://www.wonca.org
3. www.ama-assn.org – American Medical Association / American Medical Association
4. www.who.int – World Health Organization
5. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
6. http://bma.org.uk – British Medical Association
7. www.gmc-uk.org - *General Medical Council* (*GMC*)
8. www.bundesaerztekammer.de – German Medical Association
9. https://library.odmu.edu.ua/catalog/ - Electronic catalog
10. Home (nszu.gov.ua)National Health Service of Ukraine

Practical lesson 4, 5.

Topic: "The program of management of patients on an outpatient basis with the most common diseases of the broncho-pulmonary system (chronic obstructive pulmonary disease, bronchial asthma)

"Risk factors, monitoring at home, diagnosis of exacerbation, emergency care, indications for hospitalization"

The purpose of the lesson

To improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of COPD and BA, to form professional skills in drawing up a survey plan (laboratory and instrumental), a comprehensive plan for managing the patient in a stable state and during exacerbation, the necessary preventive measures.

Basic concepts:

Chronic obstructive pulmonary disease, bronchial asthma

Equipment: illustrative material, tables, orders of the Ministry of Health of Ukraine,

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to questions.

- What is the etiology of COPD and the main risk factors?
- What is the epidemiology of COPD?
- What are the main links in the pathogenesis of COPD?
- What is the method of COPD screening and follow-up?
- What are the main clinical symptoms and syndromes in COPD?
- What is the differential diagnosis of COPD?
- What are comorbid diseases in COPD?
- What are the basic principles of treating COPD in a stable state according to GOLD 2022?
- What are the principles of management of a patient with COPD during exacerbation?
- What are the indications for hospitalization during exacerbation?
- What are the methods of prevention, medical rehabilitation for COPD?
- What is the etiology of BA, risk factors?
- What are the epidemiology of BA?
- What are the main links in the pathogenesis of BA?
- What are the main PA phenotypes?
- What are the main clinical symptoms and syndromes in BA?
- What is the differential diagnosis of BA?
- What are the possible complications of BA?
- What are the diagnostic methods for BA?
- What are the basic principles of basic treatment of BA according to GINA 2022?
- What are the tactics of managing a patient with exacerbation of BA at the outpatient stage?
- What are the indications for hospitalization with exacerbation of BA?
- What are the methods of prevention?

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with patients with COPD and BA, collect anamnesis of life and disease, epidemiological history, conduct a survey on organs and systems;
- conduct a physical examination of a patient with COPD and BA and determine the main symptoms of the disease;
- Use recommended scales to assess control over COPD and BA;
- prescribe a set of laboratory and instrumental studies of a patient with COPD and BA and analyze the results;
- conduct differential diagnosis and substantiate the clinical diagnosis of a patient with COPD and BA;
- Formulate a diagnosis in accordance with national and international recommendations, draw up medical documentation;
- Provide a written treatment plan for patients with COPD and BA in a stable condition, taking into account the stage of the disease, the presence of complications, the severity of the condition, concomitant pathology;
- Assess the risk of exacerbation and tactics of management during exacerbation with COPD and BA;
- Make a plan for medical rehabilitation for patients with COPD and BA;
- make a report of the results of the examination of a patient with COPD and BA by a team of students in the study group, analysis under the guidance of the teacher of the correctness of diagnosis, differential diagnosis, the scope of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for self-control of the quality of training.

Tests for self-control:

1. Patient K., 22 years old, entered the hospital with complaints of asthma attacks up to 3-4 times a day, cough with the release of thick transparent sputum, shortness of breath. On examination: cyanosis of the lips, barrel-shaped chest, swollen cervical veins, tachycardia (110 per minute). Heart tones are weakened. Percussion - above the lungs boxy sound. Breathing is weakened, the exhalation is elongated. On both sides is a mass of dry wheezing. What is the preliminary diagnosis?

A. Spontaneous pneumothorax
B . Cardiac asthma
C . Bronchial asthma
D . Chronic obstructive bronchitis
E . Anxiety-depressive syndrome, panic attack

2. Patient A. 55 years old complains of constant shortness of breath, which increases with physical exertion, morning cough with a small amount of mucopurulent sputum. Sick for about 10 years. Smokes for 40 years. Objectively: BDR - 20/min, height - 175 cm, weight - 95 kg. The chest is barrel-shaped. Above the lungs against the background of weakened vesicular breathing - a small amount of scattered dry wheezing. What mechanism of violation of alveolar ventilation is leading:

A. Impaired chest mobility
B. Dysfunction of the neuromuscular system
C. Dysfunction of the respiratory center
D. Bronchial obstruction
E. Restrictive insufficiency of external respiration

3. A 25-year-old woman with a burdened allergology history (hay fever) during pregnancy of 26

weeks after a stressful situation suddenly appeared noisy wheezing, shortness of breath, cyanosis of the face. With auscultation: over the lungs, breathing is weakened, there are many dry wheezing; with percussion – box sound. After the attack, the woman had a small amount of viscous sputum. What is the most likely diagnosis?
A. Pulmonary embolism.
B. Pulmonary edema.
C.Obstructive bronchitis.
D. An attack of bronchial asthma.
E. Threat of abortion.

4. A patient of 60 years complains of suffocation, aggravated by physical exertion, a constant cough with a small amount of sputum. He has been smoking for over 45 years. Objectively: temperature - 36.5 ° C, BR - 24 per minute, pulse - 84 beats / min., blood pressure - 125/85 mm Hg. Asthenic, the skin is pale pink in color, the exhalation is elongated through closed lips, the chest is barrel-shaped, the respiratory muscles take an active part in breathing. Auscultative - a small amount of dry wheezing over the lungs. Absolute dullness of the heart is not determined. Spirogram: MCL - 71%, FEV1 -45% of the required values. The use of which therapy is the most effective method of secondary prevention of pulmonary emphysema in a patient?
A. Inhaled Steroid Hormone
B. Long-acting bronchodilators
C . Mucolytic agents
D. Vaccine therapy
E. Low-flow oxygen therapy

5. A 52-year-old man has been suffering from chronic obstructive bronchitis for 15 years. He has been smoking since he was 20 years old. In a spirographic study, it was established: MCL < 40% of the proper, FEV 34%. What is the degree of ventilation disorders in a patient:
A. II
B. I
C. IV
D. III
E. 0

6. A 60-year-old man complains of suffocation, cough with pink sputum that foams, a feeling of lack of air, fear of death. Objectively: orthopnea, pale skin, acrocyanosis, cold sticky sweat. Breathing is hard, in the lower posterior sections on both sides - wet small and medium-bubbly wheezing. BR - 40/min. Heart tones are sharply muted. At the top of the heart is the rhythm of the gallop. What is the most likely diagnosis:
A. Bronchial asthma, severe exacerbation
B. Pneumonia
C. Heart attack-pneumonia
D. Pulmonary edema
E. pulmonary embolism

7. A patient of 56 years, a driver, complains of constant suffocation, which increases with physical exertion, an unproductive cough, more often in the morning. He has been ill for more than 12 years. Smokes for more than 40 years (20 cigarettes per day). History of pneumonia. Objectively: temperature – 36.5^{o}C, BR – 22/min., pulse – 80/min., blood pressure – 140/80 mm Hg. Cyanosis of the lips. Above the lungs there is weakened vesicular breathing, a large number of scattered dry wheezing. Changes in which spirometry indicator are most likely to indicate the pathophysiological mechanism of respiratory failure in a patient:
A. Forced vital capacity of the lungs

B. Forced exhalation volume in 1 s
C. Vital capacity of the lung)
D. Peak volumetric expiratory
E. FVC1/FEV

8. Patient 49 years complains of suffocation, cough. Sputum does not emit. Repeatedly used salbutamol, but without effect. Objective: sits, leaning on the table. Facial cyanosis, acrocyanosis. Breathing is shallow, difficult, sometimes not listened to; scattered wheezing, significantly elongated exhalation. Heart - tones muted, tachycardia. Ps - 112/min., BP - 110/70 mmHg Liver at the edge of the costal arch. There is no peripheral edema. What is the preliminary diagnosis of the patient?
A. Bronchial asthma, moderate severity
B. Chronic obstructive bronchitis
C . Asthmatic status
D. Aspiration of a foreign body
E. Cardiac Asthma

9. In a patient, attacks of bronchial asthma usually occur at night, accompanied by bradycardia, spastic pain in the intestines, diarrhea. Which group of drugs can eliminate these symptoms?
A. Beta-blockers
B. H-anticholinergic blockers, H2-histamine blockers
C. Alpha-blockers
D. M-anticholinergic blockers
E. Tranquilizers.

10. The patient has been suffering from bronchial asthma for 15 years. What possible changes in the leukocyte formula can a doctor find in this patient?
A . Leukopenia
B. Basophilia
C. Leukocytosis
D. Eosinophilia
E. Shift leukocyte formula to the left

Situational tasks:

1. A 29-year-old man with mild persistent asthma went to an outpatient clinic for a re-examination. He was initially referred 6 months ago by a primary care physician after an asthma exacerbation that needed treatment in the emergency department.
During his first visit, he reported wheezing and coughing 4 days a week and nighttime symptoms three times a month. Spirometry revealed a forced capacity life capacity of 85% of the estimated, forced exhalation volume in 1 second 75% of the estimated, FEV1/FVC 65%, and an increase in FEV1 in 220 mL or 14% after bronchodilator. He was given low doses of inhaled corticosteroid twice daily and a short-acting inhaled beta-agonist as needed. He returned after 4 weeks with improvement, but with the continuation of daytime symptoms 2 days a week. He also had symptoms of rhinitis; Therefore, he was sent to an allergist for examination. Skin tests tested positive for trees, ambrosia, dust mites and cats, and he was prescribed a nasal steroid spray and non-sedative oral antihistamine. He came in today and has not reported any asthma exacerbations since his last visit. In addition, during the last 4 weeks he did not wake up due to asthma, did not experience morning breathing symptoms, did not miss work, did not have any restrictions on activities due to asthma, or needed to use lifesaving albuterol. He currently denies shortness of breath or wheezing. He performs aerobic exercise 4 days a week for 45 minutes per session without symptoms, provided that he performs premedication with a short-acting inhaled beta agonist.

There are no other symptoms. His current medications include low-dose inhaled corticosteroid, steroid nasal spray, and a non-sedative antihistamine of 1 tab. daily and inhaled beta-agonist as needed. History of the disease: intermittent asthma, diagnosed at the age of 13 years and frequent "colds". I never needed hospitalization due to asthma exacerbations. He works as a microbiologist, does not smoke, does not drink alcohol. Family history is not burdened.
During a medical examination, he is a man of the appropriate age, there is no acute distress. Its height and weight are proportional, and the oxygen saturation at rest, measured by pulse (SpO_2), is 98% in room air. Examination of the head and neck revealed mild erythema of the nasal mucosa. Heart examination revealed normal heart tones, no noise, gallop, or friction, and the lungs were clean on auscultation. There was no swelling, cyanosis, or beating on the limbs.
In the office, spirometry is absolutely normal. He claims to be feeling great and asks about stopping inhalers, particularly an inhaled steroid.

Question

Based on the available data, what is the next treatment plan? (Discontinue inhaled corticosteroid; start low-dose inhaled corticosteroid/long-acting beta agonist, 1 inhalation at bedtime The goal of asthma treatment is to minimize risk and maintain asthma control with the least amount of medication)
How often is spirometry recommended if the previous readings are normal and the patient's asthma is well controlled? (Every 1-2 years)
What evidence suggests that the patient needs increased asthma treatment? (Two or more night awakenings per month due to asthma)
Which of the following should be done regularly on each subsequent visit? (Review of the correct technique of inhalation and compliance)

2. A 44-year-old woman who now works in a bakery has symptoms of asthma and allergic rhinitis for 1 year, including episodic cough, wheezing, shortness of breath and tightness in her chest with itchy red tear eyes and a stuffy, runny nose and itchy nose. These symptoms worsen daily within 1-2 hours of starting work and worsen during the work week. She especially thinks, that red bran worsens its symptoms almost immediately after exposure. She notices improvement within 1-2 hours outside the workplace. She has been working at the bakery for 13 years, and for the last 10 years she has weighed the components, wearing a cloth mask. The line on which she has been working for the last 2 years is more dusty than other sections. History of seasonal allergic rhinium in the summer months since childhood. She does not smoke. Family history: asthma in her mother and brother. She now uses a long-acting inhaled steroid bronchodilator and a short-acting inhaled bronchodilator daily as needed, usually up to 4 times a day at work with relief. Physical examination is normal. Chest x-rays are also normal. Spirometry shows FEV1/FZHEL 0.62 (within 24 hours of operation), FEV1 1.9 l (projected 60%), and after taking the bronchodilator FEV1 rises to 2.2 liters (300 cm^3, 16%). A year ago, after a 2 month break at work, her FEV1 was 2.3 l. Skin prick tests tested positive for flour suspension (3+), wheat germ (3+) and red bran (2+). Her home rates of maximum PSH ranged from 270 to 340, with lower readings on weekdays.
What is the diagnosis of the patient?
What is the cause of asthma in a patient?
What studies can confirm the diagnosis?
What is the pathophysiology of asthma development due to exposure to flour or other agents?

Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

List of recommended literature (main, additional, electronic information resources):

Main:

1. Adapted evidence-based clinical guideline: bronchial asthma (Y.I. Feshchenko) Asthma and Allergy, 2020, No. 2, pp. 5–26. Asthma and Allergy, 2020, No. 3, pp. 5–22.
2. Adapted evidence-based clinical guideline: bronchial asthma (Y.I. Feshchenko) Ukr. pulmonol. journal. 2020, No. 3, pp. 5–36.
3. Modern classifications and standards for the treatment of diseases of internal organs. Emergency conditions in therapy. Analyses : normative indicators, interpretation of changes / Ed.. prof. Yu.M. mostovyi. - 27th ed., changes. – Kyiv: SLC Center, 2020. – pp. 33-74.

Additional:

1. **Test tasks "Krok-2" in pulmonology:** a collection of test tasks in the discipline "Internal Medicine" for students of the 6th year of the School of Medicine, specialty "General Medicine", "Pediatrics" / S. Y. Dotsenko, O. V. Kulinich, D. G. Rekalov [et al.]. – Zaporizhia, 2019. – 73 p.

Electronic resources:

1. https://guidelines.moz.gov.ua/
2. Asthma control questionnaire 5 http://u-breathe.ca/wp-content/uploads/2020/05/ACQ-5_asthma_control_questionnaire_may2020-fillable.pdf
3. https://goldcopd.org/2022-gold-reports/
4. https://ginasthma.org/pocket-guide-for-asthma-management-and-prevention/
5. https://www.thoracic.org/professionals/clinical-resources

Practical lesson 6

Topic: «Diseases of the upper respiratory tract. Differential diagnosis. Integrated management of patients with acute respiratory viral diseases. Differential diagnosis of exacerbations".

Objective:

To improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of acute respiratory diseases (ARI) and acute respiratory viral diseases (ARVI); to form professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive treatment plan for the patient and the necessary preventive measures.

Basic concepts:

Acute respiratory diseases, acute respiratory viral infections, new coronavirus disease

Equipment: illustrative material, tables, spirograph, nebulizer, examples of spirograms, thematic patients.

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to questions.

- What is the etiology of acute respiratory infections, ARVI?
- What are the epidemiological features of acute respiratory infections and ARVI?
- What are the main links in the pathogenesis of acute respiratory infections and ARVI?
- What are the main clinical symptoms and syndromes for acute respiratory infections and ARVI?

- What is the differential diagnosis of acute respiratory infections and ARVI
- What are the possible complications of acute respiratory infections and ARVI?
- What non-specific and specific diagnostic methods are necessary for acute respiratory infections?
- What are the basic principles of treatment of acute respiratory infections and ARVI?
- What is the etiology of the new coronavirus disease (COVID-19)?
- What are the epidemiological features of coronavirus?
- What are the main links in the pathogenesis of coronavirus?
- What are the main clinical symptoms and syndromes of different strains of COVID-19?
- What are the possible complications of COVID-19?
- What are the specific diagnostic methods for COVID-19?
- What are the principles of managing a patient with COVID-19?
- What are the methods of preventing COVID-19?

4. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with patients with acute respiratory infections and ARVI, collect anamnesis of life and disease, epidemiological history, conduct a survey by organs and systems;
- conduct a physical examination of a patient with acute respiratory infections and determine the main symptoms of the disease;
- prescribe a set of laboratory and instrumental studies of a patient with acute respiratory infections and analyze the results;
- conduct differential diagnosis and substantiate the clinical diagnosis of a patient with acute respiratory infections;
- determine the tactics of providing emergency medical care in emergency conditions in a patient with acute respiratory infections;
- to create a comprehensive treatment plan for a patient with acute respiratory infections on the basis of a preliminary clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.
- determine the prevention of acute respiratory infections;
- draw up medical documentation of a patient with acute respiratory infections;
- make a report of the results of the examination of a patient with acute respiratory infections by a team of students in the study group, analysis under the guidance of the teacher of the correctness of diagnosis, differential diagnosis, the volume of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Tests for self-control:

1. What are the leading clinical syndromes for influenza?

A. Intoxication

B. Lesions of the upper respiratory tract
B. Lesions of the lower respiratory tract
G. Hypertensive-liquor
D. Exanthem

2. What are the main clinical syndromes in COVID-19?
   A. Intoxication
   B. Lesions of the upper respiratory tract
   B. Lesions of the lower respiratory tract
   G. Diarrheal syndrome
   D. Arthralgia syndrome

3. What are the main complications of COVID-19?
   A. Development of acute respiratory syndrome
   B. Development of thrombotic complications
   B. Acute liver failure
   G. Acute renal failure
   D. Anemia

4. What are the specific treatments for COVID-19?
   A. Remdesevir
   B. Baloxavir
   V. Amiksin
   G. Remantadine
   D. Vitamin D

5. What are the criteria for hospitalization of a patient with acute respiratory infections?
   A. At the request of the patient
   B. development of acute respiratory distress syndrome
   B. Hyperthermia that is not amenable to treatment with antipyretics
   G. Hyperthermia treated with antipyretics
   D. Development of cardiovascular insufficiency

6. What are the clinical indications for the appointment of an antibiotic for ARVI?
   A. Temperature increase to 39C
   B. Cough with mucous sputum
   B. Cough with purulent sputum
   G. Runny nose
   D. At the request of the patient

7. What laboratory parameters most accurately indicate the presence of a bacterial infection?
   A. C-reactive protein
   B. increase in neutrophil levels
   B. increase in blood clotting rate
   D. increase in procalcitonin levels
   D. increased eosinophil levels

Test tasks:

1. The child has 7 months. against the background of ARVI on the 3rd day of the disease, anxiety, hoarseness, shortness of breath appeared at night. On examination: periorbital and perioral cyanosis, tachypnea. Breathing is difficult with the participation of auxiliary

muscles. Auscultative: dispersed wet wheezing. What viral infection can be clinically suspected in a child?

A. Rhinovirus
B. Parainfluenza
B. Influenza virus
G. Adenovirus
D. Respiratory synthetical virus

2. A child aged 1 year 8 months after suffering ARVI again had a fever to subfebrile numbers, a dry, unbearable cough, shortness of breath appeared. On examination: difficulty exhaling, swelling of the wings of the nose, participation in the act of breathing auxiliary muscles. Percussion box sound. With auscultation, a mass of dry whistling and multi-caliber wet wheezing on both sides. The most likely diagnosis?

A. Acute pneumonia
B. Obstructive bronchitis
B. Bronchial asthma
G. Cystic fibrosis
D. Bronchiolitis

3. At night, a 3-year-old boy was taken by ambulance to the children's hospital hospital, who had noisy breathing, inspiratory shortness of breath, retraction of the intercostal spaces, swelling of the wings of the nose and barking cough on the second day of SARS. What is the most likely diagnosis?

A. Bronchial asthma
B. Epiglottitis
B. Foreign body of the respiratory tract
G. Diphtheria croup
D. Viral (fake) croup

4. The newborn baby entered the hospital on the 3rd day of the disease with complaints of coughing, sneezing, difficulty in nasal breathing, temperature 38.50C. On examination, oral cyanosis, tachypnea, rhinorrhea, conjunctival hyperemia. Wheezing is leading above the lungs, a percussively pulmonary sound. In the general blood test - lymphocytosis. Your diagnosis?

A. Pneumonia
B. ARVI, clinically paired flu
B. ARVI, clinically RSV infection
G. ARVI, clinically adenovirus infection
D. ARVI, clinically influenza infection

5. A 10-year-old child on the 3rd day of ARVI disease developed a wet cough. With percussion - pulmonary percussion sound, with auscultation - dry wheezing over the entire surface of the lungs. What diagnosis can be made to a child

A. Acute simple bronchitis
B. Obstructive bronchitis.
B. Bronchial asthma.
D. Recurrent bronchitis
D. Pneumonia

Situational tasks.

1. A student who visited a sick comrade had chills, severe headache in the frontal area, body aches for 2 days after that, body temperature rose to 39.0 °C. By the end of the first day, nasal congestion, a dry nagging cough with a feeling of scratching behind the chest appeared. Objectively: the face is hyperemic and somewhat swollen. Injection of sclera vessels and conjunctiva, difficulty in nasal breathing. The oropharynx is hyperemic, the granularity of the posterior pharyngeal wall. The

lungs have hard breathed and single dry scattered wheezing. Pulse 96 beats/min., rhythmic. Blood pressure – 110/75 mmHg Heart tones are muted. No meningeal signs were found.
1. Preliminary diagnosis
2. Survey plan
3. Treatment.

2. Patient P., 28 years old fell ill acutely. The disease began with nasal congestion and an increase in body temperature to 37.8 ° C. The next day, there was a moderate sore throat while swallowing, tearing in the area of the back wall of the pharynx, pain and a feeling of sand in the right eye. Objectively: on the back of the pharynx hyperplastic follicles, tonsils moderately swollen, hyperemic, palpable soft-elastic, painless, not soldered to each other and surrounding tissues lymph nodes, palpable lymph nodes, palpable lymph nodes between themselves and surrounding tissues, eye slit of the right eye, eyelids swollen, hyperemia and swollen conjunctiva.
1. Preliminary diagnosis.
2. Survey plan.
3. Treatment

3. The ambulance arrived at the call. A 5-year-old boy fell ill gradually. The disease began with malaise, fever to 37.8 ° C, hoarseness, barking cough, nasal congestion. Suddenly at night there was a feeling of lack of air, noisy wheezing with an elongated breath and the participation of auxiliary muscles, BH — 40 in 1 minute, paradoxical
pulse, restless facial expression, cyanosis of the nasolabial triangle.
1. Preliminary diagnosis.
2. Survey plan.
3. Treatment.

Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

List of recommended literature (main, additional, electronic information resources):

Main:
1. Infectious diseases: textbook / O.A. Golubovska, M.A. Andreichin, A.V. Shkurba and others; ed. O.A. Golubovska. 2nd ed., reworked. and reported. Kyiv: VSV "Medicine", 2018. pp. 366-386.

Additional:
1. Order of the Ministry of Health of Ukraine dated March 28, 2020 No. 722 "Coronavirus disease (COVID-19)"
2. Guideline of the Ministry of Health of Ukraine dated 28.02.2017. "Respiratory tract infections in adults"
3. Unified clinical protocol of primary health care for adults and children "Acute respiratory infections" Order of the Ministry of Health of Ukraine dated July 16, 2014 No. 499 (as amended by the order of the Ministry of Health of Ukraine dated 11.02.2016 No 85)

Electronic information resources:

10. http://moz.gov.ua – Ministry of Health of Ukraine
11. https://guidelines.moz.gov.ua/documents/2937
12. https://www.dec.gov.ua/mtd/koronavirusna-hvoroba-2019-covid-19/
13. https://www.acpjournals.org/doi/10.7326/M22-2249
14. https://guidelines.moz.gov.ua/documents/3030
15. https://guidelines.moz.gov.ua/documents/2940
16. https://www.msdmanuals.com/professional/infectious-diseases/respiratory-viruses/overview-of-viral-respiratory-infections

17. https://www.msdmanuals.com/professional/infectious-diseases/respiratory-viruses/adenovirus-infections
18. https://www.msdmanuals.com/professional/infectious-diseases/respiratory-viruses/influenza
19. https://www.msdmanuals.com/professional/infectious-diseases/respiratory-viruses/parainfluenza-virus-infections

Practical lesson 7, 8

Topic: "Programs for the management of patients with the most common diseases of the cardiovascular system (coronary heart disease, AH). Hypertension: risk factors, methods for monitoring blood pressure, uncomplicated and complicated hypertensive crises, emergency care, indications for hospitalization"

The duration of the practical lesson is 4 hours.

Objective:

To improve and structure students' knowledge of the most common cardiovascular diseases, medical and social significance of arterial hypertension syndrome (AH) and its complications in the structure of cardiovascular morbidity and mortality, to form professional skills in the conditions of general practice of a family doctor to draw up an examination plan (laboratory and instrumental), to develop a comprehensive treatment plan for a comorbid (hypertension and coronary heart disease) patient, to provide emergency care for hypertensive patients crises and implement a program of necessary preventive measures.

Basic concepts:

Coronary heart disease. Essential arterial hypertension. Secondary arterial hypertension. Hypertensive crises.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
   Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the following questions:

- List the most common diseases of the cardiovascular system.
- Give a modern definition of hypertension syndrome, hypertension (essential hypertension).
- List the possible causes of secondary, symptomatic hypertension.
- What are the risk factors for the occurrence and progression of hypertension and its complications?
- What is the gradation of BP levels (degrees of AH)?
- How to determine the stage of hypertension?
- How to determine cardio-vascular risk in a patient with hypertension?
- What modern methods of examination are necessary in patients with hypertension?
- What groups of antihypertensive drugs are used for the routine treatment of patients with hypertension?
- What algorithm for prescribing antihypertensive drugs is used in outpatient practice?
- What are the features of managing a comorbid patient with hypertension and coronary heart disease?
- Describe the features of the course of hypertension: age, sex, in pregnant women, representatives of different races.
- What are the features of the course of complicated and uncomplicated AH?
- What are the basic rules for the treatment of patients with complicated and uncomplicated AH?

2. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education should be able to:

- identify hypertension syndrome on the basis of a survey, examination, objective examination of the patient in the practice of a family doctor;
- stratify cardio-vascular risks of hypertension in a particular patient;
- draw up differential diagnosis programs for a patient with suspected secondary hypertension;
- plan an examination of the patient to identify hypertensive lesions of the target organs excluding the secondary nature of hypertension
- interpret the data of laboratory and instrumental examination of the patient to assess the severity and characteristics of the course of HA;
- make a differential diagnosis in a particular patient with HA;
- formulate a clinical diagnosis for a patient with hypertension;
- prescribe treatment to a patient with hypertension, taking into account the peculiarities of the course and severity of the disease, comorbid conditions, socio-economic conditions of the patient's life;
- determine the prognosis and provide recommendations for the modification of the lifestyle of a patient with hypertension
- report the results of the examination of a patient with hypertension in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Situational tasks

Problem 1

A patient of 58 years suffers from arterial hypertension (blood pressure - 175/105 - 160/95 mmHg). Notes an increase in blood pressure for 18 years. Constantly takes atenolol 50 mg per day, hydrochlorothiazide 25 mg per day. Over the past ten years, it has become 30 kg heavier. Objectively: increased nutrition. Body mass index - 36.5 kg / m². Waist volume - 120 cm. There is no edema. In the lungs, breathing is vesicular, there is no wheezing. Heart tones are muted, the rhythm is correct. Heart rate - 90 beats per minute. Biochemical blood test: total cholesterol - 7.2 mmol / l; triglycerides - 3.12 mmol / l; HDL cholesterol - 0.9 mmol / l; creatinine - 95.9 μmol / l; fasting blood glucose - 6.3 mmol / l; 2 hours after taking 75 g of glucose - 9.0 mmol / l. General analysis of urine: color - straw yellow, relative density - 1014, transparent, the reaction is acidic, protein, sugar is absent, leukocytes are single in sight. Urine analysis for microalbuminuria - 200 mg / day. Creatinine clearance is 81.7 ml / min according to the Cockroft-Holt formula. ECG: sinus rhythm, heart rate - 70 beats per minute, left ventricular hypertrophy. ECHO-KG: no valvular pathology has been identified, the cavities of the heart are not dilated, the mass index of the left ventricular myocardium is 121 g / m², signs of diastolic dysfunction, FV - 65%.

Question:

1. Make assumptions and justify the most likely diagnosis.
2. Make and justify a plan for additional examination of the patient.
3. What groups of antihypertensive drugs would you recommend to the patient in

The composition of combination therapy?
Answer: Arterial hypertension.
Task 2
A 43-year-old man turned to a family doctor with complaints of a recurrent headache in the occipital region. Pain worries about 2 months against the background of a busy work schedule (night duty), smoking. Headaches have become more frequent over the past week, when measuring blood pressure of 150-160/90 mm Hg. Art. Century. Parents suffer from hypertension, his father at the age of 45 had a stroke. Objectively: Body weight is increased by abdominal type, height - 172 cm, weight - 86 kg. Waist volume - 105 cm. There is no edema. Auscultative: breathing over the lungs is vesicular, there is no wheezing. BH R- 18 per minute. Heart tones are rhythmic, percussively the limits of relative dullness of the heart within the normal range. Blood pressure - 150/90 mm Hg. Art. Art., heart rate - 92 beats per minute. There are no dysuric phenomena. Clinical blood test: hemoglobin - 145 g / l; erythrocytes - 4.9 × 1012/l; leukocytes - 7.0 × 109/l; ESR - 15 mm / h. General analysis of urine: relative density - 1018, protein - no, in the urinary sediment leukocytes - 2-4 in the field of view. Biochemical blood test: total cholesterol - 5.3 mmol / l, uric acid - 500 μmol / l, creatinine - 78 μmol / l, fasting glucose - 5.8 mmol / l. microalbuminuria: 25 mg / day. ECG: sinus rhythm, signs of LV myocardial hypertrophy, no focal changes.
Question:
1. Make assumptions and justify the most likely diagnosis.
2. Make and justify a plan for additional examination of the patient.
3. What groups of antihypertensive drugs would you recommend to the patient as part of combination therapy? Justify your choice.
Answer: Arterial hypertension.
Task 3
A patient of 52 years called an ambulance, has complaints of headache, tinnitus, dizziness. For 5 years, high blood pressure. For six months, unstable blood pressure (fluctuations from 110/80 to 185/110 mmHg), accompanied by headaches. Smokes. Irregularly takes furosemide. This morning, after overwork the day before, I felt a headache, tinnitus, "flies" in front of my eyes, dizziness. In addition, nausea appeared, vomiting was once, which did not bring relief. BMI - 33 kg / m2. Waist circumference (OT) - 116 cm. In the lungs, breathing is hard, there is no wheezing. BDR - 20 per minute. The heart tones are sonorous, the rhythm is correct, the emphasis of the II tone on the aorta. The left border of the heart is 1.5 cm outward from the mid-clavicular line. Heart rate – 91 beats per minute, blood pressure – 205/120 mm Hg. Art. Century. on both hands. The abdomen is involved in breathing, soft, painless, the liver does not protrude from under the costal arch. There is no edema. Physiological shipments are not disturbed. ECG: sinus rhythm with heart rate - 90 beats per minute, signs of left ventricular hypertrophy.
Question:
1. Make assumptions and justify the most likely diagnosis.
2. Make a plan for further additional examination of the patient and justify it.
3. What are the tactics of emergency care for this condition and subsequent antihypertensive planned therapy?
Answer: Arterial hypertension.
Task 4
A 50-year-old patient turned to a family doctor in the CPSMD with complaints of frequent headaches, periodic thirst, dry mouth, frequent urination during the day and up to 6 times in the last few days, heaviness in the lumbar region, especially the last few days after hypothermia and increased fatigue for about a week. The temperature rose to 38.8 ° C. From the anamnesis - diabetes type 2 5 years, gets metformin 1000mg / day, blood glucose more than 6 mmol / l on an empty stomach does not rise. Lisinopril is taken 20-40 mg/day depending on blood pressure. The maximum increase in blood pressure to 165/90 mm Hg. Art. Century. He has a sedentary lifestyle, works in shifts as a dispatcher. Headaches often occur after a night shift. The mother has

hypertension. Smokes. BMI - 31 kg / m2, waist volume - 108 cm. Heart tones are weakened, the rhythm is correct, the accent of the II tone over the aorta, heart rate - 88 beats per minute. Blood pressure - 145/85 mm Hg. Art. Century. (S = D). Pasternatsky's symptom is positive on both sides. In the general blood test: erythrocytes - 4.4 × 1012 / l, hemoglobin - 134 g / l, color index - 0.9, leukocytes - 12 × 109 / L, rod-core - 8%, segmented - 72%, lymphocytes - 16%, monocytes - 4%. ESR - 24 mm / h. In the general analysis of urine: specific gravity - 1018, protein - traces, leukocytes - 30-45 in the field of view, erythrocytes 1-2 in the field of view. In a biochemical blood test: blood glucose - 5.2 mmol / l, HbA1c - 5.7%, ALT - 25 IU / l, AST - 15 IU / l, creatinine - 120 μmol / l. Radiography of the lungs - without pathology. ECG - sinus rhythm, signs of left ventricular hypertrophy, heart rate - 84 beats per minute. Ultrasound of the kidneys- not increased, deformation of heart rate on both sides, micronephrolithiasis, left-sided nephroptosis.
Question:
1. Make assumptions and justify the most likely diagnosis.
2. Make and justify a plan for additional examination of the patient.
3. Prescribe therapy. Justify your choice.
Answer: Arterial hypertension.
Task 5
A patient of 18 years complains of headaches, nosebleeds, pain in the legs after a long walk. On examination, there is a hypersthenic constitution, a developed shoulder girdle, hyperemia of the face, lymphedema of the legs, a "webbed" poned neck, a square shape of the chest, valgus deformity of the kandleo joint. The pulse on the radial artery is tense, rhythmic with a frequency of 64 per minute, symmetrical on both sides. The left border of the heart is 2 cm outward from the left mid-clavicular line. Heart tones are sonorous, clear, at all points of auscultation, a rough systolic noise is heard, which is made on the vessels of the neck and into the interscapular space, the focus of the II tone on the aorta. BP on the brachial artery - 170/110 mm Hg. Art. Art., on the femoral artery - 150/80 mm Hg. Art. Century. on both sides.
Question:
1. Establish a preliminary diagnosis.
2. Outline a patient examination plan for a differential diagnosis and determine whether the patient has signs of a birth defect.
3. Determine the tactics of treatment.
Answer: Arterial hypertension.

3. Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

4. List of recommended literature (main, additional, electronic information resources):

Main:
Cardiovascular diseases. Classification, standards of diagnosis and treatment / Allukr. asoc. cardiologists ; Ed. V. M. Kovalenko [et al.]. - 3rd ed., reworked. and reported. - Kiev: Morion, 2018. - 223 p.
Additional:
1. Denesyuk V.I., Denesyuk O.V. Internal medicine. Textbook for students of higher education institutions of III-IV level of accreditation and doctors of postgraduate education based on the recommendations of evidence-based medicine / Ed. V.M. Kovalenko. – Kyiv: MORION, 2019. – 960 p.
2. Unified clinical protocol of primary and secondary (specialized) medical care for arterial hypertension. Order of the Ministry of Health 24.05.2012 No 384.

Electronic information resources:

20. http://moz.gov.ua – Ministry of Health of Ukraine
21. www.escardio.org
22. www.escardio.org/guigelines
23. www.ama-assn.org – American Medical Association / American Medical Association
24. www.who.int – World Health Organization
25. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
26. http://bma.org.uk – British Medical Association
27. www.gmc-uk.org - *General Medical Council* (*GMC*)
28. www.bundesaerztekammer.de – German Medical Association
29. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson No 9

The topic of the practical lesson is "Somatoform autonomic dysfunction. Complaints, diagnosis, methods of treatment and rehabilitation".

The duration of the practical lesson is 2 hours.

Objective:

To improve and structure students' knowledge of the medical and social significance of somatoform autonomic dysfunction syndrome (SVD) and its clinical manifestations, to form a professional ability in the conditions of general practice of a family doctor to draw up an

examination plan (laboratory and instrumental), to conduct a differential diagnosis, to develop a comprehensive treatment plan for the patient, to provide emergency care for panic attacks and to carry out the necessary preventive measures.

Basic concepts:
Somatoform autonomic dysfunction. Panic attacks.
Equipment: illustrative material, tables, thematic patients

Plan:

5. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the following questions:

- Give a modern definition of SVD.
- List the possible causes of functional disorders of the cardiovascular system in SVD.
- Name the main links of pathogenesis responsible for the appearance of clinical symptoms of SVD.
- What clinical syndromes are most characteristic of SVD?
- What are the clinical types of SVD course.
- List the main clinical signs of sympathicotonia and parasympaticotonia.
- What modern methods of examination are necessary in patients with SVD?
- What nonpharmacological treatments are effective in patients with SVD?
- What algorithm for prescribing drugs is used in outpatient practice?
- What are the features of panic attacks?
- What are the basic rules for helping patients with panic attacks?

6. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education should be able to:

- identify SVD syndrome on the basis of a survey, examination, objective examination of the patient in the practice of a family doctor;
- recognize the clinical signs of panic attacks;
- draw up differential diagnosis programs for the patient to exclude organic damage to the cardiovascular system;
- plan an examination of a patient with SVD;
- interpret the data of laboratory and instrumental examination of the patient to assess the severity and characteristics of the course of SVD;
- formulate a clinical diagnosis for a patient with SVD, in accordance with the requirements of ICD XI;
- prescribe treatment to a patient with SVD, taking into account the peculiarities of the course and severity of the disease, the socio-economic living conditions of the patient;
- provide emergency care to patients with panic attacks;
- determine the prognosis and provide recommendations for the modification of the lifestyle of a patient with SVD;
- report the results of the examination of a patient with SVD in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Situational tasks

Problem 1

A woman is 35 years old, sick for 3 months after being forced to move to another city. He complains of insomnia, pale and cold hands and feet, anxious mood, decreased performance, mental and motor lability. Objectively: increased nutrition. There is no edema. In the lungs, breathing is vesicular, there is no wheezing. Heart sounds are sonorous, the rhythm is correct. Heart rate - 98 beats per minute. Pulse - 98 beats / min, rhythmic. BP – 148/95 mmHg ECG: sinus rhythm, heart rate - 97 beats per minute. ECHO-KG: no valvular pathology has been identified, the cavities of the heart are not dilated, the mass index of the myocardium of the left ventricle is 107 g / m², FV - 65%.

Question:

1. Make assumptions and justify the most likely diagnosis.
2. Make a plan for an additional examination of the patient.
3. What drugs would you recommend to the patient for treatment?

Answer: Somatoform autonomic dysfunction.

Task 2

A 27-year-old man turned to a family doctor with complaints of a daily headache in the occipital region. redness of the skin of the body (spots) and neck ("vascular necklace") and upper body, labile blood pressure, "flickering flies" before the eyes, a feeling of pulsation in the head, throbbing tinnitus. Attacks occur for about 2 months against the background of a busy work schedule (night duty), smoking. Headaches have become more frequent over the past week, when measuring blood pressure of 145-155/90 mmHg. Art. Objectively: Body weight is increased by abdominal type, Height - 172 cm, weight - 86 kg. Waist volume - 105 cm. There is no edema. Red dermographism ("the game of vasomotors"). Auscultative: breathing over the lungs is vesicular, there is no wheezing. BDR- 18 per minute. Heart tones are rhythmic, percussively the limits of relative dullness of the heart within the normal range. BP - 150/90 mm Hg. Art. Art., heart rate - 92 beats per minute. There are no dysuria phenomena. ECG: sinus rhythm, no focal changes, high prong T in 5-6 thoracic leads.

Question:

1. Make assumptions and justify the most likely diagnosis.
2. Make and justify a plan for additional examination of the patient.
3. What drugs would you recommend to the patient? Justify your choice.

Answer: Somatoform autonomic dysfunction.

Task 3

A patient of 32 years old has complaints of frequent headaches, tinnitus, dizziness, fluctuations in blood pressure, short-term visual impairment, "flickering flies" before the eyes, a feeling of pulsation in the head, pulsating tinnitus, cooling of the limbs. For six months, unstable blood pressure (fluctuations from 90/50 to 135/100 mmHg), accompanied by headaches. Smokes. This morning, after overwork the day before, I felt a severe headache, made noise in my head, afraid of a stroke. BMI - 23 kg / m2. Waist circumference (OT) - 78 cm. Palms are wet. In the lungs, breathing is vesicular, there is no wheezing. BDR - 16 per minute. Heart sounds are sonorous, the rhythm is correct. Heart rate – 91 beats per minute, Blood pressure - 105/88 mm Hg. Art. Century. on both hands. The abdomen is involved in breathing, soft, painless, the liver does not protrude from under the costal arch. There is no edema. Physiological shipments are not disturbed. ECG: sinus rhythm with heart rate - 90 beats per minute.

Question:

1. Make assumptions and justify the most likely diagnosis.
2. Make a plan for further additional examination of the patient and justify it.
3. What are the tactics of assistance in this condition and subsequent planned therapy?

Answer: Somatoform autonomic dysfunction.

Task 4

A 40-year-old patient turned to a family doctor with complaints of frequent headaches, deterioration of physical condition (weakness, fatigue, impaired coordination and accuracy of movements), mood changes, as well as mental fatigue, decreased memory and ability to concentrate; The maximum increase in blood pressure during the last month is up to 155/90 mm Hg. Art. It has a sedentary lifestyle, works in shifts as a dispatcher on the night shift. The mother has hypertension. Smokes. BMI - 31 kg/m2. Heart sounds are sonorous, the rhythm is correct, heart rate - 82 beats per minute. BP - 145/85 mm Hg. Art. (S = D). Pasternatsky's symptom is negative on both sides. Radiography of the lungs - without pathology. ECG - sinus correct rhythm, heart rate - 84 beats per minute. Ultrasound of the kidneys without pathological abnormalities, right-sided nephroptosis.

Question:

1. Make assumptions and justify the most likely diagnosis.
2. Make and justify a plan for additional examination of the patient.
3. Prescribe therapy. Justify your choice.

Answer: Somatoform autonomic dysfunction.

Task 5

A patient of 20 years complains of headache, palpitations, increased anxiety, trembling hands, loss of appetite, nausea, vomiting, heartburn, belching, abdominal pain, a tendency to weaken the intestine, flatulence. Symptoms are disturbing for a month after a long period of fasting for weight loss. BMI - 21 kg/m2. BP on the brachial artery - 147/89 mm Hg. Art. Pulse 85 per minute. Persistent red dermographism. Ultrasound of the digestive tract and fibrogastroscopy – without pathological abnormalities.

Question:

1. Establish a preliminary diagnosis.
2. Outline a patient examination plan for a differential diagnosis.
3. Determine the tactics of treatment.

Answer: Somatoform autonomic dysfunction.

7. Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

8. List of recommended literature (main, additional, electronic information resources):

Main:

1. Cardiovascular diseases. Classification, standards of diagnosis and treatment / Allukr. asoc. cardiologists ; Ed. V. M. Kovalenko [et al.]. - 3rd ed., reworked. and reported. - Kiev: Morion, 2018. - 223 p.

2. The American Psychiatric Association Publishing Textbook of Anxiety, Trauma, and OCD-Related Disorders, Third Edition./ Edited by Naomi Simon, M.D., MSc, Eric Hollander, M.D., Barbara O. Rothbaum, Ph.D., A.B.P.P., and Dan J. Stein, M.D., Ph.D. 2020. – 754 p.

Additional:

1. Vegetative-vascular dystonia: etiopathogenesis, clinical picture, diagnosis, treatment (clinical lecture)/ T. Cherednychenko, V. Sereda, N. Sviridova, T. Parnikosa, G. Chupryna, N. Khanenko, R. Sulik, O. Mykytey, V. Svistun / East European Journal of Neurology. № 1(13) (2017) https://doi.org/10.33444/2411-5797.2017.1(13).34-39

2. Churchill, C. Barbuy, D. Caldwell, A. Cipriani, T. Furukawa. Psychological therapy for panic disorder with or without agoraphobia in adults: a network meta-analysis // Cochrane Library. – 2016. .-R.1-11

3. Adolf D., Margraf J. Edgar Hoover. The differential relationship between the sign of anxiety, depression and frontal α-asymmetry of rest. J Neural Transm (Vienna). -2016.-R.113-119

Electronic information resources:

30. http://moz.gov.ua – Ministry of Health of Ukraine
31. www.escardio.org

32. www.escardio.org/guigelines
33. www.ama-assn.org – American Medical Association / American Medical Association
34. www.who.int – World Health Organization
35. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
36. http://bma.org.uk – British Medical Association
37. www.gmc-uk.org - *General Medical Council* (*GMC*)
38. www.bundesaerztekammer.de – German Medical Association
39. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson No 10, 11

Program for the management of patients with type 2 diabetes. Screening of patients, glycemic control, principles of treatment, indications for insulin therapy, diabetic coma, prehospital care – 4 hours

Objective: to form a sense of wariness about diabetes, to form an idea of the significance of diabetes and its complications in the structure of cardiovascular morbidity and mortality, to acquaint students with the principles of screening and management of patients with diabetes at the outpatient stage.

Basic concepts: diabetes mellitus, fasting blood glucose, standard oral glucose-tolerant test, glycemic profile, hypoglycemic drugs, insulin preparations, glycated hemoglobin.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to questions.
   1. What types of diabetes do you know?
   2. What risk factors for diabetes do you know?
   3. Features of type 1 and type 2 diabetes?
   4. How to diagnose diabetes?
   5. What complications of diabetes do you know?
   6. What are the approaches to the treatment of type 2 diabetes?
   7. What groups of hypoglycemic drugs do you know?
   8. What types of comas in diabetes do you know? The main differences.
   9. Diagnosis and emergency care for hypoglycemia.
   10. What are the indications for insulin therapy?

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:
- know the definition of diabetes, epidemiological state in Ukraine and in the world;
- know the classification of diabetes and prediabetes;
- know the etiology and pathogenesis of type 2 diabetes mellitus, risk factors for its development;
- know the complications of diabetes and their diagnosis;
- know laboratory methods for diagnosing diabetes (fasting blood glucose, standard oral glucose-tolerant test, glycated hemoglobin, glycemic profile);
- know the classification of hypoglycemic drugs, insulin preparations;
- know the principles of treatment of patients with diabetes; classification of diabetic coma;
- select patients with risk factors for diabetes mellitus for early screening;
- understand the purpose of treatment and the criteria for compensating for type 2 diabetes;
- understand the principles of diet therapy for diabetes (bread units);
- determine the indications and contraindications to the appointment of oral hypoglycemic drugs;
- determine the indications for the appointment of insulin therapy;
- use self-control methods for diabetes;
- learn how to conduct differential diagnosis of coma in diabetes mellitus and know the algorithm for providing medical care at the outpatient stage.

Materials for the final stage of the lesson

Situational task 1

Patient R. 18 years old. After the flu, I felt thirsty, dry mouth, polyuria, began to lose weight. Fasting blood glucose is 13 mm/l, diuresis 3.5 l., glycosuria 3%. Acetone in the urine is negative.

1. Your previous diagnosis?
2. What examinations should be prescribed to determine the final diagnosis?

Situational task 2

Patient K., 14 years old. Height 167 cm, body weight – 51 kg. After a sore throat, he began to complain of dry mouth, thirst, drinking up to 5 liters of fluid per day, polyuria up to 4 liters, losing weight by 4 kg over the past week. Fasting glycemia – 15.2 mm/l.

1. Your previous diagnosis?
2. Make a plan for examining the patient.
3. What are the tactics of managing the patient?

Situational task 3

A 32-year-old woman turned to an appointment with a gynecologist with complaints of vaginal itching. Suffers from chronic pancreatitis for 5 years. Fasting blood sugar – 13.2 mm/l.

1. Your previous diagnosis?
2. Make a plan for examining the patient.
3. What are the tactics of managing the patient?

Situational task 4

Sick J., 38 years old. Complains of increased blood pressure, severe weakness, headache, palpitations, polyuria, weakness in the muscles of the extremities and cramps. During the examination of blood pressure – 210/120 mmHg, plasma potassium – 3,012 mm/l of plasma sodium – 148 mm/l. Urine reaction – alkaline specific gravity – 1010. Plasma aldosterone is high – 715 nmol/L. Plasma sugar after 2 hours. after carbohydrate load = 7.5 mm/l.

1. Your previous diagnosis?
2. Make a plan for examining the patient.
3. What are the tactics of managing the patient?

Situational task 5

Patient Z., 24 years old. Complains of weight gain over the past 3 years by 30 kg, headache, increased blood pressure – 180/110 mm Hg. Art. Art., violation of the menstrual cycle. Height 160 cm, body weight 95 kg, dysplastic obesity, pronounced cyanotic stripes on the skin of the abdomen, mammary glands, in the groin areas. Fasting glycemia = 9.4 mm/l.

1. Your previous diagnosis?
2. What examinations should be prescribed to determine the final diagnosis?
3. What diseases is it necessary to carry out a differential diagnosis?

Test control

1. The criterion for the diagnosis of diabetes is:

1. The level of glycated hemoglobin (HvA1s) ≥ 4.5%
2. The level of glycated hemoglobin (HvA1s) ≥ 5.5%
3. The level of glycated hemoglobin (HvA1s) ≥ 6.0%
4. The level of glycated hemoglobin (HvA1s) ≥ 6.5%

2. The criterion for the diagnosis of diabetes is:

1. Plasma glucose level ≥ 9.1 mmol/L during TSH using 75 g of glucose;
2. Plasma glucose level ≥ 6.1 mmol/L during TSH using 75 g of glucose;

3. Plasma glucose level ≥ 11.1 mmol/L during TSH using 75 g of glucose;
4. Plasma glucose level ≥ 8.1 mmol/L during TSH using 75 g of glucose;

3. The criterion for the diagnosis of diabetes is:
1. Fasting plasma glucose level ≥ 6.0 mmol/L or whole capillary blood ≥ 5.1 mmol/L (after fasting for at least 8 hours);
2. Fasting plasma glucose level ≥ 7.0 mmol/L or whole capillary blood ≥ 6.1 mmol/L (after fasting for at least 8 hours);
3. Fasting plasma glucose ≥ 8.0 mmol/L or whole capillary blood ≥ 7.1 mmol/L (after fasting for at least 8 hours);
4. Fasting plasma glucose level ≥9.0 mmol/L or whole capillary blood ≥ 9.1 mmol/L (after fasting for at least 8 hours);

4. HbA1c target level for most patients
1. < 7%
2. < 6,5%
3. < 8%
4. < 6%
5. < 5%

5. For drug prophylaxis of type 2 diabetes, you can use:
1. Metformin
2. Glibenclamide
3. Repaglinide
4. Acarbose

6. The drugs of the group of insulin sensitizers include:
1. Glyclaside
2. Metfomin
3. Acarbose
4. Sitagliptin
5. Dapagliflozin

7. Drugs of the insulin secretagoga group include:
1. Glimepiride
2. Metfomin
3. Acarbose
4. Sitagliptin
5. Dapagliflozin

8. The group of drugs that block the absorption of glucose in the intestine includes:
1. Glyclaside
2. Metfomin
3. Acarbose
4. Sitagliptin
5. Dapagliflozin

9. The drugs of the arGPP-1 group include:
1. Glyclaside
2. Metfomin
3. Acarbose
4. Lixisenatide

5. Dapagliflozin

10. Family doctors are specialists of the 1st line in providing medical care to patients with type 2 diabetes and are responsible for the following areas, EXCEPT for:
1. Detection of type 2 diabetes among risk groups
2. The appointment of therapy with drugs of the biguanide group and sulfonylurea derivatives.
3. In case of failure to reach the target level of HbA1c within 6 months - refer the patient to an endocrinologist
4. Selection of insulin therapy
5. Carrying out measures for the early detection of complications of type 2 diabetes.

11. Choice of drug therapy in patients with type 2 diabetes at HbA1c <9%:
1. Lifestyle change + metformin
2. Lifestyle changes + glibenclamide
3. Lifestyle change + metformin + glimepiride
4. Lifestyle change + metformin + iNZCTG-2
5. Lifestyle change + metformin + aGPP-1p

12. The drugs of the PPP-4 inhibitor group include:
1. Glyclaside
2. Metfomin
3. Vildagliptin
4. Acarbose
5. Dapagliflozin

13. Choice of drug therapy in patients with type 2 diabetes at HbA1c ≥9%:
1. Lifestyle change + metformin
2. Lifestyle changes + glibenclamide
3. Lifestyle change + metformin + glimepiride
4. Lifestyle change + metformin + iNZCTG-2+ glimepiride
5. Lifestyle changes + insulin

14. A child of 6 years for two months is concerned about thirst, polyuria, increased appetite. At the same time, there is a decrease in body weight by 3 kg. Within a week, nocturnal enuresis joined. During the examination, hyperglycemia of 14 mmol / l was revealed. Diagnosis: diabetes mellitus, type I. What is the most likely genesis of this disease?
1. Autoimmune
2. Viral
3. Bacterial
4. Neurogenic
5. Viral-bacterial

4. Summing up:
Conducting an assessment of students, summing up, announcing the next topic of the lesson.
5. List of recommended literature (main, additional, electronic information resources):

Main:
1. Unified clinical protocol of primary and secondary (specialized) medical care "Type 2 diabetes mellitus". Order of the Ministry of Health of December 21, 2012 No 1118. Access mode: https://dec.gov.ua/wp-content/uploads/images/dodatki/2012_1118/2012_1118YKPMD.pdf

2. ESC/EASD recommendations (2019) on diabetes, prediabetes and cardiovascular diseases. Access mode: https://pubmed.ncbi.nlm.nih.gov/31497854/

3. American Diabetes Association (2021) Standards of Medical Care in Diabetes-2021. Diabetes Care;44(Suppl 1):S4-S6. doi: 10.2337/dc21-Srev.

Additional:

1. International Diabetes Federation. IDF Diabetes Atlas, 9th edition. – Brussels, Belgium, 2019. URL: https://www.diabetesatlas.org
2. Kovalevska I.V., Ruban O.A., Yevtushenko, O.M. Research of the range of drugs for the treatment of type II diabetes in the pharmaceutical market of Ukraine // Pharmac. zhurn. – 2019. – № 2. – pp. 13–23. https://doi.org/10.32352/0367-3057.2.19.02
3. Riddle, M.C., Cefalu, W.T., Evans, P.H. et al. Consensus report: definition and interpretation of remission in type 2 diabetes. Diabetologia (2021). https://doi.org/10.1007/s00125-021-05542-z
4. Centers for Disease Control and Prevention (CDC) – Access mode: http://www.cdc.gov/foodborneoutbreaks/info_healthprofessional.htm
5. Bergenstal R.M., Gal R.L., Connor C.G. et al. (2017) T1D Exchange Racial Differences Study Group. Racial differences in the relationship of glucose concentrations and hemoglobin A1C levels. Ann. Intern. Med.; 167: 95–102.
8. All-Ukrainian NGO "Ukrainian Diabetes Association" Access mode: https://diabetes-ukraine.org.ua/

Electronic information resources:

40. http://moz.gov.ua – Ministry of Health of Ukraine
41. www.ama-assn.org – American Medical Association / American Medical Association
42. www.who.int – World Health Organization
43. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
44. http://bma.org.uk – British Medical Association
45. www.gmc-uk.org - *General Medical Council* (*GMC*)
46. www.bundesaerztekammer.de – German Medical Association
47. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson 12.

Topic: "Anemia, the most common symptoms, examination in primary care. Methods of treatment and prevention" - 2 hours.

Purpose:

To improve students' knowledge of etiology, epidemiology, pathogenesis, clinical and laboratory manifestations of anemic syndrome; to form professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive treatment plan for the patient and the necessary preventive measures.

Basic concepts:

Clinical and laboratory syndrome of anemia, iron deficiency, iron deficiency anemia

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the recipient of higher education must know the answers to the questions.

- Give a definition of anemic syndrome.
- List the risk factors for developing anemia.
- Give a description of modern classifications of anemia (etiopathogenetic, according to the degree of severity, by cell size, according to the degree of saturation of red blood cells with hemoglobin).
- List and characterize modern erythrocyte indices.
- Criteria for the diagnosis of anemia.
- The main clinical manifestations of anemic syndrome, differential diagnosis depending on the etiopathogenetic affiliation of anemia.
- List the criteria for the effectiveness of treatment of anemic syndrome.
- Principles of management of patients with iron deficiency and iron deficiency anemia in the practice of a family doctor.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with a patient with anemic syndrome, collect complaints, history of life and disease, epidemiological history, conduct a survey by organs and systems;
- conduct a physical examination of a patient with anemic syndrome and determine the main symptoms of the disease;
- prescribe a set of laboratory and instrumental studies of a patient with anemic syndrome and analyze the results;
- conduct differential diagnosis and substantiate the clinical diagnosis of a patient with anemic syndrome;
- to create a comprehensive treatment plan for a patient with anemic syndrome, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- determine the prevention of anemic syndrome;
- draw up medical documentation of a patient with anemic syndrome;
- make a report of the results of the examination of a patient with anemic syndrome by a team of students in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Situational problem 1

The patient is 39 years old, turned to the local therapist with complaints for 6 months of general weakness, dizziness, shortness of breath, loss of appetite. He has 4 children. Vegetarian. Objectively: height, weight, mucous membranes are pale, dry, coylonychia. The activity of the heart is rhythmic, the tones are sonorous, blood pressure is 90/65 mm. Hg. Art., heart rate 120 per minute. In the lungs – vesicular breathing. The liver and spleen are not enlarged. Pasternatsky's symptom is negative on both sides. There is no edema. 172 см52 кг

*ZBC: Er. - 2.7*10 ^{12}*/l, *KP – 0.6, HB – 90 g/l, ESR – 10 mm/h. Serum iron – 8.7 mkmol/l.*

Question:

1. Your previous diagnosis?
2. What examinations should be prescribed to determine the final diagnosis?
3. Your recommendations for medical and non-drug treatment of the patient.

Situational problem 2

The patient is 56 years old, works as a radiologist for 30 years. He complained of general weakness, dizziness, shortness of breath, palpitations, bleeding gums.

Objectively: mucous membranes are pale with jaundice, hemorrhagic rashes on the abdomen. Peripheral lymph nodes are not enlarged. The activity of the heart is rhythmic, the left boundary of the heart is + 2 cm, blood pressure is 160/95 mm. Hg. Art. Art., heart rate 100 per minute. In the lungs – vesicular breathing. The liver and spleen are not enlarged. Pasternacki's symptom is negative on both sides. There is no edema.

*ZBC: Er. - 2.7*10 ^{12}*/l, *Hb - 90 g/l, KP - 0.7; lake.* - 3.3*10 9/l, *thrombus. - 80*10^{9}/l, ESR – 20 mm/h.*

Question:

1. Your previous diagnosis?
2. Make a plan for examining the patient.
3. What diseases is it necessary to carry out a differential diagnosis?

Situational problem 3

The patient is 23 years old, sent to the therapeutic department of the city hospital with complaints of headaches, general weakness, dizziness, shortness of breath, jaundice. Objectively: the leather covers are lemon yellow. Peripheral lymph nodes are not enlarged. The activity of the heart is rhythmic, the left border of the heart is + 2cm, the heart sounds are deaf, blood pressure is 160/95 mm. Hg. Art. Art., heart rate 100 per minute. In the lungs – vesicular breathing. Liver +, painful on palpation, the spleen is enlarged. In the blood - Er. - 3.7*10 12/l, *1,5 смHb - 95 g/l; lake. - 5.3*10 ^{9}/l, blood clot. - 210*10^{9}*/l, *ESR – 20 mm/h, decreased osmotic resistance of erythrocytes, total bilirubin 68 mmol/l, unconjugated – 46 mmol/l. With ultrasound of the abdominal organs – gallstones, hepato- and splenomegaly.*

Question:

1. Your previous diagnosis?
2. Make a plan for examining the patient.
3. What are the tactics of managing the patient?

Tests for self-control:

1. A woman of 30 years complains of increasing weakness, shortness of breath during physical exertion. For more than 10 years he suffers from epilepsy, 3 years he constantly takes diphenin and phenobarbital. 6 months. back operated on for acute appendicitis. In FBC: Er. - 1.4x10^{12}/l, HB - 65 gr./l, Tr. - 80x10 9/l, Lake.-3.1x10^{9} /l, U-1%, E-0%, P-4%, C-34%, L-37%, M-4%, ESR - 40 mm / h. Myelogram: The red sprout is irritated, modified by the "blue" type, there are single megalocytes. What is the reason for the development of anemic syndrome?

A. Erythromielosis
B. Antagonism of anticonvulsant drugs to ICU. B-12
C. With the development of iron deficiency
D. Antagonism of anticonvulsant drugs for folic acid
E. Hypoplasia bone marrow

2. A man, 43 years old, complains of periodic blood impurities in the feces, general weakness, fatigue, shortness of breath when walking, dizziness when getting out of bed, palpitations. On examination: pallor of the skin and mucous membranes, BH - 20 per minute, heart rate - 92 per minute, blood pressure 105/70 mmHg. CBC: Er. - 2,2*10^{12}/l, Hb - 74 gr./l, ret.-0,2% Tr-ti 160*10^{9}/l, Lake. 7,8*10^{9}/l, e - 2%, p. - 6%, s/i - 64%, lf.- 20%, m - 8%, ESR 17 mm / h. What anemia occurs?

A. Chronic post-hemorrhagic anemia
B. Acute posthemorrhagic anemia
C. B12 - deficient anemia
D. Folic deficiency anemia
E. Hypoplastic anemia

3. A patient of 30 years, with a history of maxillofacial injury two days ago, complaints of nasal and gingival bleeding that do not stop. On examination: pallor of the skin, tachypnea, moderate tachycardia, hypotension. In FBC: er. - 2,0*10^{12}/l, Hb - 60 gr./l, ret.- 4%, Tr-ti — 150*10 9/l., Lake. - 9.0*10 9/l, E - 3%, n - 8%, s/i - 72%, lymph - 15%, m - 2%, ESR 18 mm / h. What anemia occurs?

A. Acute post-hemorrhagic anemia
B. Chronic post-hemorrhagic iron deficiency anemia
C. Hemolytic anemia
D.B12 - folic deficiency anemia
E. Anemia in Randu-Osler disease

4. A 46-year-old man, homeless, with signs of exhaustion. In a blood test: Er. 1,5*10^{12}/l., Hb - 70 gr./l, ret.- 0,1. Red blood cells are sharply hypochromic, microcytosis, anisocytosis, poikilocytosis; Tr - 170*10 9/l, Lake. - 4.5*10^{9}/l, leukocytes formula without features, ESR - 16 mm/h. What anemia occurs?

A. Aplastic anemia
B. Microspherocytic anemia
C. Hemolytic anemia
D. Folic deficiency anemia
E. Alimentary iron deficiency anemia

5. A woman, 47 years old, heavy periods from 13 years, 2 births, 5 abortions. Complaints: general weakness, fatigue, shortness of breath when walking, dizziness when getting out of bed, palpitations. On examination: pallor of the skin and mucous membranes, BH - 21 per minute, heart rate - 95 per minute, blood pressure 100/70 mmHg. CBC: Er. - 2,3*10 12/l., Hb - 74 gr./l, ret. - 0.2% Tr - 160*10 9/l, Lake. - 7.8*10^{9}/l, E - 2%, n - 6%, s/i - 64%, lymph. - 20%, m - 8%, ESR - 17 mm / h, serum iron - 6.0 μmol / l. What anemia occurs?

A. Chronic post-hemorrhagic anemia
B. Acute post-hemorrhagic anemia
C.B12 - deficient anemia

D. Folic deficiency anemia
E. Hypoplastic anemia

6. A student of 20 years old, on dispensary registration with a local therapist for anemia. She was not treated regularly. Over the past 2 months, self-medication in the form of fasting and shaping. Well-being worsened. Determined brittle nails, hair, the desire to eat chalk. On examination: pronounced pallor of the skin and mucous membranes, tachycardia, hypotension. FBC: Er. - 2.7*10 12 /l, Hb - 62 gr./l, microcytosis, anisocytosis, poikilocytosis, KP - 0,65; ret.-0.1%, Tr-ti - 180*10 9/l, Lake. - 4,6*10^9/l, leuko formula without features, ESR - 17 mm/h, serum iron - 5.4 μmol/l. What diagnosis can you think about?
A. Hemolytic anemia
B. Hypoplastic anemia
C.B12 - deficient anemia
D. Chronic iron deficiency anemia
E. Microspherocytosis

7. A 42-year-old man complains of weakness, palpitations, nosebleeds, the appearance of bruises on the skin. Objectively: the condition is severe, petechial hemorrhages on the skin of the body and limbs, lymph nodes are not palpated, Ps- 116/min., liver +, spleen is not palpated. In the blood: severe pancytopenia. What disease should you think about first? 2 см
A. Hypoplastic anemia
B. Hemorrhagic vasculitis
C. Acute agranulocytosis
D. Verlholf's disease
E. Acute leukemia

8. A patient of 37 years over the past 6 years notes frequent nosebleeds, severe metrorrhagia, periodic formation of bruises on the skin. 10 days ago, after significant nosebleeds, weakness increased, dizziness and palpitations appeared. Objectively: the skin is pale, petechial hemorrhages and single ecchymoses are expressed on the front surface of the body, legs and arms. In blood: Hb- 80 gr./l, Er.- 4.0*10 12/l, KP - 0.7; Lake. - 5.3 * 10 9/l, p - 2%, c - 65%, e - 2%, l - 24%, m - 5%, blood clot. - 10*10^9/l, ESR - 15 mm/h. What is the most likely diagnosis?
A. Aplastic anemia
B. Iron deficiency anemia
C. Hemophilia
D. Verlholf's disease
E. Hemorrhagic vasculitis

9. A patient of 56 years old entered the clinic with complaints of general weakness, dizziness, suffocation when walking, heartburn in the tongue, numbness of the limbs. Sick for about 5 months. Objectively: the skin and visible mucous membranes are pale; the legs are pastose; lymph nodes are not enlarged. Heart tones are muted, there is systolic noise above the top. The tongue is crimson-red, the papillary layer is smoothed. The abdomen is soft, the liver protrudes on, the spleen protrudes on, non-painful. An. blood: er - 1.0*10 12/l, Hb - 60 g/l, 2 см1 смleu. - 2.5*10^9/l, e. - 1%, p. - 5%, p. - 57%, l. - 36%, m. - 1%, ESR - 62 mm / h, megalocytes 6 in sight. What is the main diagnostic method for the diagnosis of this disease:
A. Analysis of bone marrow punctate
B. Determination of serum iron
C. Determination of bilirubin in the blood
D. Determination of erythrocyte osmotic resistance
E. Coombs reaction

10. A 26-year-old woman complains of general weakness, increased brittle nails, hair loss. Objectively: pulse 94 beats. per minute, blood pressure 110/70 mm Hg. Art. Art. The skin is pale. In blood: HB - 90 g/l, Er. - 3.5 * 10^{12} / l, KP - 0.7, ESR - 20 mm / h. Serum iron – 8.7 μmol / l. What purpose should be made to this patient?

A. Iron preparations per os
B. Iron preparations parenterally
C. Vitamin B_{12} intravenously
D. Whole blood transfusion
E. Erythrocyte mass transfusion

6. Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

7. List of recommended literature (main, additional, electronic information resources):

Main:

1. Clinical hematology. Part 1. Anemia: method. point. for students of interns / order. L.V. Zhuravleva, O.O. Yankevich. – Kharkiv: KhNMU, 2015. – 44 p.

2. Mostovyi Y. Modern classifications and standards of treatment of common diseases of internal organs. – Kyiv. SLC Center, 2018 – 616s

3. Perederiy V.G., Tkach S.M. Fundamentals of internal medicine. Anemia. - 2009. - pp.332-342.

4. Sivolap V.D. Diagnosis and treatment of anemia in the elderly: a textbook / V.D. Sivolap, O.V. Nazarenko - Zaporozhye: ZSMU, 2018. – 88 p.

Supporting literature:

1. Order of the Ministry of Health of Ukraine dated 02.11.2015 No 709 "On approval and implementation of medical and technological documents on standardization of medical care in case of iron deficiency anemia".

Electronic information resources:

48. http://moz.gov.ua – Ministry of Health of Ukraine
49. www.ama-assn.org – American Medical Association / American Medical Association
50. www.who.int – World Health Organization
51. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
52. http://bma.org.uk – British Medical Association
53. www.gmc-uk.org - *General Medical Council* (*GMC*)
54. www.bundesaerztekammer.de – German Medical Association
55. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson 13

Topic: "Clinical classification of pain. Emergency care in the practice of a family doctor with pain" - 2 hours

Objective:

To improve students' knowledge of the modern definition of pain and pain, the main causes of pain, clinical classification of pain; to form a professional ability to draw up a plan for examination and emergency care for pain.

Basic concepts:

Pain, pain, clinical classification of pain, emergency care for pain

Equipment: illustrative material, tables, thematic patients

Plan:

1.Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- Definition of the concepts of "pain", "pain".
- Classification of pain.
- The main causes of acute pain. Clinical characteristics of patients.
- Differential diagnosis of nociceptive and neuropathic pain.
- Criteria for psychogenic pain.
- The concept of specific and nonspecific, primary and secondary pain.
- Principles of emergency care at the pre-hospital stage in case of pain (acute coronary syndrome, renal colic)
- Diagnosis and differential diagnosis of pain.
- Pharmacotherapy of pain. Principles of multimodal management of patients with pain.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with the patient with manifestations of pain, collect a history of life and disease, epidemiological history, conduct a survey on organs and systems;
- conduct a physical examination of the patient;
- assign a set of laboratory and instrumental studies and analyze the results;
- conduct differential diagnosis of pain;
- promptly assess the patient's condition and provide proper medical care for the main pain syndromes that require emergency medical care in the practice of a family doctor;
- identify diseases and conditions that require emergency care;
- determine the indications and contraindications, the dosage regimen when using essential medicines for emergency care to draw up the medical documentation of the patient;
- make a report of the results of the examination of a patient with pain by a team of students in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the volume of the prescribed examination, medical tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Situational task 1

A patient of 40 years has complaints of pain in the left hypochondrium of a shingles nature with irradiation in the back, aggravated after ingestion of fatty, fried foods, especially in the evening. The pain is not relieved after taking antacids, applying heat, slightly reduced after applying cold, in the position on the abdomen and knee-elbow. The pain is accompanied by repeated vomiting without relief, bloating, diarrhea. Sick for three years. Objectively: the tongue is wet, lined with white layering. The abdomen is moderately swollen, painful on palpation at the

Mayo-Robson point. Liver at the edge of the costal arch. The spleen is not palpated.

1. What disease should I think about?
2. What measures are needed to relieve pain?

Situational task 2

The patient entered the hospital urgently with complaints of intense headaches. Blood pressure 240/120 mmHg He did not take the antihypertensive drugs prescribed to him for the last two weeks. No changes were found in the urine analysis. On the ECG – left ventricular hypertrophy, sinus tachycardia, heart rate 98' per minute. On the fundus: swelling of the optic nerve discs.

1. Preliminary diagnosis.
2. What emergency therapy in this case is necessary and will help get rid of pain?

Situational task 3

A patient of 60 years complains of pain in the left half of the chest, which increases with body turns. The use of nitroglycerin did not have an effect. The pain decreased after applying diclofenac. Auscultative picture of the lungs and heart, ECG without pathology.

1. Preliminary diagnosis
2. What are your further medical tactics?

Situational task 4

In patient F., 55 years old, with shortness of breath and sudden intense pain behind the sternum, which lasts up to an hour, an ECG found: sinus rhythm, correct, frequency 100/min., in V1 – V4 segment ST 8 mm higher above the isoline, positive prong T. In history for 5 years suffers from angina pectoris. Objectively: heart rate – 60/min., heart sounds are weakened. Blood pressure – 140/90 mmHg With Echo-KG – the zone of hypokinesia in the area of the anterior wall of the left ventricle. FV – 34%.

1. Preliminary diagnosis.
2. Algorithm for emergency care.

Situational task 5

The patient K., 48 years old, after heavy physical exertion (rearranged the furniture in connection with the repair) developed intense pain in the lumbar region, along the ureter, which radiates to the right thigh, perineum, accompanied by nausea. Urine is the color of "meat rinses". A similar attack, of lower intensity, was observed a year ago.

1. Preliminary diagnosis.
2. Algorithm for emergency care.

4. Summing up:

Conducting an assessment of students, summing up, announcing the next topic of the lesson.

List of recommended literature (main, additional, electronic information resources):

Main:

1. Family medicine: textbook /ed. Matyukha L.F., Kolesnika P.O., Igor Švab, Milica Catič. – Uzhhorod: RIK-U, 2022. – 692 p.
2. Matyukha L.F. Pain syndrome, its effects on the body and approaches to effective anesthesia in the practice of a family doctor. Ukrainian medical journal., 4 (108) – VII/VIII 2015 | www.umj.com.ua
3. Oros M.M. Diagnosis and treatment of back pain in the practice of a family doctor. Health of Ukraine. 2020. 22(491)

Additional:

1. Emergency care for a patient with chest pain – Acute coronary syndrome with ST segment elevation and its equivalents / OSCE/OSCE recommendations. https://clincasequest.academy/acs-st-elevation-osce-guide/
2. Neuropathic pain (lecture for primary care physicians) Ukr. Honey. Chasopys, 6 (128), Vol. 1 – XI/XII 2018 /WWW.UMJ.COM.UA

Electronic information resources:

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. www.ama-assn.org – American Medical Association / American Medical Association
3. www.who.int – World Health Organization
4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
5. http://bma.org.uk – British Medical Association
6. www.gmc-uk.org - *General Medical Council* (*GMC*)
7. www.bundesaerztekammer.de – German Medical Association
8. https://library.odmu.edu.ua/catalog/ - Electronic catalogue

Practical lesson 14, 15

"Program of management of patients with complaints of pain in the neck and back" – 2 hours.

"Differential diagnosis. Pain syndrome is associated with spinal pathology, patient management program" - 2 hours

Objective: To improve students' knowledge of the syndromic approach in general medical practice, the main causes of pain in the neck and back, including those associated with spinal pathology, differential diagnosis of back pain; to form professional skills in drawing up programs for the management of patients with pain in the back, including those associated with spinal pathology

Basic concepts:

Neck and back pain, differential diagnosis, vertebrogenic pain syndrome, patient management program

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- Characteristics of nonspecific back pain.
- The role of a general practitioner – a family doctor in organizing care for patients with dorsalgias.
- The main causes of neck pain. Differential diagnosis
- Algorithm for examining patients with neck pain, additional research methods.
- The main causes of pain in the lower back. Differential diagnosis.
- Algorithm for examining patients with back pain.
- Signs of a "threatening" condition in patients with complaints of neck and back pain.
- Principles of care for patients with nonspecific back pain.
- The main groups of drugs for stopping pain in dorsalgia.
- Non-drug treatments for dorsalgia.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with the patient with manifestations of pain in the lower back and neck, collect a history of life and disease, epidemiological history, conduct a survey on organs and systems;
- conduct a physical examination of the patient;
- assign a set of laboratory and instrumental studies and analyze the results;
- conduct differential diagnosis of pain in the lower back and neck;
- promptly assess the patient's condition and provide proper medical care for the main pain syndromes that require emergency medical care in the practice of a family doctor;
- identify diseases and conditions that require emergency care;
- determine the indications and contraindications, dosage regimen when using essential medicines for pain in the lower back and neck;
- draw up medical documentation of the patient;
- make a report of the results of the examination of a patient with pain in the neck and lower back by a team of students in the study group, analysis under the guidance of the teacher of the correctness of diagnosis, differential diagnosis, the volume of the prescribed examination, treatment tactics, assessment of the prognosis and performance.

Materials for the final stage of the lesson

Situational problem number 1

A man of 38 years old, for 3 years feels general fatigue, pain and stiffness in the lower and middle back, ileo-sacred articulation and neck. The pain especially intensifies between 4 and 6 o'clock in the morning. Pain and stiffness are reduced during exercise and taking NSAIDs. Also, there is redness, pain in the eyes and sensitivity to light. ESR - 27 mm / h. A survey radiograph of the spine revealed syndesmophytes in the thoracic and lumbar spine.

1.What is the most likely cause of pain in a patient?

Preliminary diagnosis.

2. Your further medical tactics.

Situational problem number 2

A palliative patient who had been in a supine position for a long time began to complain of shooting pain in the lumbar spine with irradiation to the right lower limb; feeling of "burning", running goosebumps, decreased sensitivity in the right leg.

1. What type of pain is characterized by these symptoms?
2. Your further medical tactics.

Situational task 3

At a reception at the clinic, a 12-year-old girl complains of aching back pain and fatigue while walking or sitting for a long time, which arose about two months ago. The girl grew and developed according to age, there is no history of chronic diseases and injuries, and her vision is satisfactory. There are no hereditary diseases in the family. She was not in contact with patients with infections. The father has complaints of low back pain associated with trauma. The general condition of the child is satisfactory, body temperature is 36.6 ° C. Without neurological disorders. Pathology of internal organs has not been identified. When examining the spine there is a stoop, in the thoracic region 5 adjacent vertebrae deviate from a straight line in the frontal (lateral) plane, forming a curvature arc on the right, adjacent to the primary arc, the secondary arc of curvature of the lower thoracic and lumbar vertebrae is directed by a bulge to the left (torsion or twisting). Lengthening of the tubular bones of the skeleton, hypermobility of the joints and their deformation were not detected.

1. What is the most likely cause of back pain?
2. What diagnostic tests should be prescribed in the first place?
3. What are the appropriate recommendations of a family doctor?

Situational task 4

A 32-year-old man turned to a doctor with complaints of pain in the cervical spine, radiating to the shoulder, along the radial edge of the forearm, to the thumb of his right hand. On examination, weakness and hypotrophy of the biceps muscle of the shoulder, tenar, decreased biceps reflex on the right were revealed. Hypoesthesia in the area of the radial edge of the forearm.

1.Preliminary diagnosis?
2.Survey plan?
3.Treatment plan?

Situational task 5

A 26-year-old man, the day after the first ski walk (18 km) in the season, developed low back pain that persists for three days. During the examination, tension of the back muscles of the lumbar region, restriction of mobility in the lumbar region are detected. No other violations were found during the examination.

1. Preliminary diagnosis.
2. Treatment plan.

List of recommended literature (main, additional, electronic information resources):

Main:

1. Kolisnyk P.F. Lectures on clinical vertebrology. Vinnytsia: New Book, 2019. – 184 p.
2. Family medicine:textbook /ed. Matyukha L.F., Kolesnika P.O., Igor Švab, Milica Catič. – Uzhhorod: RIK-U, 2022. – 692 p.
3. Order of the Ministry of Health of Ukraine 25.04.2012 No 311 "On approval and implementation of medical and technological documents on standardization of palliative care in chronic pain syndrome" https://zakon.rada.gov.ua/rada/show/v0311282-12#top
4. Internal diseases. The textbook is based on the principles of evidence-based medicine 2018/2019, ORTS, Wroclaw, - 1632 p. Project manager A. Kubets, Translation I. Avramenko and others.

Additional:

1. Oros M.M. Diagnosis and treatment of back pain in the practice of a family doctor // Health of Ukraine. - № 22. - 2020.– P. 39 – 40.
2. Mishchenko V.M., Harina K.V. Back pain modern view of pathogenesis and treatment // Health of Ukraine. - № 3. - 2020.– P. 27 – 30.
3. Nasonova T.I. Patient with neck pain in the practice of a family doctor or what is a computer neck // Health of Ukraine. - № 3. - 2020.– P. 28 – 29.

Electronic information resources:

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. www.ama-assn.org – American Medical Association / American Medical Association
3. www.who.int – World Health Organization
4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
5. http://bma.org.uk – British Medical Association
6. www.gmc-uk.org - *General Medical Council* (*GMC*)
7. www.bundesaerztekammer.de – German Medical Association
8. https://library.odmu.edu.ua/catalog/ - Electronic catalog

Practical lesson 16

Topic: "Emergency care in the practice of a family doctor in case of sudden death at the prehospital stage"

The duration of the practical lesson is 2 hours.

Objective:

- to improve students' knowledge of emergency medical care for patients in case of sudden death in the practice of a family doctor, namely the organization of stages of care, cardiopulmonary resuscitation, defibrillation, the use of medicines; application of the principles of a multidisciplinary approach in working with patients with heart disease; treatment and prevention of risk factors for sudden cardiac death;

- to form professional skills in filling out medical records of patients with heart disease, as well as to highlight the psychological, deontological aspects of the family doctor's activities in working with patients and their family members.

Basic concepts: sudden circulatory arrest, sudden cardiac death, pulse-free electrical activity of the heart, ventricular fibrillation, ventricular tachycardia without pulse, asystole, cardiopulmonary resuscitation

Equipment: illustrative material, tables, educational videos.

Plan:

1.Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

2.Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- Definition of the concepts of "sudden cessation of blood circulation" (RPK), "sudden death", "sudden cardiac death" (PCS).
- Mechanisms of RPK, electrocardiographic diagnostics.
- Risk factors for PCC.
- Diseases and conditions in which PCC most often develops.
- The main stages of extinction of vital important body functions.
- General principles of emergency care in the RPK.
- Contraindications to cardiopulmonary resuscitation (CPR).
- Stages of CPR.
- Methods of CPR.
- Pharmacological support of resuscitation.
- Method of defibrillation.
- Criteria for the termination of resuscitation measures.
- Indications for installation of an implanted cardioverter-defibrillator

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.)

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to recognize the signs of SCD;
- conduct an objective study at the SCD;
- interpret the results of electrocardiographic examination in SCD;
- determine the tactics and algorithm for providing emergency medical care for SCD;

- be able to control and restore airway patency;
- conduct cardiopulmonary resuscitation in SCD;
- conduct drug therapy for SCD;
- to carry out defibrillation in defibrillation rhythms of the heart;
- identify and treat the cause of SCD;
- draw up medical documentation of a patient with SCD;
- know the tactics of further management of patients who have undergone SCD.

Control materials for the final stage of the lesson

Situational problem 1

The victim, about 45 years old, lies on the site, and one of those around him conducts artificial ventilation of the lungs, spreading his arms and squeezing his chest with them. The victim fainted. Pupils are dilated, reflexes are absent, the pulse on the carotid arteries is not determined. There is no breathing. The skin is pale gray.
Question:
1. Determine the condition of the victim.
2. Specify measures for the provision of medical care.
Diagnosis: Sudden death

Situational problem 2

A man, 55, who was diagnosed with coronary heart disease: unstable angina pectoris fell while walking along the corridor. The general practitioner has established a lack of consciousness and pulsation on a. Carotis, heart tones; constricted pupils and shallow breathing.
Question:
1.Probable diagnosis.
2. Stages of emergency medical care.
Diagnosis: Sudden cessation of blood circulation

Situational problem 3

A random passerby (medical professional) found a patient aged 30-35 on the sidewalk. During the examination: the patient faints, the pulse on the peripheral arteries is not determined, the pulse on the carotid arteries is frequent, weak filling, breathing is independent, 20 in 1 minute.
Question:
1. What a passerby should do
2. What he should not do and why.
Answer: you need to give the patient a position on his side face down and call an ambulance.

Test task 1

What is the main sign of the need to start resuscitation measures:
A. Lack of self-breathing
B. Alteration of skin color C. Lack of consciousness
D. Broad pupils
E. Lack of heart tones

Test task 2

After the initial cardiac arrest, consciousness disappears due to:
A. 10-15 s
B. 2 min
C. 15-20 s
D. 1 min
E. 30 s

Test task 3

A 66-year-old patient complains of acute pain behind the sternum for 40 minutes. During the conversation, fainting, pulse and blood pressure are absent, on the ECG - waves of various shapes and amplitudes with a frequency of 300 in 1 minute. What pathology causes such a picture? A. Supraventricular paroxysmal tachycardia.

B. Atrial fibrillation.

C. Ventricular fibrillation.

D. Ventricular paroxysmal tachycardia.

E. Complete AB blockade.

Test task 4

In a patient with acute myocardial infarction, which is located in the intensive care unit under monitoring, 40 minutes after the end of thrombolytic administration, a sudden cessation of effective blood circulation and breathing was recorded. On the monitor – large-wave ventricular fibrillation. What is needed first of all to provide assistance?

A. Electrical defibrillation.

B. Lidocaine intravenously.

C. Adrenaline intracardiac.

D. Prednisolone intravenously.

E. Temporary pacemaker

Test task 5

The patient in the ward suddenly fell and fainted. Spontaneous breathing is absent. What will be the primary diagnostic measure?

A. Conduct auscultation of heart tones.

B. Determine the pulsation on the carotid arteries.

C. Assess the degree of mydriasis.

D. Assess the depth of depression of consciousness.

E. Check for oculovestibular reflex.

Test task 6

A 64-year-old woman with a sinus node weakness suddenly fell while walking. The doctor on duty during the examination stated the lack of consciousness, pulsation on the carotid arteries and heart tones; narrow pupils and liquid, shallow breathing. With what in this case is it necessary to begin resuscitation measures?

A. Intravenous administration of atenolol.

B. Blow your fist to the sternum.

C. Intravenous lasix administration.

D. Implantation of an artificial rhythm driver.

E. Intubation and mechanical ventilation

Test task 7

A 57-year-old patient was taken to the emergency room with cardialgia and widespread ST segment depression on an ECG, fainted, the pulse on the central arteries is not determined, the pupils are narrow. Cardiopulmonary resuscitation was started immediately. What events does it start with?

A. Artificial respiration and heart massage.

B. Intracardiac administration of adrenaline.

C. Setting an artificial rhythm driver.

D. Intravenous lidocaine.

E. Sublingual administration of nitroglycerin

Test task 8

The main condition for the possibility of transportation after assisting the patient in a state of clinical death?

A. Intravenous access
B. Successful intubation
C. Restoration of independent cardiac activity
D. Vehicle availability
E. Constriction of the pupils

Test task 9

For artificial respiration, the EMD doctor found that drooping the patient's head is almost impossible due to the inactivity of the cervical spine. What additional actions should be taken in these circumstances?

A. Raise the patient's lower jaw up and open his mouth, at moderate head deviation
B. Turn the patient's thrown head to the side and open his mouth
C. Put a pillow under the patient's head
D. Make extra effort to throw your head back as much as possible
Patient
E. Rinse a pillow or folded towel under the shoulders of the patient.

4. Summing up: conducting an assessment of students, summing up, announcing the next topic of the lesson.

5. List of recommended literature: (main, additional, electronic information resources):

Main
1. G.G. Roshchin, V.O. Krylyuk and others. Emergency medical care (basic life support). Kyiv, 2009.125s.
2. Emergencies : at hand. for stud. higher. honey. training. institutions of III-IV levels of accreditation / M. S. Regeda [et al.]. - L. : Magnolia 2008. - 835 p.
3. Pharmacotherapy of internal diseases and their emergency conditions: textbook. posib. for stud. higher. honey. zakl. education of III-IV levels of accreditation and interns / O. M. Bilovol, I. K. Latoguz, V. F. Moskalenko. - H. : Basis, 2001. - 238 p.
4. Shlapak I.P., Netyazhenko V.Z., Halushko O.A. Infusion therapy in the practice of an internal medicine doctor. - K.: Logos, 2013. — 308 p.

Additional
1. Recommendations of the European Society of Cardiology 2015 on the treatment of patients with ventricular arrhythmias and prevention of sudden cardiac death // Arrhythmology. – 2016. – № 1. – pp. 5-54; 2016. - № 2. – pp. 5-56.
2. Order of the Ministry of Health of Ukraine dated 05.06.2019 No 1269 "On approval and implementation of medical and technological documents on standardization of emergency medical care"
3. Usenko L.V. Manual for practical classes in anesthesiology and resuscitation. - Kyiv: Zdorovya, 2003.

Electronic information resources
1. http://moz.gov.ua – Ministry of Health of Ukraine
2. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
3. www.who.int – World Health Organization
4. https://library.odmu.edu.ua/catalog/ - Electronic catalog

5. https://phc.org.ua/uptodate - a global clinical resource of evidence-based medicine
6. http://bma.org.uk – British Medical Association
7. www.gmc-uk.org - *General Medical Council* (*GMC*)
8. www.bundesaerztekammer.de – German Medical Association

Practical lesson 17

Topic: "Organization of emergency medical care in the practice of a family doctor for convulsions and loss of consciousness at the prehospital stage".
The duration of the practical lesson is 2 hours.

Objective: to improve students' knowledge of diagnosis, treatment, emergency care for patients with seizures and loss of consciousness in the practice of a family doctor; systematize the features of management of patients with pathology of the nervous system in the practice of a family doctor; to form professional skills in filling out medical records of patients with diseases of the nervous system, as well as to highlight the psychological, deontological aspects of the family doctor's activity in working with patients and their family members.

Basic concepts: convulsions, epilepsy, epileptic reaction, epileptic syndrome, fainting, syncopal state, collapse
Equipment: illustrative material, tables, educational videos.

Plan:
1.Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

2.Control of the reference level of knowledge is carried out by the method of frontal survey.
To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- Definition of the concept of "convulsions", classification of convulsive states.
- Definition of "epilepsy", "epileptic seizure", "epileptic status".
- Types of seizures in the presence of pathological activity in the brain and by involvement in convulsive paroxysm of skeletal muscles.
- Causes of seizures in different age periods, pathogenesis of seizures.
- The clinical picture of an epileptic seizure and the characteristic signs of a convulsive state accompanying other diseases.
- Diagnostic and differential diagnostic criteria for an epileptic seizure.
- Mandatory and additional methods of examination for convulsive conditions.
- Algorithm for the provision of emergency medical care at the prehospital stage for convulsions.
- Features of medical care for febrile, affective-respiratory convulsions, spasmophilia and other metabolic disorders.
- Definition of the concepts of "fainting", "syncope", "collapse".
- Stages of development and the clinical picture of fainting.
- Classification and characteristic features of groups of syncopal states.
- Algorithm for the primary assessment of the patient's condition with loss of consciousness.
- Emergency care for fainting at the prehospital stage.
- Cause, pathogenesis, and agnostic criteria for collapse.
- Algorithm for emergency care during collapse at the prehospital stage.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.)

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- recognize signs of convulsive states, syncopal state, collapse and be able to quickly assess the patient's vital functions;

- possess the peculiarities of the method of collecting anamnesis, complaints, conducting a clinical examination of patients with convulsions and loss of consciousness;
- determine the plan for examining a patient with convulsions and loss of consciousness;
- integrate the data of clinical examination, special research methods, evaluate the indicators of laboratory methods;
- know the differential diagnostic criteria for convulsive states and fainting;
- clearly understand the causes or conditions that led to the development of seizures and fainting;
- know and be able to provide emergency care at the prehospital stage for convulsions and fainting;
- correctly resolve the issue of the need for emergency hospitalization and transportation of patients to intensive care units and specialized centers;
- be able to correctly draw up medical documentation of patients with diseases of the nervous and cardiovascular systems;
- be able to prevent the causes of convulsive conditions and fainting.

Control materials for the final stage of the lesson

Situational problem 1

A child of 2 years after hypothermia rose to 39.5 ° C, there was a dry cough, bother, lethargy, appetite disappeared. In the evening, the child developed an attack of clonic-tonic convulsions, which lasted 1 minute.
Establish a diagnosis, determine the tactics of patient management and assign recommendations to the mother to the child.
Diagnosis: febrile seizures

Situational problem 2

A man of 42 years old, with diagnostics of spastic paraparesis, was prescribed a tizanidine muscle relaxant according to the scheme of gradual increase in dose. The patient violated the recommendation and consumed a daily dose, after which he felt general weakness, dizziness, decreased strength in the legs and briefly lost consciousness. During the physical examination, the arterial pressure is 75/55 mmHg, the pulse is 69/min., the body temperature is 36.6ºC, and the total muscular hypotony.
Establish a preliminary diagnosis, determine the amount of necessary research for differential diagnosis.
Diagnosis: collapse caused by an overdose of muscle relaxant

Situational problem 3

In a patient with epilepsy at the age of 50,during the examination, there are repeated generalized tonicoclonic convulsive seizures, fainting, mouth spike, a skin of a grayish-white color, a skin hematoma of 1x2 cm on the forehead, a heart rate of 120/min., fluctuations in arterial pressure from 130/80 to 170/100 mmHg. During a neurological examination: the stars do not react to the world, the gaze does not focus, the pathological reflexes of the lower bones.
Determine the tactics of patient management and the algorithm of emergency care.
Diagnosis: status epilepticus

Situational problem 4

The girl, 13 years old, after a long standing in the sun, complained of dizziness, fainted, fell, blood pressure 80/40 mm Hg, pulse 100 in 1 minute, weak filling, shallow breathing, face pale. After 4 minutes. Symptoms regressed.
Formulate the most likely diagnosis. Determine the stages of emergency care.
Diagnosis: fainting under the infusion of thermal factor (heat stroke)

Situational problem 5

Pregnant, 38 weeks 1 pregnancy. With an increase in blood pressure, convulsions occurred. Objectively: consciousness is absent, clonic convulsions. Swelling of the face and hands. Pulse 80 in 1 minute, rhythmic. BP 230/130 mm Hg Century. No changes were found on the part of the heart and lungs.
Formulate a preliminary diagnosis. Determine the tactics of patient management and the algorithm of emergency care.
Diagnosis: eclampsia of pregnant women. Help – magnesium sulfate, diazepam, nifedipine.

Test task 1

A patient of 19 years old was urgently taken to the emergency department of the hospital. During the examination, there are multiple repeated generalized tonicoclonic convulsive seizures, fainting, mouth spike, grayish-white skin, chest hematoma 1x2 cm on the forehead, heart rate - 120/min., fluctuations in arterial pressure from 130/80 to 170/100 mmHg. During a neurological examination: the stars do not react to the world, the gaze does not focus, the pathological reflexes of the lower bones. What is the patient's condition?

A. Epileptic status
B. Tetanus
C. Acute cerebrovascular accident
D. Meningitis
E. Delirium

Test task 2

A child of 3 years old arrived from home, who, against the background of hyperthermic syndrome caused by influenza, lasts tonic-clonic genera-lysed convulsions for 50 minutes. Therapy was not carried out. For the immediate treatment of convulsive syndrome it is necessary:

A. Enter intravenous lorazepam
B. Enter calcium gluconate intravenously
C. Urgently apply cold compresses to the child
D. Inject phenobarbital intramuscularly
E. Prescribe high-dose paracetamol

Test task 3

A patient of 33 years was diagnosed with paroxysm of supraventricular tachycardia. Immediately after the rapid intravenous administration of 10 ml of a 10% solution of novocainamide, the patient appeared general weakness, darkening of the eyes, cold sweat, she fainted. Objectively: pallor of the skin, blood pressure 60/40 mmHg, pulse 120 in 1 minute, weak filling, heart tones muted. What complication did the patient have? What kind of emergency care should a doctor use?

A. Comma
B. Anaphylactic shock
C. Syncopal state
D. Vago-insular crises
E. Collapse

Test task 4

After surgery, the patient suddenly developed tetanic convulsions of the distal limbs ("obstetrician's hand"), there are phenomena of brochospasm. What emergency therapy is needed?

A. Introduction of potassium chloride solution
B. Introduction of magnesium sulfate solution
C. Introduction of a solution of furosemide
D. Introduction of sibazon
E. Introduction of calcium chloride solution

Test task 5

With the ineffectiveness of re-administration of diazepam, the drug of choice is:

A. GHB

B. Luminal (phenobarbital)

C. Midazolam

D. Hexenal

6. Summing up: conducting an assessment of students, summing up, announcing the next topic of the lesson.

7. List of recommended literature: (main, additional, electronic information resources):

Main

1. Pediatrics: differential diagnosis, emergency conditions : textbook. manual / M. L. Aryaev, N. V. Kotova, O. O. Zelinsky [et al.] ; ed. M. L. Aryaeva, N. V. Kotova. — Odessa : ONMedU, 2017. — 280 s

2. Order of the Ministry of Health of Ukraine dated 05.06.2019 "On approval and implementation of medical and technological documents on standardization of emergency medical care".

3. Order of the Ministry of Health of Ukraine dated 17.04.2014 No 276 "On approval and implementation of medical and technological documents on standardization of medical care for epilepsy".

4. Recommendations of the European Society of Cardiology (ESC) 2018: syncope.

Additional

1. Providing emergency care in the practice of a family doctor for convulsions and loss of consciousness: a textbook for practical classes and independent work of VI year students in the discipline "General Practice - Family Medicine" / Mikhailovskaya N.S., Gritsai G.V. – Zaporizhia: ZSMU, 2014. – 119 p.

3. Tactics of a family doctor in syncopal conditions: educational and methodical manual for students of the VI year of specialty "General Medicine", "Pediatrics" according to the program of the discipline "General Practice - Family Medicine" / Mikhailovskaya N.S., Gritsai G.V. - Zaporozhye: ZSMU, 2019. – 132 p.

4. Emergency and emergency medical care: a manual for interns to prepare for the licensed exam "Krok-3" / N. V. Banadiga [et al.] ; Ternopil region. state. honey. un-t them. I.Y. Gorbachevsky Ministry of Health of Ukraine, Teaching and Sciences. in-t postgraduate diploma. education. - Ternopil : TSMU; Ukrmedkniga, 2017. - 383 p.

5. Cuckoo I.S. Syncopal conditions: clinical picture, diagnosis, emergency care / I.S. Zozulya, A.I. Zozulya // Acute and emergency conditions in the practice of a doctor. – 2015. – No. 3-4. – P. 5-8.

Electronic information resources

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. https://library.gov.ua — National Science and Medical Library of Ukraine
3. www.who.int – World Health Organization
4. https://library.odmu.edu.ua/catalog/ — Electronic catalogue
5. http://medlib.bsmu.edu.ua – Medical libraries on-line - BSMU Library
5. https://phc.org.ua/uptodate - G frontal clinical resource of evidence-based medicine
6. https://health-ua.com – Medical portal

Practical lesson No 18

Topic: "Providing emergency care in the practice of a family doctor for stings, bites, electrical injuries, drowning and exposure to low and high temperatures at the prehospital stage"

The duration of the practical lesson is 2 hours.

Objective: to improve students' knowledge of emergency medical care for patients with stings, bites, electrical injuries, drowning and exposure to low and high temperatures, namely the organization of stages of care, the use of medicines; cardiopulmonary resuscitation.

Basic concepts: biological effect of poison, heat stroke, burns, hypothermia, frostbite, electrical injury, drowning, cardiopulmonary resuscitation

Equipment: illustrative material, tables, educational videos.

Plan:

1.Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).

2.Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- What types of body reactions cause Hymenoptera bites?
- pathogenesis and clinical manifestations in case of bites by Hymenoptera;
- stages of emergency care for Hymenoptera bites;
- emergency care for anaphylactic shock;
- clinical signs and emergency care for bites of poisonous snakes;
- clinical manifestations and emergency care for arachnid bites;
- preventive measures and emergency care for tick bites;
- stages of emergency care for jellyfish bites;
- algorithm for providing emergency care for heat stroke;
- classification and criteria for determining the severity of burns,
- rules for determining the area and depth of burns;
- indications for hospitalization for burns;
- stages of emergency care for burns;
- diagnosis of frostbite periods according to clinical signs; the main stages of freezing;
- emergency care for general cold injury and frostbite;
- the effect of electric current on the body, which determines the degree of influence of the electric current on the human body;
- the main clinical signs of electrical injuries, the difference between the effect of high and low voltage electric current on the human body;
- algorithm for providing emergency care for electric shocks;
- types of drowning;
- emergency care for drowning.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.)

Recommendations (instructions) for completing tasks

The applicant for higher education should be able to:

- provide emergency care for bites by Hymenoptera;
- be able to recognize anaphylaxis, and carry out therapeutic measures at the prehospital stage in case of anaphylactic shock;
- provide emergency care for snake bites;
- provide emergency care for spider bites;
- provide emergency care for jellyfish bites;
- remove the tick; know the methods of protection against ticks and the measures of prevention of tick-borne encephalitis and borreliosis;
- provide emergency care for injuries caused by exposure to low temperatures;
- provide emergency care for injuries caused by high temperatures;
- provide emergency care for electrical injuries;
- conduct cardiopulmonary resuscitation;
- it is necessary to solve the issue of transporting patients to intensive care units and specialized centers.

Control materials for the final stage of the lesson

Situational task 1

A patient of 36 years old was taken to the hospital who, after a bee sting, appeared dizziness, darkening of the eyes, and difficulty breathing. During the examination – the condition is severe, the skin is pale, heart rate is 124 in 1 minute, blood pressure is 80/40 mmHg, there are a large number of dry wheezing in the lungs. Your diagnosis? Determine the tactics of patient management.
Diagnosis: anaphylactic shock.

Situational task 2

From a freshwater reservoir they got the victim in a state of clinical death. Water has been removed from the stomach and respiratory tract, and pulmonary-cardiac resuscitation has begun. After 3 minutes, breathing and cardiac activity resumed. What should be the further therapeutic tactics? Justify the answer.

Situational task 3

A 17-year-old girl received an electrical injury by accidentally touching a bare wire with her hand. She fainted, there was a stop in blood circulation. After resuscitation measures, consciousness and blood circulation were restored. What should be the further tactics and why?

Situational task 4

Husband Z., 32 years old, was at a public transport stop for 1 hour at an air temperature of +2 o C andhigh relative humidity (98%). At work, he turned to a guild therapist. Complains of cooling of the limbs, tremor of the small muscles of the whole body. The skin is cold, a small cyanosis of the lips and limbs. Heart rate 102 in 1 minute, blood pressure 150/80 mmHg. Body temperature 36.2ºC. What medical care should be provided to the patient?
Diagnosis: general hypothermia.

Test task 1

The patient is 42 years old, taken to the adoptive department of the hospital with complaints of dizziness, weakness, difficulty breathing. The deterioration occurred suddenly after a bee sting in the left hand. On examination – the condition is severe, pallor of the skin, heart rate – 110 minutes, blood pressure 90/60 mm Hg. Art. What kind of emergency care does the patient need?

A. Apply jute above the bite site, attach a heating pad.
B. Apply jute below the bite site, apply ice.

C. Chop the bite site with lidocaine.
D. Apply jute above the bite site, apply ice.
E. Apply jute below the bite site, apply a heating pad.

Test task 2

The patient complains of difficulty breathing, burning and sore throat, hoarseness, the man giggled while taking water. An hour ago, while eating watermelon, he was bitten by a wasp. History of food and drug allergies. On examination, a sharp swelling of the tongue, which is hardly contained in the mouth, temperature 37.3 ° C, tachycardia, decreased blood pressure. The patient needs immediate administration:

A. Calcium glucanate.
B. Suprastin.
C. Eufillin.
D. Adrenaline.
E. Furosemide.

Test task 3

A 27-year-old woman was stung in the cheek by a wasp. A dense swelling of the cheek, lips, tongue, neck, inspiratory dyspnea, stridorous breathing, pale leather covers with a cyanotic tinge quickly appeared. What is the most likely diagnosis?

A. Angioedema
B. Acute allergic urticaria
C. Anaphylactic shock
D. Foreign body of the larynx
E. Food allergies.

Test task 4

After multiple stings of the wasp, the condition of the victim deteriorated sharply: there was a sharp frailty, dizziness, palpitations, tightness in the chest, shortness of breath. Ob-no: pronounced pallor, sweating, heart rate-110 in 1 minute, and T-80/50 mmHg.

A. Angioedema
B. Acute allergic urticaria
C. Anaphylactic shock
D. Foreign body of the larynx
E. Food allergies.

Test task 5

What complications arise in a patient who has been bitten by a poisonous snake, if he was not provided with high-quality first aid ?

A. Hemocoagulation shock, post-hemorrhagic shock, "turnstile shock"
B. Severe internal bleeding: gastrointestinal, nasal, renal bleeding
C. DIC syndrome, lymphadenitis, phlebothrombosis,
D. Gangrene, phlegmon, abscesses
E. All of the above

Test task 6

The victim V. 34, who fell asleep in the sauna, was taken to the intensive care unit. During the examination: consciousness is absent, skin and visible mucous membranes are dry, pupils are dilated, their reaction to light has withered, nystagmus, pulse 148 beats in 1 minute, AT-80/40 mHg, Cheynes-Stokes breathing - 40 in 1 minute, clonic convulsions, body temperature 42^0C. What pathological condition has developed in the patient?

A. Heat stroke of mild degree.
B. Overheating
C. Heat stroke of moderate severity.
D. Heat stroke of severe degree.

E. Clinical death.

Test task 7

During the spring flood, rescuers took out of the water, with a temperature of 14 0 C, the victim C. 45r. During the examination: consciousness is absent, pupils are dilated, their reaction to light has withered, the pulse is filiform, bradyarrhythmia, slow breathing, marbling of the skin, rectal temperature 27-29 ^{0}C. What pathological condition did the patient develop?

A. Freezing, adynamic stage.
B. Drowning.
C. **Freezing, stuporous stage**.
D. Freezing, convulsive stage.
E. Frostbite.

4. Summing up: conducting an assessment of students, summing up, announcing the next topic of the lesson.

5. List of recommended literature: (main, additional, electronic information resources):

Main:

1. Voronenko Yu.V., Shekera O.G., Roschin G.G. and others. Topical issues of disaster medicine in the practice of a family doctor. – Izdatelsky dom Zaslavsky. - K., 2017. – 288 p.
2. Voronenko Yu.V., Shekera O.G., Kuznetsova L.V. and others Topical issues of allergology in the practice of a family doctor. – Izdatelsky dom Zaslavsky. - K., 2016. – 324 p.
3. Voronenko Yu.V., Shekera O.G., Zozulya I.S. and others. Topical issues of emergency medicine in the practice of a family doctor. – Izdatelsky dom Zaslavsky. - K., 2016. – 124 p.

Additional

1. Emergency medicine: Emergency (ambulance) medical care: Textbook for honey. University IV r.a. Approved by the Ministry of Education and Science / I.S. Zozulya, V.I. Bobrov, G.G. Roschin and others; ed. I.S. Cuckoo. — 3rd ed., revised. and extra. — K., 2017. — 960 p.
2. Order of the Ministry of Health of Ukraine No 1269 of 05.06.2019 "On approval and implementation of medical and technological documents on standardization of emergency medical care".

Electronic information resources

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. https://library.gov.ua — National Science and Medical Library of Ukraine
3. www.who.int – World Health Organization
4. https://library.odmu.edu.ua/catalog/ — Electronic catalogue
5. http://medlib.bsmu.edu.ua – Medical libraries on-line - BSMU Library
5. https://phc.org.ua/uptodate - G frontal clinical resource of evidence-based medicine
6. https://health-ua.com – Medical portal
7. http://adau.allergo-ua.info – Medical portal

Practical lesson 19

"Organization of medical care for incurable patients. Methods of palliative treatment of the main symptoms and syndromes in case of incurable disease" - 2 hours

Objective: To improve students' knowledge of the organization of medical care for incurable patients, methods of palliative treatment of the main symptoms and syndromes in case of incurable disease; to form professional skills in drawing up programs for the management of incurable patients

Basic concepts:

Palliative care, organization of palliative care, methods of palliative treatment for an incurable disease.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, checking those present, communicating the topic, the purpose of the lesson, the motivation of higher education students to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with the applicant of higher education must know the answers to the questions:

- Definition of "Palliative patient", "Palliative care";
- Basic principles of palliative care;
- Forms and levels of palliative care;
- Palliative and hospice medicine. Basic principles of hospices
- The role of a general practitioner – a family doctor in organizing palliative care for incurable patients;
- Criteria for determining a patient in need of palliative care;
- Basic principles of pharmacotherapy of chronic pain in palliative patients. WHO steps;
- Basic principles of symptomatic therapy in incurable patients (nausea, vomiting, constipation, dry mouth, hiccups);
- Prevention and treatment of pressure sores;
- Basic principles of care for palliative patients with stoma;
- Deontological and psychological aspects of communication with incurable patients and their family members.

3. Formation of professional skills and abilities (mastering skills, conducting curation, determining the treatment regimen, conducting laboratory research, etc.).

Recommendations (instructions) for completing tasks

The applicant for higher education must:

- be able to communicate with a patient with a palliative patient;
- conduct a physical examination of the patient;
- conduct differential diagnosis of pain in a palliative patient;
- promptly assess the condition of the palliative patient and provide proper medical care for the main symptoms in the practice of a family doctor;
- determine the indications and contraindications, dosage regimen when using essential medicines for pain and other symptoms in palliative patients;
- draw up medical documentation of the patient, including writing out prescription forms for narcotic, psychotropic substances;
- make a report of the results of the examination of a patient with pain in the neck and lower back by a team of students in the study group, analysis under the guidance of the teacher of the correctness of diagnosis, differential diagnosis, the volume of the prescribed examination, treatment tactics, assessment of the prognosis and performance.
- possess the peculiarities of communication with patients and his family.

Materials for the final stage of the lesson

Tests

1. A palliative patient who had been in a supine position for a long time began to complain of shooting pain in the lumbar spine with irradiation to the right lower limb; feeling of "burning", running goosebumps, decreased sensitivity in the right leg. What type of pain is characterized by these symptoms?
   A. Neuropathic type of pain
   B. Somatic type of pain
   C. Visceral type of pain
   D. Nociceptive type of pain
   E. Breakthrough type of pain
2. A palliative patient suffers from a chronic pain syndrome of nociceptive type of moderate intensity. Preparations of which group will be basic in the formation of an anesthesia regimen for this patient.
   A. Non-narcotic analgesics
   B. Weak opioid analgesics
   C. Nonsteroidal anti-inflammatory drugs
   D. Strong opioid analgesics
   E. Adjuvant drugs
3. A palliative patient receives painkillers with opioid analgesics on an ongoing basis. Suddenly, after psycho-emotional stress, the patient felt a significant increase in pain, which was not stopped by the prescribed doses of painkillers. How to assess the condition that has arisen in the patient?
   A. Poor drug tolerance
   B. Addiction to prescribed drugs
   C. Drug overdose
   D. Interrupted medication
   E. "Breakthrough" of pain
4. The palliative patient was diagnosed with trigeminal neuralgia. What adjuvant drug should be added to the basic treatment regimen to adequately control the pain syndrome associated with the complication that has arisen in this patient?
   A. Carbamazepine
   B. Motilium
   C. Morphine
   D. Lactulose
   E. Dexamethasone
5. Patient N. was diagnosed with metastatic liver damage without an established primary focus. Palpation – the liver is bumpy, hard, enlarged up to 6 cm below the costal arch, sharply painful. What adjuvant drug will reduce swelling and pain associated with liver damage in this patient?
   A. Lidocaine
   B. Morphine sulfate
   C. Dexamethasone
   D. Olive oil
   E. Rectal suppositories with glycerin
6. A palliative patient suffering from chronic pain syndrome should be prescribed an adequate anesthesia regimen. The main analgesic and co-analgesic should be chosen depending on:
   A. Intensity of pain and its pathogenetic mechanism
   B. Localization of the malignant neoplasm
   C. Age and gender of the patient
   D. Concomitant pathology
   E. Desires of the patient

7. A palliative patient developed symptoms of nausea and vomiting against the background of basic anesthetic therapy. Which drugs of which group will be the drugs of choice for the correction of these side effects?
   A. Sedatives
   B. Anticonvulsants
   C. Laxatives
   D. Dopamine antagonists
   E. Local anesthetics
8. In a palliative patient suffering from severe dementia, changes in behavior are determined: constant restless screaming, turning into crying, episodic difficulty breathing, the appearance of grimaces on the face, the occurrence of sudden sudden sudden movements, the patient cannot be reassured. How do you assess the patient's condition?
   A. It is necessary to immediately determine the causes of the deterioration of the patient's condition, perhaps the patient is worried about severe or unbearable pain
   C. The patient is in a bad mood
   C. This condition is normal for the last stages of dementia
   D. It is necessary after some time to re-assess the patient's condition
9. A girl of 3 years old, suffers from a type of brain cancer known as glioblastoma (stage 4). The prognosis of the disease is extremely unfavorable. In the hospital, the patient was given a course of chemotherapy and radiotherapy, and 6 days ago she was discharged. At home, her condition remained stable until this morning, when the girl began to be disturbed by severe pain. What will be your actions?
   A. Calm parents, pain syndrome – is a symptom of deterioration
   B. Prescribe morphine anesthesia
   C. Appoint an NSAIDs
   D. Prescribe sedatives
   E. Hospitalize the Child
10. A boy of 18 months, suffering from severe hydrocephalus, cannot sit, does not hold his head and does not speak. All day long he looks into space and sometimes moves his hands aimlessly. Recently, the mother has been anxious about the appearance of pain in the child. What are the criteria for diagnosing pain in a child?
   A. Fever, chills
   B. Body movements, crying and inability to comfort the child, facial expressions
   C. Delayed physical development of the child
   D. Lack of coordinated swallowing reflex, vomiting,
   Regurgitation
   E. Positive response to painkillers

List of recommended literature (main, additional, electronic information resources):

Main:

1. Palliative-hospice care: a textbook / V.S. Tarasyuk, G.B. Kuchanskaya — 2nd ed. — K.: VSV "Medicine", 2021. — 328 p. + 4 p. color. incl.
2. Actual issues of palliative and hospice care in the practice of a family doctor: a textbook for interns and doctors - students of institutions (faculties) of postgraduate education / Y.V. Voronenko [et al.]; ed. Yu.V. Voronenko and others. ; National. honey. acad. Postgraduate diploma. education them. P.L. Shupika Ministry of Health of Ukraine, Institute of Family. medicine of the Ministry of Health of Ukraine. - Kyiv : Zaslavsky publish house, 2017. - 206 p.
3. Order of the Ministry of Health of Ukraine dated 04.06. 2020 No 1308 On improving the organization of palliative care in Ukraine http://search.ligazakon.ua/l_doc2.nsf/link1/RE34892.html

4. Order of the Ministry of Health of Ukraine 25.04.2012 No 311 On approval and implementation of medical and technological documents on standardization of palliative care in chronic pain syndrome https://zakon.rada.gov.ua/rada/show/v0311282-12#top
5. Palliative and hospice care:textbook ed. V.Y. Voronenko, Yu.I. Gubsky. – Vinnytsia: New Book, 2017. – 392 p.
6. Resolution of the Cabinet of Ministers of Ukraine dated 13.05. 2013 No. 333 The procedure for the acquisition, transportation, storage, release, use and destruction of narcotic drugs, psychotropic substances and precursors in health care facilities dated May 13, 2013 No. 333 https://zakon.rada.gov.ua/laws/show/333-2013-%D0%BF#Text
7. Family medicine :textbook /ed. Matyukha L.F., Kolesnika P.O., Igor Švab, Milica Catič. – Uzhhorod: RIK-U, 2022. – 692 p.

Additional:

1. Palliative and hospice care for patients with tuberculosis: a textbook (university IV r. a.) / Y.I. Feshchenko, V.M. Kniazevich, O.M. Raznatovska, H.A. Gritsova. – Kyiv: Medicine, 2017. – 128 p.
2. Riga O.O., Penkov A.Yu., Konovalova N.M. Principles of palliative care for children. Manual for children's palliative care trainers. – Kharkiv: 2017. – 97 p.

Electronic information resources:

1. http://moz.gov.ua – Ministry of Health of Ukraine
2. www.ama-assn.org – American Medical Association / American Medical Association
3. www.who.int – World Health Organization
4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
5. http://bma.org.uk – British Medical Association
6. www.gmc-uk.org - *General Medical Council* (*GMC*)
7. www.bundesaerztekammer.de – German Medical Association
8. https://library.odmu.edu.ua/catalog/ - Electronic catalog
9. https://www.who.int/health-topics/palliative-care