**MINISTRY OF HEALTH PROTECTION OF UKRAINE**

**ODESSA NATIONAL MEDICAL UNIVERSITY**

Faculty: medical
Department of propaedeutics of internal diseases and therapy

**CONFIRMED by**

Rector for scientific and pedagogical work

_____ Eduard BURIACHKIVSKYI

09/09/2024

# METHODICAL DEVELOPMENT FOR PRACTICAL LESSONS FROM EDUCATIONAL DISCIPLINE

Faculty, course: medical, 3
Educational discipline: Nursing practice

**Approved:**
Meeting of the department of propaedeutics of internal diseases and therapy
Protocol No. _1_ dated August 27, 2024.

Head of the department _____ Olena YAKYMENKO

Authors:
Head of the department, Doctor in Medicine, Professor Yakimenko Olena
Doctor in Medicine, Associate Professor Sebov  Denis
PhD of Medicine, Assistant Professor Oliynyk Dmytro
PhD of Medicine, Assistant Professor Maznichenko Iegor
Assistant Professor Zakrytov Denis

PRACTICAL TRAINING

Practical lesson No. 1

Topic: Moral and ethical legal principles of nursing in Ukraine. Organization of the work and duties of the nurse of the main structural divisions of the therapeutic hospital. Determination of the role and place of the nurse in the care of patients in the medical and diagnostic process, the concept of its structure and conditions. Moral, ethical and deontological principles of formation of a medical specialist. The main professional duties of secondary medical personnel in polyclinic and inpatient departments of the hospital. Principles of professional subordination in the doctor-nurse-junior medical staff system. The concept of medical and protective, sanitary and hospital regimes of a therapeutic hospital, the role of junior medical personnel in their provision.

Purpose: To demonstrate mastery of the basic principles of medical deontology. Demonstrate mastery of the principles of job instructions and current orders regulating the professional activity of a therapeutic nurse. Demonstrate mastery of the duties of a nurse in a therapeutic department.

Basic concepts: Deontology, therapeutic hospital, nurse, job description.

Equipment: Laptop with presentation, multimedia projector, individual tasks on the topic of practical training, job instructions.

Plan:

1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding studying the topic).

1. General goals.

-Demonstrate mastery of the basic principles of medical deontology.

-Demonstrate mastery of the principles of job instructions and current orders regulating the professional activity of a therapeutic nurse.

-Demonstrate mastery of the duties of a nurse in a therapeutic department.

2 Educational goals are related to the formation of a professionally significant personality substructure and relevant aspects of deontological, environmental, legal, psychological, patriotic, professional responsibility, etc.

3 Specific goals:

-know:

1. Basic principles of medical deontology.
2. The content of job instructions and current orders regulating the professional activity of a nurse.
3. Responsibilities of the nurse of the therapeutic department.
4. Rules for transferring shifts to the next shift.

4 Based on theoretical knowledge of the topic:

- master the techniques (be able to):

1. Define welcome functions.
2. Make appropriate entries to the temperature sheet.
3. Master the methods of communication with the patient and relatives within the framework of medical deontology.

2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):

requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
Poll:

1. The role and duties of secondary medical personnel in treatment and prevention activities.
2. The role and duties of secondary medical personnel.
3. The structure and functions of a nursing post.
4. The importance of the nurse on duty in maintaining and ensuring the treatment and diagnostic process of the therapeutic department.
5. The importance of the manipulation nurse in maintaining and ensuring the treatment and diagnostic process of the therapeutic department.

2) On the basis of theoretical knowledge, in accordance with the topic of the lesson, be able to:

- Communicate with the patient and relatives within the framework of medical deontology.
- Fill out medical documentation during patient registration.
- Organize the treatment and diagnostic process in a therapeutic hospital.

4. Discussion of theoretical issues:
. *Questions for self-control*

1. Conduct a pulse study and blood pressure measurement.
2. Peculiarities of deontology in the work of medical professionals with patients and their relatives.
3. Basic professional duties of junior and middle medical personnel in polyclinics and therapeutic hospitals.
4. Principles of professional subordination in the system of doctor — nurse — junior medical staff.
5. Moral-ethical and deontological principles of the formation of a medical specialist with a therapeutic profile.
6. Reception and registration of patients.
7. Rules for filling out the medical documentation of the polyclinic and therapeutic hospital.
8. Measure body temperature and fill out a temperature sheet.
9. Calculate the frequency of breathing and fill in the temperature sheet.
10. The structure and principle of working with a list of medical prescriptions.

B. Tests for self-control
1. Monitoring of patients' compliance with the nutritional regime and internal rules is carried out by:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. sister is the landlady

2 Ward nurse:
A. Performs medical appointments for patients in her assigned wards
B. Monitors the condition of patients
C. Makes a departure for patients
D. Organizes the nutrition of patients
E. All of the above.

3. The following should accompany patients to clinical and diagnostic examinations:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. a relative of the patient
Standards of answers:
Task 1: D Task 2: E . Task 3: D

5. Topics of reports/abstracts:

_____

6. Summary:


**Main:**

1. Propaedeutic of internal medicine: textbook / Y.I. Detsyk, O.G. Yavorsky, E.M. Neiko, etc.; edited by O.G. Yavorsky. - 6th ed., vypr. and additionally. - K.: VSV "Medicine", 2020. - 552 p. + 12 p. color.
2. Methods of objective examination in the clinic of internal diseases: textbook. possible / O.O.Yakymenko, O.E. Kravchuk, V.V. Klochko and others. - Odessa, 2013. - 154 p.
3. Diagnostic methods in the clinic of internal medicine: a textbook / A.S. Svintsitskyi. - K.: VSV "Medicine", 2019. - 1008 p. + 80 p. color.

**Additional:**

1. Method of examination of a therapeutic patient: textbook. posib. / S.M. Andreychyn, N.A.Bilkevych, T.Yu.Chernets. - Ternopil: TSMU, 2016. - 260 p.
2. Inquiry and physical examination of the patient of therapeutic profile: Textbook for students of III-IV courses of medical universities / V.E. Neiko, I.V. Tymkiv, M.V. Bliznyuk [et al: IFNMU, 2016. - 142 p.
3. Yepishyn A.V. Propaedeutic of internal diseases with care for therapeutic patients / AB. Yepishin K. - 2015. 768s.
4. Kovaleva OM. Propaedeutic of Internal Medicine/OM. Kovaleva, N.A. Safargalina-Kornilova // K.: Medicine 2010 - 750s.
5. Macleod's Clinical Examination / Ed. G.Douglas, F.Nicol, C.Robertson.- 13th ed.- Elsevier. 2013. - 471 p.
6. Bates' Guide to Physical Examination and History Taking / Ed. Lynn S. Bickley, Peter G. Szilagyi. - Wolters Kluwer, 2017. - 1066 p.


**Electronic information resources**

1. http://moz.gov.ua - Ministry of Health of Ukraine
2. www.ama-assn.org - 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://onmedu.edu.ua/
9. https://onmedu.edu.ua/kafedra/propedevtiki-vnutrishnih-hvorob-ta-terapii/

Practical lesson No. 2

Topic: Determination of vital functions of the patients' body: blood pressure measurement algorithm, pulse research technique, analysis of pulse properties, thermometry technique, research of external breathing functions. Rules for filling out the temperature sheet. Regulation of body temperature is normal. Methods of measuring body temperature. Registration on temperature sheets. Pulse, its definition. Vessels available for palpation. The main properties of the pulse (uniformity, rhythmicity, frequency, tension, filling) and the rules for their determination. Methodology of pulse research on radial arteries. Concept of pulse deficiency. Blood pressure and the rules of its measurement on the brachial artery. Basic rules for determining breathing parameters: frequency, depth, type, rhythm of breathing. Rules for filling out the temperature sheet.

Purpose: To demonstrate mastery of determining vital signs and the ability to register in a temperature sheet. Rules for transferring shifts to the next shift. Thermometry, blood pressure measurement, respiratory rate calculation, pulse oximetry and pulse research with data entry on the temperature sheet.

Basic concepts: Blood pressure, pulse, respiratory rate, thermometry, temperature sheet.

Equipment: Laptop with presentation, multimedia projector, individual tasks on the topic of the practical lesson, tonometer, pulse oximeter.

Plan:

1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding study of the topic). Educational goals are related to the formation of a professionally significant personality substructure and relevant aspects of deontological, ecological, legal, psychological, patriotic, professional responsibility, etc.

1. Define welcome functions.
2. Make appropriate entries to the temperature sheet.
3. Master the methods of communication with the patient and relatives within the framework of medical deontology.
4. Master the principles of working with a list of medical prescriptions.

2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.

3. Formation of professional skills, skills (mastery of

kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):

A.*Questions for self-control*

1. Conduct a pulse study and blood pressure measurement.
2. Peculiarities of deontology in the work of medical professionals with patients and their relatives.
3. Rules for filling out the medical documentation of the polyclinic and therapeutic hospital.
4. Measure body temperature and fill out a temperature sheet.
5. Calculate the frequency of breathing and fill in the temperature sheet.
6. The structure and principle of working with a list of medical prescriptions.

B. Tests for self-control

1. State of consciousness of the patient Yu. 20l. treated as a comma. What is characteristic of this?
A. Preserved consciousness with preserved reflexes
B. Lack of consciousness and sharp suppression of reflexes
S. A state of hibernation with preserved reflexes from which a patient can be brought out for a short time by a loud appeal
D. Inhibition, poor orientation in the surrounding environment
E. Preserved consciousness with sharp suppression of reflexes

2. A patient with left-sided croupous pneumonia assumed a forced position - lying on his right side. The forced position of the patient in bed should be understood as:
A. The position recommended by the doctor for faster recovery
B. The position taken by the patient under the influence of the progress of the disease
S. A condition that the patient cannot change on his own
D. The position that the patient takes to reduce the manifestations of the disease (shortness of breath, cough, pain, etc.)
E. The position taken by the patient during immobilization of the limb (application of splints, splints, skeletal extension).

3. Control over patients' compliance with the diet and internal rules is carried out by:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. sister is the landlady

4. Information about the patient's drug intolerance is entered in:
A. title page of medical history
B. list of medical appointments
S. temperature sheet
D. leaf of a person who left the hospital
E. A. V.

5. A patient with an acute violation of cerebral blood circulation must follow an individual regimen:
A. bed
V. strict bed
S. semi-bed
D. general
E. ward

6 Ward nurse:
A. Performs medical appointments for patients in her assigned wards
B. Monitors the condition of patients
C. Makes a departure for patients
D. Organizes the nutrition of patients
E. All of the above.

7. The following should accompany patients to clinical and diagnostic examinations:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. a relative of the patient

Standards of answers:
Task 1: In . Task 2: D Task 3: D Task 4: A. Task 5: B.
Task 6: E . Task 7: D

4. Discussion of theoretical issues:
1. The role and duties of secondary medical personnel in treatment and prevention activities.
2. The role and duties of secondary medical personnel.
3. The structure and functions of a nursing post.
4. The importance of the nurse on duty in maintaining and ensuring the treatment and diagnostic process of the therapeutic department.
5. The importance of the manipulation nurse in maintaining and ensuring the treatment and diagnostic process of the therapeutic department.

2) On the basis of theoretical knowledge, in accordance with the topic of the lesson, be able to:
- Determine vital functions (pulse, respiratory rate, blood pressure, body temperature).
- Make appropriate entries to the temperature sheet.
- Communicate with the patient and relatives within the framework of medical deontology.
- Orientate yourself in the principles of working with a list of medical prescriptions.
- Fill out medical documentation during patient registration.
- Organize the treatment and diagnostic process in a therapeutic hospital.

A.*Questions for self-control*
1. Conduct a pulse study and blood pressure measurement.
2. Peculiarities of deontology in the work of medical professionals with patients and their relatives.

3. Basic professional duties of junior and middle medical personnel in polyclinics and therapeutic hospitals.
4. Principles of professional subordination in the system of doctor — nurse — junior medical staff.
5. Moral-ethical and deontological principles of the formation of a medical specialist with a therapeutic profile.
6. Reception and registration of patients.
7. Rules for filling out the medical documentation of the polyclinic and therapeutic hospital.
8. Measure body temperature and fill out a temperature sheet.
9. Calculate the frequency of breathing and fill in the temperature sheet.
10. The structure and principle of working with a list of medical prescriptions.

B. Tests for self-control

1. Monitoring of patients' compliance with the nutritional regime and internal rules is carried out by:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. sister is the landlady

2 Ward nurse:
A. Performs medical appointments for patients in her assigned wards
B. Monitors the condition of patients
C. Makes a departure for patients
D. Organizes the nutrition of patients
E. All of the above.

3. The following should accompany patients to clinical and diagnostic examinations:
A. doctor
B. senior nurse
C. nurse
D. cloth nurse
E. a relative of the patient

Standards of answers:
Task 1: D Task 6: E . Task 7: D

4. Summary:

_____

_____

Practical lesson No. 3

Topic: Technique and algorithm of hygienic treatment of hands. Disinfection. Sterilization. Types and algorithm of various types of cleaning. Preparation of the manipulation cabinet. Definition of standards of asepsis and antiseptics. Disinfection methods and techniques. Types of sterilization, methods of assessing the quality of pre-sterilization cleaning and sterilization. Rules and methods of preparation of the working surface

of the manipulation nurse, preparation of the manipulation office at the beginning and at the end of working hours.

Purpose: To demonstrate mastery of the basic principles of hygienic hand treatment. Understanding the features of disinfection, sterilization in the conditions of a therapeutic hospital. Features of the manipulation cabinet. Rules and methods of preparation of the working surface of the manipulation nurse, preparation of the manipulation office at the beginning and at the end of working hours.

Basic concepts: Hygienic treatment of hands, disinfection, sterilization, asepsis and antiseptics, manipulation room.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson, sanitizer.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding studying the topic).
Acquaint applicants with the range of duties and actions of a manipulation nurse in a therapeutic department, the technique of hygienic hand washing, disinfection and sterilization.

2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
The structure of the manipulation cabinet
Duties of a manipulation nurse
Define the concepts: septic, aseptic, antiseptic
The technique of hygienic processing of hands

4. Discussion of theoretical issues:
Poll:
- To list the range of duties and actions of the manipulation nurse of the therapeutic department.
- How to prepare a manipulation table for work.
- List the main requirements for disinfection, pre-sterilization cleaning of instruments.
- The technique of performing hand processing.

Materials on methodical provision of classes.

1. So that sterile gastric probes do not dry out and do not crack, they are stored:

A. In a 1% solution of boric acid.
B. In a 0.5% chloramine solution.
C. In 1% chloramine solution.
D. In a 20% solution of boric acid.
E. In a 3% solution of hydrogen peroxide.

2. What is the mechanism of action of chloramine solutions?
A. Disinfectant.
B. Detoxifying.
C. Anti-inflammatory.
D. Anti-edematous.
E. What burns

3. Disinfection is:
A.- a set of measures to destroy vegetative forms of pathogenic and conditionally pathogenic microorganisms.
B.- complete release of any substance or object from microorganisms by acting on it by physical factors.
C.- complete release of any substance or object from microorganisms by acting on it with chemical factors.
D.- complete liberation of any substance or object from microorganisms by mechanical means
E. -wet tidying up

4. How many stages of pre-sterilization cleaning in different ways of multiple instruments are there?
A. 6.
B. 5.
C. 2.
D. 3.
E. 4.

5. Who is the founder of nursing, the "mother of nursing"
A. Mati Teresa
W. Florence Nightingale
S. Socrates
D. Hippocrates
E. Henderson

Standards of answers to solving tasks.
Task 1: A. Task 2: A. Task 3: A. Task 4: E. Task 5: B.

4. Summary:

_____

_____

Practical lesson No. 4
Topic: Technique of performing intradermal, subcutaneous, intramuscular, intravenous injections, intravenous drip infusions. Types and algorithm of catheter placement. Calculation of the dose of the soluble form of the drug for injection. Insulin administration technique. Techniques, algorithms for intradermal, subcutaneous, intramuscular, intravenous injections, intravenous drip infusions. Classification of catheters, algorithm for

setting up a peripheral intravenous catheter. Methods of insulin administration, keeping medical records, places of insulin administration, side effects.

Purpose: To demonstrate the implementation of algorithms for intradermal, subcutaneous, intramuscular, intravenous injections, intravenous drip infusions. Peculiarities of working with a list of appointments and calculating the dose of medicinal products. Understanding the differences between different types of catheters.

Basic concepts: injection, caterer, appointment list, dose, route of drug administration, side effects.
Equipment: A laptop with a presentation, a multimedia projector, individual tasks on the topic of a practical lesson, dummies, catheters, a syringe with a needle, a container.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding studying the topic).
Development of algorithms for the introduction of medicinal products using various techniques.
2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
Work with the appointment letter
Algorithm for performing intradermal injections
Algorithm for performing subcutaneous injections
Algorithm for performing intramuscular injections
Algorithm for performing intravenous injections
Injection execution algorithm
Algorithm for performing intravenous drip infusions
Side effects, possible with injections

4. Summarizing the results regarding the assimilation of the material, discussion and clarification of unclear aspects of the topic. 1. What is a possible complication when both walls of a vein are punctured during an intravenous injection?
1. Hematoma.
2. Necrosis.
3. Sepsis.
4. Thrombophlebitis.
5. Infiltrate.
2. Without finding out the allergic history, the patient was administered vitamin B6. After the injection, the patient developed marked agitation, tightness in the chest, general redness of the skin, a coughing fit,

deterioration of the breathing rhythm, and a decrease in blood pressure. What complication did the patient have?
1. Quincke's edema
2. Medicinal embolism
3. Allergic reaction
4. Collapse
5. Anaphylactic shock
3. After the administration of penicillin, the patient lost consciousness, the patient was pale, his breathing was shallow, his pulse was 100 beats. per minute, blood pressure 90/50 mm Hg. What are the tactics of the nurse on duty?
1. Apply an ice pack to the injection site
2. Enter prednisolone
3. Call the attending physician
4. Establish fresh air access
5. Introduce respiratory analeptics
4. For 5 days, the nurse administered a 25% solution of magnesium sulfate to the right upper-outer quadrant of the buttock to the patient M. for 5 days. This evening, the patient turned to the nurse with complaints of unbearable pain at the injection site, the presence of a seal, an increase in general and local body temperature. What complication occurred?
1. Hematoma.
2. Esophageal inflammation.
3. Sepsis.
4. Abscess.
5. Phlebitis.
5. After the intramuscular injection, on the second day, a feeling of pain, swelling, and hyperemia appeared at the site of drug administration. What complication occurred?
1. Drug embolism.
2. Allergic reaction.
3. Air embolism.
4. Tissue necrosis.
5. Infiltrate.
6. When a 10% calcium chloride solution was administered intravenously in the manipulation room, patient M., 40 years old, developed a burning pain at the injection site, a bulge appeared around the vein. Name a complication that can arise in this situation.
1. Air embolism.
2. Fat embolism.
3. Tissue necrosis.
4. Allergic reaction.
5. Sepsis
7. During an intravenous injection, the nurse accidentally injected a 10% calcium chloride solution under the skin. How should the nurse act?
1. Inject 50–80 ml of 9% sodium chloride solution into the injection site.
2. Put a bubble with ice.
3. Stop the administration, apply a warming compress
4. Continue administration of 10% calcium chloride solution.

5. Put a tourniquet above the injection site.
8. Parenteral administration of drugs is:
1. Administration of drugs by injection.
2. Administration of the drug through the rectum.
3. Rubbing the ointment.
4. Administration of the drug through the mouth.
5. Application of powders
9 Complications of lipodystrophy occur in patients who receive injections for a long time:
1. Insulin.
2. Bicillin.
3. Gentamicin.
4. Vitamin B6.
5. Vitamin B1.
Reference answers: 1-1, 2 - 5, 3 - 3, 4 - 4, 5 - 5, 6 - 3, 7 - 3, 8 - 1, 9 - 1

4. Summary:

_____

_____

Practical lesson No. 5
Topic: Methodology and technique of blood and urine collection for general analysis of blood and urine. The method of urine collection according to the method of Ambyurge, Kakovsky-Addis and Nechyporenko. Methods of blood collection for biochemical and immunological studies. Method of using a glucometer. Rules for collecting urine and blood for various types of laboratory tests, rules for patient preparation and patient instruction. Assessment of laboratory indicators and their significance in the diagnostic process. Algorithm for determining blood glucose using a glucometer. Evaluation of the result. First aid for patients with hypoglycemic and hyperglycemic coma.

Purpose: To demonstrate mastery of the algorithm of urine collection according to the method of Amburger, Kakovsky-Addis and Nechiporenko, blood collection for biochemical and immunological studies, use of a glucometer

Basic concepts: blood sampling, urine sampling, urine collection according to the Amburger, Kakovsky-Addis and Nechyporenko method, monovet, glucometer
Equipment: Laptop with presentation, multimedia projector, individual tasks on the topic of practical training, job instructions.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding studying the topic).
Mastery of the algorithm for urine collection according to the Amburger, Kakovsky-Addis and Nechiporenko methods, blood collection for biochemical and immunological studies, use of a glucometer

2. Control of the reference level of knowledge (written work, written testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of kami, carrying out curation, determining the treatment scheme, carrying out laboratory research, etc.):
Catheterization of the urinary bladder using a Foley catheter in a woman
Catheterization of the urinary bladder with a Foley catheter is the most common procedure for long-term drainage of the urinary tract in patients in hospital conditions.

Performance environment: In a hospital ward

Indication:

- Acute or severe chronic urinary retention
- Obtaining urine for research
- Measurement of residual urine volume
- Administration of radiopaque substances or other drugs directly into the bladder
- Bladder irrigation
- Urine diversion during surgical interventions and in the postoperative period
- Accurate measurement of diuresis in critically ill patients

Contraindications:

- Injury of the urethra
- Urethral strictures
- RelativeAcute infection of the genitals and urethra
- RelativeReconstructive surgical interventions on the lower urinary tract
- RelativeTumors of the lower urinary tract and organs of the reproductive system

Possible complications:

| Complication | Prevention strategy |
|---|---|
| Infections of the urinary tract and org of the reproductive system | Aseptic performance of the procedure. |
| Trauma to the urethra or bladder with bleeding or microscopic hematuria | Using a sufficient amount of lubricant. Careful execut of the procedure. |

| | |
|---|---|
| Perforation of the urethra | Careful execution of the procedure. Termination of th procedure in case of acute pain syndrome |
| Formation of urethral stricture | Aseptic performance of the procedure. Using a suffici amount of lubricant. Using the optimal diameter of th catheter. |
| Perforation of the urinary bladder | Do not use rigid catheters. Careful execution of the procedure. |
| Leakage of urine around the catheter | Using the optimal diameter of the catheter. Regular monitoring of the condition of the catheter. |
| Bladder incrustation and calculi | Regular monitoring of the condition of the catheter. Regular washing and replacement of the catheter. Cor of sufficient fluid intake by the patient. |
| Decreased bladder volume | If possible, try to transfer the patient to independent urination as soon as possible. |

Обладнання:

| Name | Number |
|---|---|
| Container for biological waste and used materials | 1 |
| Tray | 1 |
| Couch | 1 |
| Anatomical tweezers | 1 |

Supplies:

| Name | Number |
|---|---|
| Non-sterile gloves | 1 pair |
| Sterile gloves | 1 pair |
| Antiseptic for the treatment of mucous membranes | 1 |
| Syringe 10 ml | 1 |

| | |
|---|---|
| Sterile isotonic solution of sodium chloride | 10 ml |
| Sterile cotton-gauze napkins | 5 |
| Foley catheter in a sterile package | 1 |
| Sterile urinal | 1 |
| Sterile lubricant | 2 ml |

Procedure steps:

1. Check disposable consumables immediately before preparation for the procedure for the expiration date.
2. Add 10 ml of sterile isotonic sodium chloride solution to the syringe.
3. Place the syringe on a sterile surface.
4. Wet gauze swabs with a water-soluble antiseptic that can be used for mucous membranes (aqueous solution of chlorhexidine 0.001%, povidone-iodine 10%, etc.).
5. Prepare the patient for the procedure (catheterization of the urinary bladder is performed with the patient lying on his back with his legs slightly apart and bent at the knees).
6. With the non-dominant (left for right-handed) hand, carefully spread the labia and visualize the external opening of the urethra.
7. Clean the area around the external opening of the urethra with a cotton swab moistened with a water-soluble antiseptic that can be used on mucous membranes, in a circular motion, starting at the external opening of the urethra and moving outward.
8. Put the used material in a container for used material.
9. Wear sterile gloves.
10. Remove the catheter from the package.
11. Connect a sterile urine collection device with a tube to the catheter.
12. Lubricate the end of the catheter with sterile lubricant.
13. With the dominant (right for right-handed) hand, grab the catheter at a distance of 5-6 cm from the side opening with sterile tweezers.
14. Insert the catheter into the opening of the urethra and, gradually intercepting the catheter with tweezers, push it deeper into the canal.
15. If urine does not appear, before filling the balloon, flush the catheter to make sure its location is correct.
16. After the appearance of urine, push the catheter inward proximally for 10 cm, or until the opening of the bell for filling the balloon.
17. Fill the balloon of the catheter to 10 ml with a sterile isotonic solution of sodium chloride using a pre-prepared syringe.
18. Put the syringe in the waste container.
19. Carefully pull the catheter outward until resistance is felt.

Catheterization of the urinary bladder with a Foley catheter in men is much more complicated than in women and is performed exclusively by a doctor.
The procedure is performed in the position of the patient lying on his back with his legs slightly apart and bent at the knees.

Catheters are measured in French units (F), also known as Charrier units (Ch). Each unit is 0.33mm Sizes range from 12 to 24 F for adults and 8 to 12 F for children.
Usually, women use catheters of size 12-16 Ch.

Link:

1. Kirsteen Cameron, Karen Jarvis, Urinary Catheterisation for Adults Clinical Guideline Version 3, 27th January 2022 https://covid19app.nhsggc.org.uk/media/2210/urinary-catheterisation-adultsfinal.pdf

4. Discussion of theoretical issues:

Question:
1. Algorithm of venous blood sampling
2. Algorithm of glucometry
3. Algorithm of urine collection according to the method of Amburge, Kakovsky-Addis and Nechiporenko
4. Types of monovet
5. First aid for patients with hypoglycemic and hyperglycemic coma.

1. In a healthy person, the need to urinate at night does not occur more than:
A. 1 time
B. 2 times
C. 3 times
D. 4 times
E. does not occur at all

2. The patient was prescribed a general urinalysis in the nephrology department. According to the clinical analysis of morning urine, it is possible to evaluate:
A. Fluctuations in the relative density of urine
B. Daily proteinuria
C. The number of erythrocytes and leukocytes in the field of vision
D. Daily glucosuria
E. Nocturia

3A patient with acute glomerulonephritis saw a change in the color of urine in the form of "meat slops". What is associated with the appearance of this color of urine?
A. Bladder inflammation
B. Inflammation of the renal pelvis
C. Inflammation of renal glomeruli
D. Inflammation of the urethra
E. Inflammation of the ureter

4 Spastic pains in the abdomen do not occur with defeat:
A.Mesentary vessels
B. Pancreatic duct
C. Intestines

D. Stomach
E. Bile-vowing ways

Standards of answers to solving tasks: Task 1: V.. Task 2: C. Task 3: C. Task 4: A.

4. Summary:

_____

_____

Practical lesson No. 6

Topic: Methods and technique of taking material for bacteriological research. Material collection algorithm for quick tests. Diagnostic value of laboratory tests. Algorithm for taking material from the pharynx cavity, nasal scraping, discharge from the ears. Preparation of the patient and the algorithm for taking urine and feces for bacteriological research.

Purpose: To demonstrate mastery of the algorithm for collecting urine and feces. the technique of bacterial swabs from the throat, rapid antigen tests. Algorithm for taking material from the pharynx cavity, nasal scraping, discharge from the ears.

Basic concepts: smear, stool analysis, urine analysis, test system

Equipment: A laptop with a presentation, a multimedia projector, individual tasks on the topic of a practical lesson, algorithms for performing practical skills, a set for taking a bacterial smear.

2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.

3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
Taking swabs for bacteriological examination from the nasal cavity

Abbreviation:

sowing tanl bacteriological research

A swab from the nose and throat is carried out in order to identify microorganisms and determine their sensitivity to antibiotics, antimycotics.

Performance environment: In the outpatient clinic

Indication:

- inflammatory processes of the nasal cavity and paranasal sinuses

Обладнання:

| Name | Numbe |
|---|---|
| table | 1 |
| chair | 2 |
| | |
| lamp | 1 |

Supplies:

| Name | Numbe |
|---|---|
| spatula | 1 |
| test tube | 2 |
| a sterile cotton swab on a stick | 2 |
| | |
| sterile gloves | 1 |

Procedure steps:

1. Ask the patient to sit facing a window or light source.
2. Taking a swab from the throat is performed on an empty stomach or no earlier than 2 hours after eating, drinking or gargling.
3. Ask the patient to open his mouth wide.
4. With the left hand, press the back of the tongue down and forward with the spatula, which is held with the left hand.
5. With the right hand, remove the tampon from the test tube and carefully insert it into the oral cavity, without touching the tongue and cheeks.
6. Make a smear on the surface of the tonsils on the border between the healthy and the affected area.
7. Remove the tampon from the oral cavity and carefully place the obtained material in a sterile test tube, without touching its neck.
8. Before taking a swab from the nose, it is necessary to clean the patient's nose in advance and remove the crusts.
9. Take the test tube in your left hand, lift the tip of your nose with the same hand.
10. With the right hand, insert a sterile tampon into the right and then into the left nostril in circular motions to a depth of 1.5-2 cm, tightly touching its walls.
11. Remove the tampon from the nasal cavity and carefully place the resulting material in a sterile test tube without touching its neck.
12. Label the test tube and place it in the tripod.

4. Discussion of theoretical issues:
Material collection algorithm for quick tests.
Diagnostic value of laboratory tests.
Algorithm for taking material from the pharynx cavity, nasal scraping, discharge from the ears.

Algorithm for taking secretions from the ears.
The algorithm for taking a nasal scraping.
Patient preparation and stool sampling algorithm for bacteriological research.
Patient preparation and urine collection algorithm for bacteriological research.

Tasks for checking the initial level of knowledge
Task 1:
1. What is the position of the patient during the enema?
A. Knee-ulnar
B. On the left side
C. On the back with the legs brought to the stomach.
D. On the right side
E. On the stomach
Task 2.
An enema is
A. water procedure, which is taken for hygienic, therapeutic and preventive purposes.
B. introduction of drugs into the intestine
C. Introduction of liquid into the lower part of the large intestine through the anus for therapeutic and diagnostic purposes.
D. lavage of the gastrointestinal tract
E. x-ray examination of the colon.
Task 3:
A colonoscopy was prescribed for the patient in the gastroenterology department. What enemas are performed before a diagnostic examination of the intestine?
A. Maslyani
B. Medicinal
C. Hypertensive
D. Nutrients
E. Cleaning
Task 4:
There are indications for an enema
A. zaakrep 1 day
B. ineffective urges to defecate
C. introduction of substances into the large intestine for diagnostic purposes.
D. the need for gastric lavage
E. duodenal sounding.
Task 5:
When are cleansing enemas done?
A. On the eve of X-ray examination of chest organs
B. before conducting irigoscopy
C. with acute abdominal pain
D. with acute flatulence, pain and ineffective urges to defecate
E. before fibrogastroscopy
Standards of answers to solving tasks.
Task 1: B. Task 2: C. Task 3: E. Task 4: C. Task 5: B.

*Preparation of patients and equipment for taking feces for helminth eggs, hidden roof, co-program. Rules for taking a urine analysis for research according to the methods of Zimnytskyi, Nechyporenko, Addis-Kakovskii, their diagnostic value.*

Task 1

In a healthy person, taking into account the nature of the food, bowel emptying should occur no less often:

A. 1 time in 6-12 years
B. 1 time in 24-48 hours
C. 1 time in 56-72 years
D. 2 times a week
E. 1 time a week

Task 2

A healthy person has no more need to urinate during the night:

A. 1 time
B. 2 times
C. 3 times
D. 4 times
E. does not occur at all

Task 3

A general urinalysis was prescribed to the patient in the nephrology department. According to the clinical analysis of morning urine, it is possible to evaluate:

A. Fluctuations in the relative density of urine
B. Daily proteinuria
C. The number of erythrocytes and leukocytes in the field of vision
D. Daily glucosuria
E. Nocturia

Task 4

A patient with acute glomerulonephritis saw a change in the color of urine in the form of "meat slops." What is associated with the appearance of this color of urine?

A. Bladder inflammation
B. Inflammation of the renal pelvis
C. Inflammation of renal glomeruli
D. Inflammation of the urethra
E. Inflammation of the ureter

Task 5

Spastic pains in the abdomen do not occur with defeat:

A.Mesentary vessels
B. Pancreatic duct
C. Intestines
D. Stomach
E. Biliary tract

4. Summary:

_____

_____

Practical lesson No. 7
Topic: Methodology and technique of electrocardiogram registration. Standard and additional leads. Analysis of the main elements of the electrocardiogram. Basic concepts of electrocardiographic research. Electrocardiogram registration technique using standard leads. Analysis of the main components of the electrocardiogram.

Purpose: To demonstrate mastery of the ECG recording method. Mastery of ECG analysis.

Basic concepts: electrocardiogram, electrocardiograph, standard and additional leads.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson, electrocardiograph.
2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
Electrocardiograph use technique
Types of electrocardiographs
Safety rules for using an electrocardiograph
Emergency situations
Basic elements of ECG
4. Discussion of theoretical issues:
Question:
1. What main waves and complexes form the normal ECG, describe them.
2. What does the P wave on the ECG show and what is its normal characteristic?
3. What does the P-Q segment show on the ECG and what is its normal characteristic?
4. What does the QRS complex on the ECG reflect and what is its normal characteristic?
5. What does the S-T segment show on the ECG and what is its normal characteristic?
6. What does the P wave on the ECG show and what is its normal characteristic?
7. What is the electrical axis of the heart, its characteristics in normal and pathological conditions.
8. How to evaluate the main rhythm driver on the ECG and count the number of heart contractions?

Situational tasks:

*1. The P-Q interval is:*

*a.* The time of passage of the impulse through the atria.
*b.* Atrioventricular delay time.
*c.* The time of passage of the impulse from the sinus node to the atrium.
*d.* Time of passage of the pulse through the His system.

*e. Time of passage of the impulse through the atria, atrioventricular node, His system to the working myocardium.*

*2. Normally, the P-Q interval is equal to:*

a. 0.05-0.06 s.
b. 0.08-0.09 s.
c. 0.10-0.12 s.
d. 0.07-0.14 s.
*e. 0.12-0.12 s.*

*3. What ECG interval is used to determine the frequency of heart impulses?*

a. P-Q
b. QRS
c. QRST
*d. R-R*
e. P-P

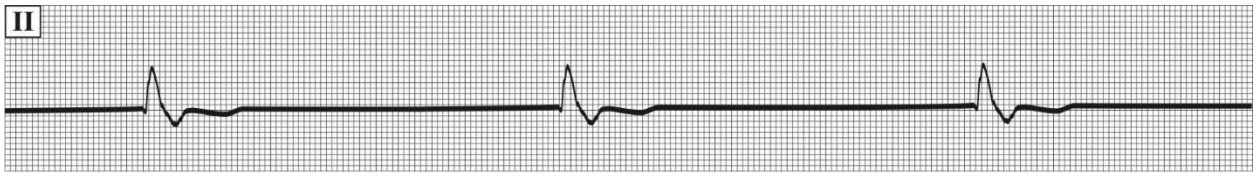
*4. What element of the ECG shows the conduction of the impulse through the AV junction?*

*a. Segment P-Q*
*b.* R-T interval
*c.* Zubets R
*d.* Zubets T
*e.* QRS complex

*5. Which element of the ECG reflects the conduction of the impulse along the legs of the bundle of His?*

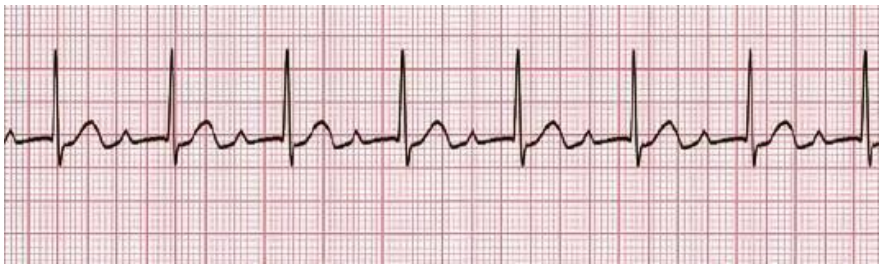
a. Segment P-Q
b. P-Q interval
c. Zubets R
d. Zubets T
*e. QRS complex*

*6. Describe the following ECG:*




a. Migration of the supraventricular pacemaker
b. Rhythm with AV coupling with simultaneous excitation of the atria and ventricles.
c. Rhythm with AV coupling with preliminary excitation of the ventricles.
d. Rhythm with AV coupling with prior excitation of the atria.
*e. Idioventricular rhythm.*

*7. Describe the following ECG:*



a. Sinoatrial block,
*b. Atrioventricular blockade of the first degree,*
*c.* Atrioventricular block II degree,
*d.* Atrioventricular blockade of the III degree,
*8. Which type of arrhythmia does not belong to a violation of myocardial excitability?*
*+A. Extrasystole*
B. Sinus arrhythmia
S. Sinus bradycardia
D. His leg block
E. Atrial fibrillation

5. Topics of reports/abstracts:
_____
6. Summary:

4. Summary:

_____
_____

Practical lesson No. 8
Topic: Care of the seriously ill. Oral and nasal care, eyes. Prevention of bedsores. Prevention of congestion phenomena in the lungs in seriously ill patients. Technique of changing underwear and bed linen. Methods of treatment of the oral and nasal cavity. Preparation of solutions and tools for manipulations. Definition of the concept of bedsores, classification. Methods of prevention and treatment of bedsores. Techniques and types of respiratory gymnastics in seriously ill patients.

Purpose: To demonstrate mastery of the basic principles of care for critically ill patients. Methods of care for the oral and nasal cavity, eyes, prevention of bedsores, prevention of congestion in the lungs in seriously ill patients. Technique of changing underwear and bed linen

Basic concepts: Patient care, bedsores, position in bed.
Equipment: Laptop with a presentation, a multimedia projector, individual tasks on the topic of a practical lesson, an algorithm.

2. Control of the reference level of knowledge (written work, written testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform practical classes (knowledge requirements, list of didactic units);

questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):

METHOD OF DROPPING IN THE NOSE AND EYES

The method of care and external treatment of the eyes and nasal cavity with the help of medicinal solutions.

Performance environment: medical institution, manipulation room, ward.

Indications: local therapy of pathological conditions requiring external treatment.
Contraindications: hypersensitivity to the components of the solution, impaired hemostasis, incompatible use of several medicinal solutions

Possible complications and prevention strategy:

| | |
|---|---|
| Infection | npliance with the rules of asepsis and antiseptics |

Equipment: examination gloves, sterile gauze napkins, a pipette, a container with a disinfectant solution.

The algorithm for instilling drops into the nose:

| Necessary actions |
|---|
| 1. Preparation for the procedure<br>Explain to the patient the course and essence of the upcoming procedure |
| 2. Give the patient information about the drug and its side effects |
| 3. Obtain the patient's consent to the procedure |
| 4. Prepare equipment |
| 5. Wash and dry your hands, put on a mask and gloves |
| 6. Execution of the procedure<br>Read the prescription sheet and the label on the medication package (name, dose, expir date) |

| |
|---|
| 7. Ask the patient to sit or lie down, help if necessary |
| 8. Ask the patient to free the nasal cavity from mucus using napkins |
| 9. Collect the medicinal substance in the pipette |
| 10. Ask the patient to throw back his head a little, tilting it to the right shoulder |
| 11. Slightly raise the tip of the patient's nose |
| 12. Instill 3 drops of medicinal substance into one nostril |
| 13. Ask the patient to press the wing of the nose against the septum with his finger make light circular movements |
| 14. Repeat points 11 - 13 to inject drops into the other nostril |
| 15. Completion of the procedure<br>Immerse the pipette in the disinfectant solution |
| 16. Ask the patient about his well-being |
| 17. Remove the mask, wash and dry your hands. Remove gloves and mask and dispose a waterproof bag |
| 18. Make a record of the procedure and the patient's reaction to it in the appropriate me office |

The algorithm for instilling drops into the eyes:

| Necessary actions |
|---|

| |
|---|
| 1. Preparation for the procedure<br>Explain to the patient the course and essence of the upcoming procedure |
| 2. Give information to the patient about the drug and its side effects |
| 3. Obtain the patient's consent to the procedure |
| 4. Wash your hands, put on a mask, rubber gloves |
| 5. Prepare equipment |
| 6. Execution of the procedure<br>Read the prescription sheet and the label on the medication package (name, dose, expiration d |
| 7. Treat the gloves with alcohol |
| 8. Ask the patient to take a comfortable position, tilt his head slightly back |
| 9. Add drops heated to body temperature into a sterile pipette |
| 10. Pull the lower eyelid with a sterile gauze napkin.<br><br>*Note:* instillation must be started from the healthy eye |
| 11. Inject 1-2 drops of the medicinal substance into the inner corner of the eye, without touc<br>the eyelashes and eyelids |
| 12. To recommend the patient to close the eye |
| 13. Apply a sterile gauze napkin and remove the remains of the drug from the eyelid with a s<br>napkin |

| |
|---|
| 14. Repeat points 10 - 15 to inject drops into the other eye<br><br>*Note*: Pipettes - separate for each eye |
| 15. Completion of the procedure<br>Immerse the pipettes, napkins in the disinfectant solution |
| 16. Ask the patient about his well-being |
| 17. Remove the mask and gloves and throw them in a waterproof bag. Wash and dry your han |
| 18. Make a record of the procedure and the patient's reaction to it in the appropriate me documentation |

4. Discussion of theoretical issues:

Care of the seriously ill. Oral and nasal care, eyes. Prevention of bedsores. Prevention of congestion phenomena in the lungs in seriously ill patients. Technique of changing underwear and bed linen. Methods of treatment of the oral and nasal cavity. Preparation of solutions and tools for manipulations. Definition of the concept of bedsores, classification. Methods of prevention and treatment of bedsores. Techniques and types of respiratory gymnastics in seriously ill patients.

Question:

Definition of seriously ill patient.

Methods of care for the oral and nasal cavity, eyes.

The mechanism of formation of bedsores.

Typical locations of bedsores.

Methods of prevention and care of bedsores.

Techniques and types of respiratory gymnastics in seriously ill patients.

1. Soporosis is:

1. The state of "stunning", in which the patient is poorly oriented in the surrounding situation, inhibited.

2. The state of "hibernation" from which the patient can leave for a short time with a loud appeal.

3. An unconscious state, which is characterized by a complete loss of reflexes and disorders of vital functions.

4. State of unconsciousness.

5. A state of delirium, hallucinations.

2. The patient is poorly oriented, answers questions slowly. This condition is called:

A. Stupor

V. Sopor

S. Coma

D. Collapse

E. Fainting

3. The patient is unconscious, does not answer questions, reflexes are not determined. This condition is called:

A. Stupor

V. Sopor

S. Coma

D. Collapse

E. Fainting

4. An active-forced position is:

1. The position that the patient can easily change, depending on his needs and wishes.

2. A position that the patient cannot change on his own.

5. The position that the patient changes independently in order to relieve pain.

4. The position that the patient is forced to occupy by the pathological process against his will.

5. The need for the patient to be constantly in bed.

7. The passive-forced position is:

1. The position that the patient can easily change, depending on his needs and wishes.

6. A position that the patient cannot change on his own.

3. The position that the patient changes independently in order to relieve pain.

4. The position that the patient is forced to occupy by the pathological process against his will.

5. The need for the patient to be constantly in bed.

7. The patient has a "proud" posture, the abdomen is enlarged. Under what conditions does it occur?

1. What is associated with a decrease in cerebral blood flow during fainting:

A. Short-term spasm of cerebral vessels

B. Short-term spasm of peripheral vessels

C. Short-term expansion of cerebral vessels

D. Short-term expansion of peripheral vessels

E. Long-term expansion of peripheral vessels

8. What is the pulse on the central arteries during clinical death:

A. Paroxysmal tachycardia

B. Bradycardia

S. Filamentous

D. Weak filling

E. Not determined

4. Summary:

_____

_____

Practical lesson No. 9
Topic: The technique of placing a nasogastric tube. Stomach lavage technique. Methodology of duodenal probing. Preparation of the necessary instruments and the patient for placing a nasogastric tube. The algorithm for placing a nasogastric probe. Indications and contraindications for gastric lavage. Stomach lavage technique. Indications and contraindications for gastroduodenal probing. Methodology and algorithm of duodenal probing.

Purpose: To demonstrate mastery of the algorithm for placing a nasogastric tube, gastric lavage, and gastroduodenal probing.

Basic concepts: Hygienic treatment of hands, disinfection, sterilization, asepsis and antiseptics, manipulation room, probe, preparation for the procedure.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson, sanitizer.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out

laboratory research, etc.):
ORDER 01.06.2013 No. 460 {The order became invalid on the basis of the Order of the Ministry of Health No. 2415 dated 03.11.2021} On the approval of protocols of a nurse (paramedic, midwife) for patient care and the performance of basic medical procedures and manipulations

| Necessary actions | Justification |
|---|---|
| 1. Preparation for the procedure<br>Explain to the patient the conduct and essence of the future procedure (if possible) and obtain the patient's consent<br><br>for the procedure | Encouraging the patient to cooperate. The patient's rights are respected |
| 2. Prepare the equipment (place the probe in the freezer in advance for at least 1.5 hours) | A quick and efficient procedure is ensured. The introduction of the probe is facilitated due to the reduction of the vomiting reflex |
| 3. Wash and dry your hands. Put on gloves | Infectious safety is ensured |
| 4. Execution of the procedure<br>Offer or help the patient to sit on a chair closer to the back. If the patient cannot sit on a chair, the procedure can be performed with the patient lying on his side. At the same time, place the patient's head low | Placing the patient in a position convenient for the procedure |
| 5. Cover the patient's chest with a waterproof apron | Clothes are protected from contamination. Infectious safety is ensured |
| 6. Determine the distance at which the probe should be inserted: from the lips to the earlobe and down the front abdominal wall so that the last hole of the probe is below the xiphoid process | Correct insertion of the probe into the stomach is ensured |

| | |
|---|---|
| 7. Explain to the patient that during the introduction of the probe, nausea and urges to vomit are possible, which can be suppressed by breathing deeply through the nose. Do not squeeze the lumen of the probe with your teeth and pull it out | The necessary information is provided for the successful completion of the procedure and the avoidance of unpleasant sensations |
| 8. Stand to the right of the patient. Offer him to open his mouth, put the blind end of the probe, moistened with distilled or boiled water, on the root of the tongue.<br><br>*Note:*in in case of inappropriate behavior of the patient (if the probe is inserted for the purpose of washing the stomach), means of fixation for arms and legs should be used, the head should be fixed by hand; use a rotor expander to keep the patient's mouth open | It makes the procedure easier |
| 9. Ask the patient to make several swallowing movements (if possible), during which carefully advance the end of the probe into the esophagus | During swallowing, the epiglottis closes the entrance to the trachea, while simultaneously opening the entrance to the esophagus |
| 10. Advance the probe slowly and evenly. If an obstacle is encountered, stop and remove the probe. Repeat point 9 | The danger of inserting the probe into the trachea is excluded |
| 11. Continue inserting the probe to the desired mark if it advances with little resistance | Significant resistance during insertion, vomiting, cyanosis, fogging of the probe (if the probe is transparent) indicate that the probe has entered the trachea |
| 12. Make sure that the probe is correctly located in the stomach: inject about 20 ml of air into the stomach using a Jeanette syringe, while listening to the epigastric area. The correct position of the probe is also confirmed by aspiration of a large volume of liquid | The danger of introducing liquid into the trachea is excluded (during gastric lavage, enteral nutrition) |

| | |
|---|---|
| 13. Continue the procedure for which the probe was inserted | The possibility of carrying out the procedure for which the probe was inserted is provided |
| 14. Completion of the procedure<br>Remove gloves, put in a waterproof bag. Wash and dry your hands | Infectious safety is observed |
| 15. Make a record of the procedure and the patient's reaction in the appropriate medical documentation | Documentation of the procedure is provided |

A.2.1.2. Insertion of a nasogastric tube (the patient can help the medical worker, the behavior is adequate)

| Necessary actions | Justification |
|---|---|
| 1. Preparation for the procedure<br>Explain to the patient the course and essence of the future procedure (if possible) and obtain the patient's consent to the procedure | Encouraging the patient to cooperate. The patient's rights are respected |
| 2. Prepare the equipment (the probe should be kept in the freezer for at least 1.5 hours) | A quick and efficient procedure is ensured. The introduction of the probe is facilitated due to the reduction of the vomiting reflex |
| 3. Determine the most favorable way of inserting the probe: first press one wing of the nose and ask the patient to breathe, then repeat these actions with the other wing of the nose | The procedure allows you to determine the most passable half of the nose |

| | |
|---|---|
| 4. Determine the distance to which the probe should be inserted: from the tip of the nose to the earlobe and down the front abdominal wall so that the last hole of the probe is below the xiphoid process | Correct insertion of the probe into the stomach is ensured |
| 5. Execution of the procedure<br>Help the patient acquire a high Fowler's position | A physiological position is created during swallowing |
| 6. Cover the patient's chest with a towel | Clothes are protected from contamination. Infectious safety is observed |
| 7. Wash and dry your hands. Put on gloves | Infectious safety is observed |
| 8. Treat the blind end of the probe well with sterile petroleum jelly or glycerin | It is easier to insert the probe. Unpleasant sensations and injury to the nasal mucosa are prevented |
| 9. Ask the patient to tilt his head back a little | It is possible to quickly insert the probe |
| 10. Insert the probe through the lower nasal passage to a distance of 15 - 18 cm | The natural curves of the nasal passage facilitate the passage of the probe |
| 11. Ask the patient to return the head to a natural position | The possibility of further insertion of the probe is provided |

| | |
|---|---|
| 12. Give the patient a glass of water and a drinking tube. Ask to drink in small sips while swallowing the tube. You can add a piece of ice to the water | The passage of the probe through the oropharynx is facilitated. Friction against the mucous membrane is reduced. During swallowing, the epiglottis closes the entrance to the trachea, while simultaneously opening the entrance to the esophagus. Cold water reduces the risk of nausea |
| 13. Help the patient to swallow the probe, gently pushing it into the pharynx during each swallow | Discomfort decreases. It is easier to advance the probe |
| 14. Make sure that the patient can speak clearly and breathe freely | It is ensured that the probe is in the esophagus |
| 15. Ensure the correct location of the probe in the stomach - inject about 20 ml of air into the stomach using a Jeanette syringe, while listening to the epigastric region, or attach the syringe to the probe - during aspiration, the contents of the stomach should flow into the probe | It is possible to carry out the procedure. The correct position of the probe is confirmed |
| 16. If necessary, leave the probe for a long time: cut off a patch 10 cm long, cut it in half lengthwise by 5 cm. Attach the plaster with the uncut part to the back of the nose. Wrap each cut strip of adhesive plaster with a probe and fasten the strips crosswise on the back of the nose, avoiding pressing on the wings of the nose | Displacement of the probe is excluded |
| 17. Close the probe with a plug (if the procedure for which the probe was inserted will be performed later) and attach with a safety pin to the patient's clothing on the chest | Gastric contents are not allowed to leak between feedings |

| | |
|---|---|
| 18. Help the patient to acquire a comfortable position | The correct position of the body is ensured |
| 19. Completion of the procedure<br>Remove gloves, put in a waterproof bag. Wash and dry your hands | Infectious safety is observed |
| 20. Make a record of the procedure and the patient's reaction in the appropriate medical documentation | Documentation of the procedure is provided |
| 21. Wash the probe every 4 hours. 15 ml of isotonic sodium chloride solution | Probe patency support is provided |

A.2.1.3. Washing the stomach with a thick probe

| Necessary actions | Justification |
|---|---|
| 1. Preparation for the procedure<br>Put on waterproof aprons on yourself and the patient | Clothes are protected from contamination |
| 2. Execution of the procedure<br>Insert a thick gastric probe to the set mark (seeProtocol for the execution of probe procedures 1.10, clause 2.1.1) | It is possible to wash the stomach |
| 3. Attach a watering can to the probe, lower it to the level of the stomach | Spillage of stomach contents is prevented |
| 4. Holding the watering can slightly tilted at the level of the stomach, pour 1 liter of water into it | With this position of the watering can, water will not enter the stomach |

| | |
|---|---|
| 5. Slowly raise the watering can up 1 m. As soon as the water reaches the hole, lower the watering can to knee level, preventing water from spilling out | According to the law of connected vessels, the water will enter the stomach, and then again into the funnel |
| 6. Repeat point 5 twice and pour the washing water into the prepared sterile vessel (if it is necessary to take the washing water for research).<br><br>*Note:*washing water is taken for research according to the doctor's prescription. In case of suspicion of poisoning with caustic poisons, take the first portion of washing water | More intensive mixing of stomach contents with water and taking them for research is ensured |
| 7. Repeat points 4, 5, but pour the water into a vessel for draining the washing water (use the prepared 10 liters of water) | Gastric lavage is provided |
| 8. Completion of the procedure<br>Disconnect and remove the probe from the stomach, wrapping it with a napkin | Contamination of clothes and hands is prevented |
| 9. Immerse contaminated items in a container with a disinfectant solution | Infectious safety is ensured |
| 10. Remove the aprons, immerse them in a container with a disinfectant solution or in a waterproof bag | Infectious safety is ensured |
| 11. Remove gloves. Help the patient wash and get into a comfortable position | Rest is provided after the procedure |
| 12. Wash and dry your hands | Infectious safety is observed |

| | |
|---|---|
| 13. Write a referral and send test tubes with wash water to the laboratory. After disinfection, pour the rest of the washing water into the sewer | Infectious safety is observed |
| 14. Make a record of the procedure and the patient's reaction to it in the relevant medical documentation | Documentation of the procedure is provided |

A.2.1.4. Washing the stomach with a thin probe

| Necessary actions | Justification |
|---|---|
| 1. Preparation for the procedure<br>Put on waterproof aprons on yourself and the patient | Clothes are protected from contamination |
| 2. Execution of the procedure<br>Insert a thin stomach tube through the mouth or nose (seeProtocol for the execution of probe procedures 1.10, clause 2.1.1, 2.1.2) | It is possible to wash the stomach |
| 3. Attach a Jeanette syringe to the probe and pull the piston a little toward you. Disconnect the syringe by returning the piston to its original position | Confirmation that the probe is in the stomach will be the flow of liquid into the syringe |
| 4. Fill the syringe with water. Attach the syringe to the probe and inject water into the stomach | Implementation of the procedure is ensured |
| 5. Pull the syringe piston toward you, aspirating the injected water<br><br>*Note:*V if necessary, take washing water for research | Removal of stomach contents is ensured |

| | |
|---|---|
| 6. Disconnect the syringe from the probe and pour the contents into a vessel for washing water | Gastric lavage is provided |
| 7. Repeat points 4 - 6 until all the water (10 l) prepared for washing is used | It is important to remove not only the contents of the stomach, but also toxins secreted by the mucous membrane of the stomach |
| 8. At the end of the procedure, disconnect the Jeane syringe and remove the probe from the stomach, wrapping it with a napkin | Contamination of clothes and hands is prevented |
| 9. Completion of the procedure<br>Immerse the used equipment in a container with a disinfectant solution | Infectious safety is observed |
| 10. Remove aprons, put them in a container with a disinfectant solution or in a waterproof bag | Infectious safety is observed |
| 11. Take off gloves, help the patient to wash and get into a comfortable position | Necessary rest is provided after the procedure |
| 12. Wash and dry your hands | Infectious safety is observed |
| 13. Write a referral and send the vessel with washing water to the laboratory. Pour the rest of the washing water into the sewer after disinfection | Infectious safety is observed |
| 14. Make a record of the procedure and the patient's reaction in the relevant medical documentation | Documentation of the procedure is provided |

A.2.1.6. Duodenal probing (fractional method)

| Necessary actions | Justification |
|---|---|
| 1. Preparation for the procedure<br>Explain the course of the procedure to the patient and obtain his consent for the procedure | The patient's right to information is ensured |
| 2. Determine the distance to which the patient should swallow the probe. The probe has three marks: the first - at a distance of 40 - 45 cm from the oil and corresponds to the placement of the oil in the cardiac part of the stomach, the second - 70 cm, corresponds to the distance from the incisors to the gatekeeper, the third - 80 - 90 cm - the distance from the incisors to the point of confluence of the common bile duct into the duodenum | It is ensured that the probe enters the stomach and duodenum |
| 3. Offer the patient to sit on a chair or couch | Position required for probe insertion |
| 4. Wash and dry your hands. Put on gloves, put a towel on the patient's chest and neck | Infectious safety is observed. Clothes are protected from contamination |
| 5. Take the probe at a distance of 10 - 15 cm from the oil, and support its free end with your left hand (the probe must be in the freezer for 1.5 hours before insertion) | The vomiting reflex is reduced, the procedure is facilitated |
| 6. Execution of the procedure<br>Ask the patient to open his mouth, place the tongue on the root, and then push the probe deeper into the pharynx. At the same time, the patient should make active swallowing movements. With each swallowing movement, the probe will pass into the stomach to the desired mark | Twisting of the probe is excluded. The passage of the probe through the esophagus is ensured |

| | |
|---|---|
| 7. To check the location of the probe, a syringe is attached to it. If during aspiration a cloudy liquid of yellow color, oil in the stomach enters the syringe, if not - pull the probe closer to you and offer to swallow it again | If the liquid does not enter the syringe, it means that the probe is twisted in the esophagus. Getting the probe into the stomach is a necessary condition for continuing the procedure |
| 8. If the probe is in the stomach, place the patient on the right side, place a roll or a folded blanket under the pelvis, and a warm heating pad under the right hypochondrium. In this position, the patient continues to slowly swallow the probe to the 2nd mark (70 cm). Duration of ingestion - 40 - 60 minutes. | In this position, it is easier to advance the probe to the goalkeeper. Swallowing leads to the fact that the probe often twists in the stomach and ultimately the duration of the examination increases |
| 9. After swallowing the probe to the 3rd mark (80 - 90 cm), lower its free end into the test tube.<br><br>*Note:*a tripod with test tubes is installed below the couch | This indicates that the probe is in the duodenum |
| 10. If there is oil in the duodenum, a golden-yellow liquid enters the test tube - duodenal contents - portion A. In 20 - 30 minutes. 25 - 40 ml of this portion (2 - 3 test tubes) is received.<br><br>*Note:* if the liquid does not enter the test tube, it is necessary to check the location of the probe by injecting air into it with a syringe: if the probe is in the duodenum, then the injection of air is not accompanied by any sound effects; if the probe is still in the stomach - characteristic clicking sounds are noted when air is introduced | The color of portion A is due to a mixture of bile, pancreatic secretions, and intestinal juice. In the presence of impurities of gastric juice, portion A becomes cloudy |
| 11. After receiving portion A, inject a gallbladder stimulator (25 - 40 ml of a 33% solution of magnesium sulfate or 30 - 40 ml of a 10% solution of sorbitol) or a cholagogue of a hormonal nature, for example, cholecystokinin - 75 units intramuscularly, into the probe using a Jeanette syringe | A side effect of magnesium sulfate is a laxative effect. It ensures the release of the gall bladder and receiving a portion of B |

| | |
|---|---|
| 12. Move the end of the probe into the next test tube | The sequence of the procedure is ensured |
| 13. After 10 - 15 minutes. after the introduction of the stimulator into the test tube, a portion of B - cystic bile begins to flow. Duration of receiving portion B: in 20 - 30 minutes. - 30 - 60 ml of bile (4 - 6 test tubes).<br><br>*Note:* for the timely detection of portion C, carefully monitor the color of bile when receiving portion B: in the event of the appearance of a light-colored liquid, move the probe to another test tube. Mark the portions | The color of cystic bile is brown or olive, and in case of stagnation of bile - dark green. If the concentration function of the gallbladder is weak, it is not always possible to distinguish portions A and B by color |
| 14. Move the probe to the next test tube to receive portion C: in 20 - 30 min. - 15 - 20 ml of bile (1 - 2 test tubes) | The color of liver bile is lighter, golden yellow |
| 15. Completion of the procedure<br>Remove the probe with slow, gradual movements, wiping it with a napkin | Mechanical cleaning of the probe is provided |
| 16. Place the probe in the disinfectant solution | Infectious safety is observed |
| 17. Remove gloves, wash and dry hands | Infectious safety is observed |
| 18. Make an entry in the procedure logbook (form 029-o) | Documentation of the procedure is provided |
| 19. Label the test tubes and deliver them to the laboratory with a referral, noting the patient's department, surname, first name and patronymic | The reliability of the received information is ensured |

A.3. Symptoms and situations, in the event of which it is necessary to immediately notify the doctor:

A.3.1. Sharp deterioration of the patient's condition.

A.3.2. Patient's refusal to perform the procedure.

A.4. Resource support for protocol implementation

Equipment

A.4.1. Sterile gastric tube, towel, napkins, Jeanette syringe with a capacity of 60 ml, phonendoscope, sterile glycerin or petroleum jelly, tray, clean rubber gloves, waterproof apron.

A.4.2. A sterile gastric tube with a diameter of 0.5 - 0.8 cm, a towel, napkins, a Jeanette syringe with a capacity of 60 ml, a phonendoscope, sterile petroleum jelly or glycerin, a tray, clean gloves, an adhesive plaster (1 x 10 cm), a clamp, scissors, a plug for probe, safety pin.

A.4.3. Gastric lavage system: two thick sterile gastric probes connected by a glass tube (the blind end of one probe is cut off); a glass watering can with a capacity of 0.5 - 1 l, a towel, napkins. sterile test tubes (cans) for washing water, a vessel with boiled water at room temperature (10 l), a mug, a vessel for draining washing water, gloves, a waterproof apron - 2 pieces, sterile vaseline oil or glycerin, a waterproof bag.

A.4.4. A thin gastric tube, a towel, napkins, a sterile vessel for washing water, a vessel with boiled water at room temperature (10 l), a vessel for draining washing water, gloves, a waterproof apron - 2 pieces, sterile vaseline oil or glycerin, a Jeanette syringe with a capacity 0.5 l, waterproof bag.

A.4.5. A sterile gastric tube with a diameter of 0.5 - 0.8 cm, one of the secretion stimulants, a syringe for injections (if the stimulus is parenteral), alcohol, cotton balls, gloves, a tripod with test tubes, a syringe for sampling gastric contents (if there is no vacuum unit , intended for this purpose).

A.4.6. Sterile duodenal probe, tripod with test tubes, gallbladder stimulator (25-40 ml of 33% magnesium sulfate, 10% sorbitol solution or cholecystokinin), aspiration syringe, Jeanette syringe, injection syringe (if cholecystokinin is used), heating pad, roller, gloves.

4. Discussion of theoretical issues:
Preparation of the patient for nasogastric probes.
Stomach lavage technique.
Preparation of the necessary tools for placing a nasogastric tube
The algorithm for placing a nasogastric probe.
Indications and contraindications for gastric lavage.
Stomach lavage technique.
Indications and contraindications for gastroduodenal probing.
Methodology and algorithm of duodenal probing.
Possible side effects during probing.

4. Summary:

_____

_____

Practical lesson No. 10
Topic: Patient preparation for instrumental research methods. Algorithm for performing various types of enemas. Algorithm of gas discharge tube application. Bladder catheterization. Methods of instrumental research of patients in a therapeutic hospital. The technique of preparing patients for ultrasound examination

of organs of the abdominal cavity and kidneys, colonoscopy, fibrogastroduodenoscopy, irigoscopy. rectoromanoscopy, bronchoscopy.

Purpose: To demonstrate mastery of the algorithm for setting up various types of enemas, the use of a gas tube, catheterization of the urinary bladder. patient preparation for instrumental research methods.

Basic concepts: Hygienic treatment of hands, disinfection, sterilization, asepsis and antiseptics, manipulation room, instrumental methods of examination.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson, sanitizer.
2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Questions (test tasks) to check basic knowledge on the topic
seminar:
Patient preparation for instrumental research methods.
Algorithm for performing various types of enemas.
Algorithm of gas discharge tube application.
Bladder catheterization.
Methods of instrumental research of patients in a therapeutic hospital.
The technique of preparing patients for ultrasound examination of organs of the abdominal cavity and kidneys
The technique of preparing patients for colonoscopy,
The technique of preparing patients for fibrogastroduodenoscopy,
The technique of preparing patients for irrigoscopy. sigmoidoscopy,
The technique of preparing patients for bronchoscopy.

4. Discussion of theoretical issues:
Test questions:
1. The following enema is used to strengthen bowel movements:
1. I will clean
2. hypertensive
3. emulsion
4. siphon
2. After an oil enema, the bowels are released mainly through:
1. 5-7 min
2. 30 min
3. 1-2 years
4. 10-12 years
3. How much water is needed for a siphon enema:

1. 1 l
2. 1.5 l
3. 2 l
4. 3 l
5. 10-12 l

4. Indications for the appointment of a gas outlet tube:
1. fasten
2. intestinal obstruction
3. drug poisoning
4. flatulence

5. Name the contraindications for using a cleansing enema:
1. inflammatory diseases
2. rectum
3. preparation for endoscopic colonoscopy
4. preparation for surgery
5. poisoning and intoxication constipation

6. What measures should be taken in case of flatulence?
1. gastric lavage
2. introduction of the gas outlet tube with
3. use of painkillers

7. The amount and temperature of liquid according to relaxing enemas:
1. 1-1.5 l; 20-25*C
2. 10 l, over 40*C
3. 100-200 ml, 37-38*C
4. 500 ml, 20-30*C
5. 1-1.5 l; 37-38*C

8 How far should the gas removal tube be inserted into the colon:
1. 20 cm
2. 15 cm
3. 7 cm
4. 25 cm

9. In order to prepare for X-ray examination of the intestine, the patient is prescribed a cleansing enema. What position should be given to the patient during a cleansing enema:
1. half-lying on the right side, legs bent at the knees
2. on the back
3. on the stomach
4. on the left side, legs bent at the knee joints and brought to the stomach

4. Summary:

_____

_____

Practical lesson No. 11

Topic: Principles and standard of medical triage of the wounded and victims. Algorithm and technique of temporary stopping of arterial, venous and capillary bleeding. Standards of transportation and transfer of patients. Standards, principles of medical triage of victims. Types of bleeding. technique of stopping arterial, venous and capillary bleeding. Standards of transportation and transfer of patients.

Purpose: To demonstrate mastery of the basic principles of medical triage of the wounded and victims. Determination of types of bleeding, standards of transportation and transfer of patients. Understanding algorithms and techniques for temporary stopping of arterial, venous and capillary bleeding.

Basic concepts: medical triage, bleeding, stopping bleeding.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding
studying the topic).

2. Control of the reference level of knowledge (written work, written
testing, frontal survey on basic terminology, etc.)
(if necessary).
3. Questions (test tasks) to check basic knowledge on the topic
seminar:
Principles and standard of medical triage of the wounded and victims.
Algorithm and technique of temporary stopping of arterial, venous and capillary bleeding.
Standards of transportation and transfer of patients.
Standards, principles of medical triage of victims.
Types of bleeding. technique of stopping arterial, venous and capillary bleeding.
Standards of transportation and transfer of patients.

4. Discussion of theoretical issues:

1. .Principles and standard of medical triage of wounded and victims.
2. .Demonstrate the technique of temporarily stopping arterial bleeding.
3. .Demonstrate the technique of temporarily stopping venous bleeding.
4. .Demonstrate the technique of temporarily stopping capillary bleeding.
5. .Standards of patient transportation and transfer

6. Specify the first medical aid for bleeding from the large arterial vessels of the limb:

A. Placing a tourniquet on the limb above the place of damage
B. Placing a tourniquet on the limb below the point of damage
C. Applying a pressure bandage to the wound
D. Placing a vascular suture

E. Applying an occlusive dressing

2. Specify the methods of temporarily stopping arterial bleeding from a wound in the middle third of the forearm

A. Finger compression of the radial artery
B. Application of a hemostatic tourniquet below the site of damage
C. Maximum flexion of the limb in the elbow joint
D. Elevated position of the upper limb

3. Which bleeding is usually not accompanied by significant blood loss?

A. Arterial
B. Parenchymatous
C. Capillary
D. Venous

4. Specify the methods of temporary stopping of venous bleeding from a leg wound:

A. Finger compression of the femoral artery
B. Application of a hemostatic tourniquet above the site of damage
C. Applying a compression bandage to the wound
D. Maximum flexion of the limb in the hip and knee joints

5. Indicate which position should be given to the victim in the case of nosebleeds:

A. Sitting with head thrown back
B. Sitting, bent his head forward
C. Lying on your back
D. Lying on the side
E. Lying on your back with your legs up

6. State the characteristic signs of pulmonary bleeding:

A. Vomiting with dark red blood
B. Vomit the color of coffee grounds
C. Tar-like stool
D. Coughing up foamy sputum of bright red color
E. Coughing up red blood

7. Specify the method of temporary stopping of bleeding:

A. Finger compression of the vessel in the wound
B. Vascular ligation
C. Vascular embolization
D. Suturing of a vessel
E. Applying a clamp to a bleeding vessel

8. Indicate on which area in relation to the wound a hemostatic tourniquet is applied:

A. Directly on the wound
B. On the wound, placing an aseptic bandage under the tourniquet
C. Proximal to the wound as close as possible to it
D. Distal from the wound as close as possible to it

9. Select first aid measures for internal bleeding:

A. Placing a tourniquet
B. Applying cold
C. Finger compression of the vessel
D. Applying a pressure bandage
E. Maximum flexion of the limb

5. Topics of reports/abstracts:

_____

6. Summary:

Practical lesson No. 12

Topic: Terminal states. Cardiopulmonary resuscitation (CPR). Concepts and types of terminal state (death). Signs of clinical and biological death. Rules for handling a corpse. Cardiopulmonary resuscitation (CPR), principles and standards of assessment of vital functions and performance of CPR.

Purpose: Determination of terminal states and their classification. Demonstrate proficiency in CPR. Understanding the features of clinical and biological death. Rules for handling a corpse. Study of the principles and standards of assessment of salutary functions and implementation of SAV.

Basic concepts: Cardiopulmonary resuscitation (CPR), terminal condition, clinical and biological death
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding
studying the topic).

2. Control of the reference level of knowledge (written work, written
testing, frontal survey on basic terminology, etc.)
(if necessary).
3. Questions (test tasks) to check basic knowledge on the topic
seminar:
Terminal states.
Cardiopulmonary resuscitation (CPR).
Classification of terminal states
Signs of clinical and biological death.
Rules for handling a corpse.
Cardiopulmonary resuscitation (CPR), principles and standards of assessment of vital functions and performance of CPR.

Situational tasks.
Task 1.

Patient O, 49 years old, is in the therapeutic department, he has an attack of bronchial asthma, cyanosis of the skin, shortness of breath at rest up to 35 respiratory movements per minute. What should be the actions of the nurse?

Task 2

Due to the pathology of the respiratory system and severe respiratory failure, the doctor prescribed oxygen therapy to patient S. What percentage of oxygen should be in the inhaled mixture?

Task 3

The patient began to complain of weakness, dizziness, severe shortness of breath during physiotherapy procedures. What should be the actions of the nurse in the situation?

4. Discussion of theoretical issues:

Question:

Types of terminal states

Differences between clinical and biological death

CPR technique

Possible bi

Tests

1. The most effective method of oxygen therapy:

A. Delivery of oxygen from an oxygen pillow

B. Supply of oxygen through nasal catheters

C. Providing oxygen through a mask

D. Delivery of oxygen through a ventilator

E. Hyperbaric oxygenation, or oxygen barotherapy

2. What is the Bobroov apparatus used for:

A. To purify oxygen from impurities

B. For oxygen hydration

C. To create the necessary pressure

D. For mixing oxygen with nitrogen

E. For a clear percentage ratio of oxygen and carbon dioxide

3. Manifestations of biological death

A. involuntary urination

B. decreased reflexes

C. dryness of the sclera and conjunctiva

D. constricted pupil

E. a reversible process is possible after resuscitation measures

4. Oxygen therapy is:

A. deep breathing of air

B. use of pure oxygen for breathing

C. active ventilation of the room

D. use of a special composition enriched with nitrogen

E. use of an oxygen mixture containing from 40 to 95% oxygen

5. Pure oxygen cannot be used for oxygen therapy due to:

A. oppression of the respiratory center

B. burns of the respiratory tract

C. toxic effect on the body

D. convulsions, loss of consciousness
E. all of the above
6. Oxygen therapy is indicated:
A. Acute and chronic respiratory failure is accompanied by cyanosis
B. a decrease in the partial pressure of oxygen in the blood
C. severe heart failure is accompanied by cyanosis
D. pronounced shortness of breath at rest
E. all of the above
7. Artificial respiration by the "mouth to mouth" method is carried out
A. immediately when breathing stops
B. immediately when blood circulation stops
C. after artificial heart massage
D. after ensuring patency of the respiratory tract
E. within 7 minutes after clinical death.
8. Indirect heart massage is done when
A. Sudden cessation of breathing and heart
B. Cardiac arrest after a penetrating chest wound
C. Cardiac arrest due to tamponade (rapid filling of the pericardium with fluid)
D. Slowing of heart contractions to 38 per minute
E. lack of consciousness
9. The effectiveness of indirect heart massage is observed by
A. dilation of the pupil
B. pink skin
C. displacement of the sternum by 1-2 cm
D. the appearance of a pulse on the carotid artery
E. chest movements
10. The effectiveness of artificial heart massage is observed by
A. dilation of the pupil
B. skin pinkness
C. displacement of the sternum by 1-2 cm
D. the appearance of a pulse on the carotid artery
E. chest movements
11. To what depth should the sternum move in an adult during indirect heart massage:

A. 1-2 cm

B. 2-4 cm

S. On 2-4 mm

D. 4-6 cm

E. It should not shift

12. What should be the ratio of breathing rate and chest compressions if there are two resuscitators:

A. 1/20

V. 20/1

S. 1/5

D. 5/1

Well, 1/10

13. What should be the ratio of breathing rate and chest compressions if the resuscitator is alone:

A. 1/15

V. 15/1

S. 2/15

D. 15/2

5. Topics of reports/abstracts:

_____

6. Summary:

Practical lesson No. 13
Topic: Technique of pulse oximetry. Oxygen therapy. Rules for using nebulizers and pocket inhalers. The main indicators of pulse oximetry. Reference values. Indications for oxygen therapy. The structure of Bobrov's apparatus. Safety techniques when working with oxygen. Indications and contraindications for inhalation. Types of nebulizers, technique of use.

Purpose: To demonstrate mastery of the basic principles of oxygen therapy. Mastering the method of pulse oximetry. knowledge of the structure of the Bobrov apparatus and safety techniques for working with oxygen.

Basic concepts: Hygienic treatment of hands, disinfection, sterilization, asepsis and antiseptics, manipulation room.
Equipment: Laptop with a presentation, multimedia projector, individual tasks on the topic of a practical lesson, sanitizer.
Plan:
1. Organizational measures (greetings, verification of those present, reporting
understanding of the topic, the purpose of the lesson, the motivation of higher education applicants regarding studying the topic).
Acquaint applicants with the range of duties and actions of a manipulation nurse in a therapeutic department, the technique of hygienic hand washing, disinfection and sterilization.

2. Control of the reference level of knowledge (written work, written
testing, frontal survey, etc.) (if necessary):
requirements for applicants' theoretical readiness to perform
practical classes (knowledge requirements, list of didactic units);
questions (test tasks, problems, clinical situations) for re-
verification of basic knowledge on the topic of the lesson.
3. Formation of professional skills, skills (mastery of
kami, carrying out curation, determining the treatment scheme, carrying out
laboratory research, etc.):
Poll:
Indications for oxygen therapy.
Pulse oximetry algorithm.
Structure of the beaver's apparatus
Patient O, 49 years old, is in the therapeutic department, he has an attack of bronchial asthma, cyanosis of the skin, shortness of breath at rest up to 35 respiratory movements per minute. What should be the actions of the nurse?
Task 2
Due to the pathology of the respiratory system and severe respiratory failure, the doctor prescribed oxygen therapy to patient S. What percentage of oxygen should be in the inhaled mixture?
Task 3
The patient began to complain of weakness, dizziness, severe shortness of breath during physiotherapy procedures. What should be the actions of the nurse in the situation?
6.3 Tasks for checking the initial level of knowledge
Test control tasks
1. The most effective method of oxygen therapy:
A. Delivery of oxygen from an oxygen pillow
B. Supply of oxygen through nasal catheters
C. Providing oxygen through a mask
D. Delivery of oxygen through a ventilator
E. Hyperbaric oxygenation, or oxygen barotherapy
2. What is the Bobroov apparatus used for:
A. To purify oxygen from impurities
B. For oxygen hydration
C. To create the necessary pressure
D. For mixing oxygen with nitrogen
E. For a clear percentage ratio of oxygen and carbon dioxide
3. Manifestations of biological death
A. involuntary urination
B. decreased reflexes
C. dryness of the sclera and conjunctiva
D. constricted pupil
E. a reversible process is possible after resuscitation measures
4. Oxygen therapy is:
A. deep breathing of air

B. use of pure oxygen for breathing
C. active ventilation of the room
D. use of a special composition enriched with nitrogen
E. use of an oxygen mixture containing from 40 to 95% oxygen
5. Pure oxygen cannot be used for oxygen therapy due to:
A. oppression of the respiratory center
B. burns of the respiratory tract
C. toxic effect on the body
D. convulsions, loss of consciousness
E. all of the above
6. Oxygen therapy is indicated:
A. Acute and chronic respiratory failure is accompanied by cyanosis
B. a decrease in the partial pressure of oxygen in the blood
C. severe heart failure is accompanied by cyanosis
D. pronounced shortness of breath at rest
E. all of the above

Standards of answers to solving tasks.
Task 1: A. Task 2: A. Task 3: A. Task 4: E. Task 5: B.

4. Summing up the results regarding the assimilation of the material, discussion and clarification of unclear aspects of the topic.