

**FEDERAL STATE BUDGET EDUCATIONAL
HIGHER EDUCATION INSTITUTION
"ROSTOV STATE MEDICAL UNIVERSITY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION**

FACULTY OF TREATMENT AND PREVENTION

Evaluation materials on practice

“Practice for obtaining professional skills and experience in
the professional activities of nursing staff”

(appendix to the work program of practice)

Specialty 05/31/01 General Medicine

1. Interim certification form: test

2. **Type of intermediate certification:** based on the results of the current certification

3. List of competencies formed by the discipline or in formation which discipline is involved:

A) *general professional (OPK):*

OPK-6: Capable of organizing patient care, providing primary health care, ensuring the organization of work and making professional decisions in emergency conditions at the prehospital stage, in emergency situations, epidemics and in areas of mass destruction

4. Forms of assessment tools in accordance with the competencies being developed

Code competencies	Forms of assessment tools for current certification
OPK-6	Interview

Skills Interview Questions:

1. How to sanitize the patient.
2. How to change the patient's underwear and bed linen.
3. How patients are transported.
4. How the vessel is supplied to a bed patient.
5. How to wash the patient.
6. How oral toileting is performed.
7. How to put drops into the eyes and wash the eyes.
8. How to instill drops into the ears and perform ear toilet.
9. How to perform nasal toilet, instillation of drops into the nose.
10. How to measure body temperature and record data on a temperature sheet.

11. How to apply a local warming compress.
12. How to apply a cold compress.
13. How to prepare and serve a heating pad to a patient.
14. How to prepare and serve an ice pack to a patient.
15. How to carry out rubbing, rubbing, lubricating the skin with a medicine.

16. How to measure daily diuresis.
17. How biological material is collected from patients for laboratory research.

18. How care is provided for patients of different ages suffering from diseases of various organs and systems and their transportation.
19. How to feed patients.
20. How to carry out disinfection and pre-sterilization preparation of medical instruments, materials and patient care products.
21. How to perform different types of enemas.
22. How to determine the characteristics of the pulse on the radial artery.
23. How is blood pressure measured?
24. How is an oral examination performed?
25. How the gas outlet tube is inserted.
26. How the technique of performing intramuscular injections is carried out.
27. How the technique of performing subcutaneous injections is carried out.
28. How the technique of performing intravenous injections is carried out.
29. How to prepare the system for intravenous transfusion.
- thirty . How wet cleaning of surgical hospital premises is carried out.

List of skills:

1. Carry out sanitary treatment of the patient.
2. Change the patient's underwear and bed linen.
3. Transportation of patients.
4. Vessel delivery.
5. Washing the patient.
6. Carrying out oral toilet.
7. Instilling drops into the eyes and rinsing the eyes.
8. Instilling drops into the ears and cleaning the ears.
9. Toilet the nose, instill drops into the nose.
10. Measuring body temperature and recording data on a temperature sheet.
11. Applying a local warming compress.
12. Applying a cold compress.
13. Preparing and serving a heating pad to the patient.
14. Preparing and serving an ice pack to the patient.
15. Rubbing, rubbing, lubricating the skin with a medicine.
16. Measurement of daily diuresis.
17. Collection of biological material from patients for laboratory research.
18. Caring for patients of different ages suffering from diseases of various organs and systems and their transportation.
19. Feed the sick.
20. Carry out disinfection and pre-sterilization preparation of medical instruments, materials and patient care products.
21. Perform various types of enemas.
22. Carrying out oxygen therapy using various methods.
23. Determination of pulse characteristics on the radial artery.
24. Measurement of blood pressure.
25. Conducting an examination of the oral cavity.
26. Insertion of a gas outlet tube.
26. Technique for performing intramuscular injections.
27. Technique for performing subcutaneous injections.
28. Technique for performing intravenous injections.
29. Preparing the system for intravenous transfusion.
30. Wet cleaning of surgical hospital premises.

**Description of indicators and criteria for assessing competencies at their stages
formation, description of rating scales**

Criteria	Levels of competency development		
	<i>Threshold</i>	<i>Sufficient</i>	<i>High</i>
	Competence formed. Demonstrated threshold, satisfactory sustainable level practical skill	Competence formed. Demonstrated enough level independence, sustainable practical skill	Competence formed. Demonstrated high level independence, high adaptability practical skill

Competency assessment indicators and rating scales

Grade "unsatisfactory" (not accepted) or absence formation competencies	Grade "satisfactorily" (passed) or satisfactory (threshold) level of development competencies	Grade "Fine" (passed) or sufficient level development competencies	Excellent rating (passed) or high level development competencies
failure to student on one's own demonstrate knowledge when solving assignments, lack independence in application of skills. Absence confirmation availability formation competencies indicates negative development results academic discipline	student demonstrates independence in application of knowledge skills and abilities to solve educational tasks in full According to sample given teacher, by tasks, solution of which there were shown teacher, it should be considered that competence formed on satisfactory level.	student demonstrates independent application knowledge, skills and skills at decision tasks, tasks similar samples that confirms Availability formed competencies for higher level. Availability such competencies for sufficient level testifies about sustainable fixed practical skill	student demonstrates ability to full independence in choosing a method solutions non-standard assignments within disciplines with using knowledge, skills and skills, received as in development progress given disciplines and adjacent disciplines should be considered competence formed on high level.

Evaluation criteria for the test

Mark	Descriptors	
	strength of knowledge	knowledge of implementation methods and implementation of practical skills
passed	strong knowledge of the basic processes of the subject area being studied, the answer is distinguished by the depth and completeness of the disclosure of the question; mastery of terminology	stable knowledge of methods and practical skills.
not accepted	insufficient knowledge of the subject area being studied, unsatisfactory disclosure of the issue; poor knowledge of the basic issues of theory. Allowed	low level of knowledge of methods and practical skills

	serious errors in the content of the answer	
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**CHECKLIST FOR EXAMINATION PROCEDURE
for the second (commission) retake**

No.	Examination event*	Points
1	Interview based on the results of the internship	2-5
Total maximum number of points for the examination procedure:		5

1. How to sanitize the patient.

Standard answer. The patient's body is examined to identify scabies, pediculosis and signs of infection. After the examination, a corresponding entry is made on the title page of the medical record. The medical worker decides with the doctor the question of the need for sanitary treatment and its volume; If necessary, the patient's nails are cut. If necessary, help the patient undress. Clothes are placed in a clean separate bag, and 2 receipts are filled out for items given away, listing the contents of the bag. One receipt is handed over to the warehouse with the patient's belongings, the second – pasted into the patient's medical record. The patient is given soap and a boiled washcloth for washing. Do not allow steam to accumulate in the room. Weak patients should be escorted to the bathroom and held when entering and exiting the water. Help the patient wash if he is unable to do it himself. First the head is washed, then the body, then the legs. When washing, focus on the person's condition. After finishing washing, dry the patient's skin with a dry, clean towel.

2. How to change the patient's underwear and bed linen.

Standard answer. The patient's bed linen and underwear must be changed at least once a week after a hygienic bath and additionally as needed. Depending on the patient's condition, there are different ways to change bed linen. Patients who are allowed to sit are transferred from bed to chair and bed linen is changed. Pay attention to the fact that there are no folds or seams on the bed, and that the edges of the sheet are tucked under the mattress. In seriously ill patients, with heavy discharge from a wound, etc. You need to put an oilcloth under the sheet. Changing bed linen for bedridden patients is usually performed by two people, using longitudinal or transverse methods. Longitudinal method (used in cases where the patient is allowed to turn). The patient is moved to the edge of the bed. Roll the dirty sheet lengthwise into a roller, spreading a clean one in its place. Shift or turn the patient to the other side of the bed. They remove the dirty sheets and straighten out the clean sheets. Transverse method (used in cases where the patient is prohibited from active movements in bed). Raise the patient's head and upper torso. Remove the pillow. A dirty sheet is folded into a roll, and in its place a clean sheet is placed and straightened to the middle of the bed, a pillow is placed, and the head is lowered. Raise the patient's pelvis, rolling up the dirty sheet, and put a clean one in its place. Lower the patient's pelvis. Raise your feet - completely remove the dirty one, replacing it with a clean sheet.

Underwear is changed at least once every 7-10 days and additionally when soiled. A change of underwear for a seriously ill patient is carried out as follows. They roll up the dirty shirt to the waist and carefully move it to the back of the head. Raise both the patient's arms. Release the head and then the patient's hands. If a hand is injured, the shirt is first removed from the healthy one. Then from the sore arm. When changing linen, be sure to inspect the skin for bedsores and other features. Dress the patient in

in reverse order. The main location of a patient in a hospital is the bed. Depending on the general condition, the patient takes one or another position in bed. Remember! There are active, passive and forced positions.

In the active position, the patient can get out of bed, sit and walk independently. We must remember that the active position does not mean easy treatment of the disease. In a passive position, the patient lies in bed and cannot stand up, turn around, or change body position on his own. More often these are unconscious patients or neurological patients with motor paralysis. The patient takes the forced position himself to alleviate his condition. So, with severe shortness of breath, the patient is in a sitting position, with inflammation of the pleura (pleurisy) - on the sore side. The position of the patient in bed can to a certain extent characterize the patient's condition. To create a comfortable position for the patient in bed, a functional bed is used. Using handles located at the head and foot ends of the bed, you can give it a comfortable functional position that improves the function of a particular organ or system. For example, in case of severe shortness of breath, the head end of the bed is raised, creating a semi-sitting position for the patient, and lowered to a horizontal level when blood pressure drops, while simultaneously raising the foot end of the bed. It is necessary that the bed is comfortable and neat, the mesh is well stretched, with a smooth surface. A mattress with a cover is placed on top of the mesh. For seriously ill patients on bed rest, an oilcloth is placed across the entire width of the cover under the buttock area, the edges of which are fixed (sewn or tucked under the mattress). A sheet is placed on top of the mattress, which is tucked along the entire length under the edges of the mattress so that it does not bunch up. In patients suffering from shortness of breath, 2-3 well-fluffed pillows should be placed under the back, and a headrest should be placed if there is no functional bed. If the patient is leaning against a wall, then a pillow is placed under his back and a bench is placed under his feet.

3. How patients are transported.

Standard answer. Choosing the right transportation method is of great importance. This depends mainly on the nature of the disease. The method of transporting the patient is determined by the doctor examining him. There are several methods for transporting patients.

1. on foot (in satisfactory condition, accompanied by a paramedic).
2. on a stretcher (manually or on a gurney, usually seriously ill patients, after surgery, anesthesia, in an unconscious state, etc., if necessary, the patient should be secured on the gurney with special belts or handrails. Transportation is carried out by two medical workers. If necessary, the patient is transferred from the bed onto the stretcher and vice versa. In this case, the patient can be transferred by two medical workers: one holds the patient's head, neck, upper and lower chest, the second puts his hands under the lower back and hips. In the absence of a gurney, 2-4 orderlies carry the stretcher manually. should be done without haste and shaking. The patient should be carried down the stairs feet first, with the front end of the stretcher slightly raised and the back end slightly lowered. Thus, a horizontal position of the stretcher is achieved. The patient is carried up the stairs also in a horizontal position. The patient on the stretcher must walk in step, in short steps, slightly bending his knees and strictly holding the stretcher at the same horizontal level. If anyone feels tired during the transfer, they should report it immediately, as tired fingers may involuntarily relax. During transportation, you should check with the patient about his well-being.

3. on a wheelchair. Transportation can be carried out by one junior nurse, while observing certain rules: 1. Tilt the wheelchair forward by stepping

on the footrest. 2. Ask the patient to stand on the footrest, then, supporting the patient, sit him in the chair. 3. Lower the wheelchair to its original position. 4. Make sure that during transportation the patient's arms do not extend beyond the armrests of the wheelchair.

Using the frame located behind the back of the chair, you can change the position of the backrest and leg panel, which allows you to transport the patient in a sitting, reclining or lying position. This method is the most convenient, reliable and gentle.

4. in the arms (1-2 orderlies carry out transportation. If the patient is carried by one person, then with one hand he clasps the patient's chest at the level of the shoulder blades, and brings the other hand under his hips: in this case, the patient, in turn, clasps the carrier by the neck. If the patient is carried by two people, then they make a "complex lock" (one clasps his left forearm with his right hand, and the assistant's forearm with his left hand) and puts the patient in his arms, and he must clasp the carriers by the neck)

4. How the vessel is supplied to a bed patient.

Standard answer. Sequencing

1. Before serving the vessel, rinse it with warm water and leave a little warm water in it;
2. Place your left hand under the sacrum, helping the patient raise the pelvis (the patient's legs should be bent at the knees);
3. With your right hand, bring the vessel under the patient's buttocks so that the perineum is above the hole;
4. After defecation and urination, wash the patient;
5. Pour the contents of the vessel into the toilet, rinse the vessel with hot water, and disinfect it with a 10% chloramine solution;
6. Wash your hands.

In patients with urinary incontinence, permanent urinals are used

5. How to wash the patient.

Standard answer. A patient with limited mobility should be washed twice a day. If the patient uses diapers, this should be done every time they are changed, after every bowel movement and every 3-4 hours for urinary incontinence. In this case, it is most convenient to use wet wipes.

To wash the patient, prepare: a bedpan; oilcloth; tweezers or clamp; jug with warm water (37-38°C); gauze napkins; liquid soap; wet wipes; dry diaper.

Procedure: Wash your hands and put on gloves. Help the patient remove underwear or diaper. Place a bedpan under the patient's sacrum. Wrap a gauze napkin around the clamp and moisten it with water and soapy water. Pouring the perineal area from a jug with warm water, treat the external genitalia with napkins in the direction from the pubis to the anus, the anus and between the buttock fold. Change wipes as needed. Then dry the perineum with dry wipes or a diaper. Clean the bedpan and discard used wipes. If there is skin irritation or diaper rash, apply Sudocrem or Baby Tamu-Tamu cream. Help the patient put on underwear or a diaper

6. How oral toileting is performed.

Standard answer. To brush teeth, place the kidney-shaped tray under the patient's chin. Ask him to remove his dentures, if any. Place the denture in a cup of clean water. Instruct the patient to rinse their mouth with a small amount of water. Apply a little paste to your toothbrush. Holding the patient's chin, ask him to open his mouth and gently brush his teeth with sweeping movements.

on the upper and then on the lower jaw. Again, suggest rinsing your mouth with water and Octenidol Mouth and Throat Antiseptic Solution. Pat your lips dry with a towel. Apply lipstick to your lips.

7. How to put drops into the eyes and wash the eyes.

Standard answer. An eye dropper is used to place drops into the eyes. Sequence of actions: check that the name of the drops matches the doctor's prescription; take the required number of drops into the pipette (2-3 drops for each eye); with the patient lying or sitting, ask him to throw back his head and look up; pull back the lower eyelid and, without touching the eyelashes (do not bring the pipette closer to the eye than 1.5 cm), drop the drops into the conjunctival fold of one and then the other eye.

To wash the eyes, use a special glass (eye bath). Sequence of actions: pour the medicinal solution into a glass and place it on the table in front of the patient; ask the patient to take the glass by the stem with his right hand, tilt his face so that the eyelids are in the glass, press it to the skin and raise his head, while the liquid should not leak out; ask the patient to blink frequently for a minute; ask the patient to place the glass on the table without removing it from his face; pour fresh solution and ask the patient to repeat the procedure 8-10 times.

8. How to instill drops into the ears and perform ear toilet.

Standard answer. There is no need to clean your ears and nose every day. Only when it gets dirty.

The ears are cleaned with soft cotton swabs. When a large amount of sulfur accumulates, special drops are used to help dissolve and remove it. For each nostril you need a separate clean cotton swab!

9. How to perform nasal toilet, instillation of drops into the nose.

Standard answer. If you need to clear crusts from your nose, roll a small piece of cotton wool into a flagellum and soak it in oil. The same hydrophilic oil used to wash your face will also work. Using a twisting motion, insert the oiled flagellum into the patient's nostril 1.5-2 cm, and then gently pull it out.

10. How is body temperature measured and data recorded? temperature sheet.

Standard answer. Thermometry - measuring body temperature. As a rule, thermometry is carried out twice a day - in the morning on an empty stomach (at 7-8 a.m.) and in the evening before the last meal (at 5-6 p.m.). According to special indications, body temperature can be measured every 2-3 hours (temperature profile).

Locations for measuring body temperature. Armpits. Oral cavity (the thermometer is placed under the tongue). Inguinal folds (in children). Rectum (usually in seriously ill patients; the temperature in the rectum is usually 0.5-1°C higher than in the armpit).

Measuring body temperature in the armpit.

Necessary equipment: maximum medical thermometer, container with disinfectant solution (0.1% Chlormix (exposure 60 minutes) or 0.1% Chlorotsid (exposure 60 minutes)), individual napkin, temperature sheet. Sequencing

Wipe the patient's armpit area dry (wet skin distorts thermometry readings). Examine the axillary area: if there is hyperemia or local inflammatory processes, temperature cannot be measured (the thermometer readings will be higher than the temperature of the whole body). Remove the thermometer from the glass with the disinfectant solution. After disinfection, the thermometer should be rinsed

running water and wipe dry thoroughly. Shake the thermometer so that the mercury column drops to below 35°C. Place the thermometer in the armpit so that the mercury reservoir is in contact with the patient's body on all sides; ask the patient to press his shoulder tightly to his chest (if necessary, the health care worker should help the patient hold his arm). Remove the thermometer after 10 minutes and take readings. Shake the mercury in the thermometer to below 35°C. Place the thermometer in a container with a disinfectant solution. Record the thermometer readings on the temperature sheet.

Registration of thermometry results

The measured body temperature must be recorded in the logbook at the nurse's station, as well as in the temperature sheet of the patient's medical history. The temperature sheet, intended for daily monitoring of the patient's condition, includes thermometry data, as well as the results of measuring respiratory rate (RR) in digital form, pulse and blood pressure (BP), body weight (every 7-10 days), amount of alcohol consumed per day of fluid and the amount of urine excreted per day (in milliliters), as well as the presence of stool (with a "+" sign). On the temperature sheet, days are marked along the abscissa (horizontal) axis, each of which is divided into two columns - "y" (morning) and "v" (evening). There are several scales along the y-axis (vertical) - for temperature curve ("T"), pulse curve ("P") and blood pressure ("BP"). In the "T" scale, each grid division along the ordinate axis is 0.2 °C. Body temperature is marked with dots (blue or black), after connecting them with straight lines, a so-called temperature curve is obtained. Its type has diagnostic value for a number of diseases.

In a healthy person, body temperature can fluctuate from 36 to 37°C, and it is usually lower in the morning and higher in the evening.

Situations in which erroneous thermometric data may be obtained are as follows. The nurse forgot to shake the thermometer. The patient has a heating pad applied to his arm, on which body temperature is measured. Body temperature was measured in a seriously ill patient, and he did not press the thermometer tightly enough to the body. The mercury reservoir was located outside the armpit area. Simulation of patients with elevated body temperature.

11. How to apply a local warming compress.

Standard answer. As prescribed by a doctor.

Contraindications: - purulent skin diseases, - hyperthermia.

It is necessary to have: - a napkin (linen - 4 layers or gauze - 6-8 layers), waxed paper (polyethylene - in no case), cotton wool, a bandage (elastic, if possible), a kidney-shaped tray, solution: ethyl alcohol 40-45% or vodka, water 20-25°C.

PATIENT PREPARATION: 1. Psychological. 2. Explain the meaning of the manipulation and the rules of behavior for the patient.

SEQUENCING:

1. Prepare the first layer of compress (napkin) so that its dimensions are 3 cm larger than the site of the disease.
2. Each subsequent layer of compress should be 3 cm larger than the previous one.
3. Soak a napkin in the solution and wring it out well.
4. Place it on the desired area of the body (if it is the ear, cut a hole to the size of the ear).
5. Apply wax (compress) paper as a second layer (if on the ear, cut a hole).
6. Place a layer of cotton wool on top of the paper, which should completely cover the two previous layers.
7. Secure the compress with a bandage so that it fits snugly to the body, but does not restrict the patient's movements.
8. Check with the patient about his feelings after some time.
9. Leave the compress for 8-10 hours, and the alcohol compress for 4-6 hours (it is better to leave them overnight).
10. After 2-3 hours, check that the compress is placed correctly, place your finger under the first layer of the compress, if it is wet and warm, then the compress is placed correctly,

if dry, then the compress must be applied again. 11. After removing the compress, apply a dry, warm bandage using cotton wool and a bandage.

12. How to apply a cold compress.

Standard answer. As prescribed by a doctor.

Contraindications: - purulent skin diseases.

PREPARE: - 2 napkins (linen - 4 layers or gauze - 6-8 layers), kidney-shaped tray, cold water 14-16°C, pieces of ice.

PREPARATION OF THE PATIENT: 1. Psychological. 2. Explain the meaning of the manipulation and the rules of behavior for the patient.

SEQUENCE OF ACTIONS: 1. Prepare napkins so that their size is 3 cm larger than the site of the disease. 2. Pour water into the tray and put a few pieces of ice in it. 3. Soak napkins in the solution. Wring out one napkin so that no water drips. 4. Place 1 napkin on the desired area of the body. 5. After 2-3 minutes, replace the napkin. 6. As it melts, add pieces of ice. 7. Check with the patient about his feelings after some time. 8. Change wipes until hyperemia (redness) or pain decreases. 9. After removing the napkin, if necessary, apply a dry dressing using a bandage.

13. How to prepare and serve a heating pad to a patient.

Standard answer. Indications: doctor's prescription.

Contraindications: - bleeding of various origins; acute inflammatory processes of any localization; malignant neoplasms; skin damage; bruises (first day); infected wounds.

PREPARE: - heating pad; water (t° 65°C); towel or heating pad cover; water thermometer.

PREPARATION OF THE PATIENT: - psychological; Explain to the patient how to use the heating pad and when to remove it.

SEQUENCE OF ACTIONS: 1. When using the heating pad for a long time, apply Vaseline or other greasy cream to the skin (using gloves) to avoid burns. 2. Check the heating pad for leaks. 3. Fill it 2/3 full with water, hold it by the narrow part of the neck. 4. Displace steam from the heater over the sink by bending the narrow part of the heater away from you, and in this position screw the cap. 5. Turn the heating pad upside down and check its tightness. 6. Dry with a towel, put a cover on it or wrap it in a dry towel and apply to the desired area of the body. 7. After 5 minutes, check to see if the patient has overheated skin (symptom of "marbled skin" or bright hyperemia). 8. Remove the heating pad after it has cooled down. 9. Pour out the water, screw on the cap and immerse the heating pad and towel in the disinfectant solution for at least 60 minutes. Additional Information. The heating pad is stored dry with the lid open.

14. How to prepare and serve an ice pack to a patient.

Standard answer. Indications are determined by the doctor: - acute inflammatory processes; bleeding; hyperthermia; bruises in the first hours; for insect bites; after abortion; postoperative period.

Contraindications: hypothermia (determined by the doctor).

PREPARE: 1. Ice pack. 2. Pieces of ice. 3. Towel or diaper. 4. Tray. 5. Wooden hammer.

PATIENT PREPARATION: - psychological; explain to the patient the essence of the manipulation and how he should behave when performing it'

SEQUENCE OF ACTIONS: 1. Take an ice pack and check its tightness. 2. Unscrew the cover. 3. Place the ice cubes in a towel and then in a tray. 4. Use a wooden mallet to crush the ice. 5. The resulting pieces of ice

Fill the ice pack 2/3 full. 6. Add water, press the bubble against a horizontal surface and in this position screw on the lid, turn the bubble over and check its tightness. 7. Pat dry, roll the towel into 4 layers and wrap it around the bubble. 8. Sit or lay the patient in a comfortable position and apply the bladder to the desired area of the body. 9. Leave it for 10-15 minutes, if you need to use it for a long time, take a break of 30-40 minutes. and then repeat the procedure. 10. When finished using, remove the bladder, empty the water, force out the air, screw on the cap and soak it and the towel for at least 60 minutes.

15. How to carry out rubbing, rubbing, lubricating the skin medicine.

Standard answer. Unction. Sequence of actions when rubbing the ointment: I.

Preparation for the procedure; read the name of the drug; provide the patient with the necessary information about the drug; help the patient find a comfortable position; ask if the patient would like to be screened off (if there are other patients in the room); examine the area of skin where you need to rub the ointment; wash your hands;

II. Execution of the procedure; Apply the amount of ointment required for rubbing onto the special device. Remember! The nurse should not rub the ointment on the patient with unprotected hands, as this is unsafe. Rub the ointment with light rotational movements into the skin surface determined by the doctor until traces of the ointment disappear (in some cases there are precise instructions on when to stop rubbing); cover the patient warmly if required by instructions; III. End of the procedure; make sure that the patient does not experience discomfort after the procedure; wash your hands.

In some cases, when the ointment does not have a strong irritating effect on the skin, the patient can rub the ointment in independently (using the fingertips). The movements of the fingers should be light and rotational. When teaching the patient the technique of performing this procedure, you should warn him about the need to wash his hands before and after rubbing in the ointment.

Sequence of actions when applying ointment to the skin:

I. Preparation for the procedure; read the name of the ointment; provide the patient with the necessary information about the drug; help the patient take a position comfortable for the procedure; wash your hands;

II. Execution of the procedure; squeeze out the amount of ointment required for the patient from the tube onto a glass spatula (or take it with a spatula from a large container); apply a thin layer of ointment to the skin using a glass spatula; do not do this with your hands, as some ointments are absorbed through intact skin; ask the patient to hold the surface of the skin with the applied ointment open for 10-15 minutes; ask the patient if he experiences any discomfort due to the procedure; wash your hands;

III. End of the procedure; After examining the skin, make sure that the ointment has been absorbed. In surgical practice, bandages with various ointments are quite widely used.

16. How to measure daily diuresis.

Standard answer. Diuresis is the release of urine over a known period of time. Daily diuresis is the total amount of urine excreted by the patient during the day. Daily diuresis in adults is 800 - 2000 ml and depends on age, temperature and humidity of the environment, nutritional conditions, physical activity and other factors and should be 75-80% of the amount of fluid drunk; 20-25% of the fluid is excreted through sweat, breathing and stool.

Daily water balance is the ratio between the amount of fluid introduced into the body and the amount of fluid excreted from the body during the day. The liquid contained in fruits, soups, vegetables, etc., as well as the volume of parenterally administered solutions are taken into account.

Equipment: medical scales, graduated glass container for collecting urine, water balance sheet.

1. Preparation for the procedure: Make sure that the patient can independently record the fluid. Explain to the patient the need to adhere to the usual water, food and physical regime. Give detailed information about the order of entries in the water balance sheet. Make sure you know how to fill out the sheet. Explain the approximate percentage of water in food to facilitate accounting for the fluid administered (not only the water content in the food is taken into account, but also parenteral solutions administered).

2. Carrying out the procedure: Explain that at 6.00 o'clock you need to urinate in the toilet. Collect urine after each urination into a graduated container and measure urine output. Record the amount of liquid released on the accounting sheet. Record the amount of fluid entering the body on a record sheet. At 6.00 the next day, hand in the record sheet to the nurse.

3. End of the procedure: The nurse determines how much fluid should be excreted in the urine (normal). Compare the amount of fluid excreted with the amount of calculated fluid (80% is the normal amount of fluid excreted). The water balance is negative if less fluid is released than normal. The water balance is positive if more fluid is excreted than normal. Make entries on the temperature water balance sheet.

17. How is biological material collected from patients for laboratory testing? research.

Standard answer. Laboratory research methods serve as an important stage in the examination of the patient. The data obtained helps assess the patient's condition, make a diagnosis, monitor the patient's condition over the dynamics and course of the disease, and control the treatment.

The following types of laboratory tests are distinguished. Mandatory - they are prescribed to all patients without exception, for example, general blood and urine tests. Additional - they are prescribed strictly according to indications depending on the specific case, for example, the study of gastric juice to study the secretory function of the stomach. Planned - they are prescribed a certain number of days after the previous study in order to monitor the patient over time and monitor treatment, for example, a repeat general urine test of a patient with exacerbation of chronic pyelonephritis. Emergency - they are prescribed in an urgent (urgent) situation, when further treatment tactics may depend on the results of the study, for example, studying the content of cardiac troponins in the blood of a patient with acute coronary syndrome. Troponins are highly sensitive and highly specific biological markers of cardiac muscle necrosis that develops during myocardial infarction.

The material for laboratory research can be any biological substrate. Discharges of the human body - sputum, urine, feces, saliva, sweat, discharge from the genitals. Fluids obtained by puncture or pumping include blood, exudates and transudates, cerebrospinal fluid. Liquids obtained using instrumental diagnostic equipment - stomach contents and duodenum, bile, bronchial contents. Organ tissues obtained by biopsy - tissues of the liver, kidneys, spleen, bone marrow; contents of cysts, tumors, glands. Biopsy (bio- + Greek opsia - vision) - intravital

taking a small amount of tissue for microscopic examination for diagnostic purposes.

The ward nurse selects prescriptions from the medical history (from the prescription sheet) and records the necessary laboratory tests in the test log. After receiving biological material (urine, feces, sputum, etc.), she must organize its timely delivery to the laboratory by filling out a referral. The referral must indicate the department, room number, last name, first name, patronymic of the patient, his diagnosis, date and time of sample collection and the last name of the nurse who collected the material. Blood from a finger is taken by a laboratory assistant under appropriate conditions, blood from a vein is taken by a procedural nurse. The correctness of the laboratory test results is ensured by careful compliance with the requirements for the technique of collecting biological material, which depends not only on the competent actions of the nurse, but also on her ability to establish contact with the patient and properly instruct him on the procedure for collecting the material. If the patient finds it difficult to remember and immediately follow the instructions, you should make a short, understandable note for him. To avoid the risk of infection with viral and bacterial infections transmitted through blood and other biological materials, the following precautions should be observed: avoid direct contact with biological material - work only with rubber gloves; handle laboratory glassware carefully, and if damaged, carefully remove glass shards; thoroughly disinfect containers used in the process of collecting biological material - laboratory glassware, vessels and urinals, etc. before draining into the sewer, disinfect patient discharge. If the nurse does get biological material from the patient on the skin, she should immediately treat the contact areas with a 70% alcohol solution, rubbing the skin with a swab soaked in it for 2 minutes, after 5 minutes, rinse the skin with running water.

Blood test

When examining blood, it is necessary to remember that all vital processes are subject to significant variations under the influence of external factors, such as changes in time of day and year, food intake, and changes in solar activity. The biochemical composition of biological fluids is subject to individual fluctuations in different people, reflecting the influence of gender, age, diet, and lifestyle. The morphological composition of blood also fluctuates throughout the day. Therefore, it is advisable to take blood samples at the same time - in the morning on an empty stomach. On the eve of the study, the nurse should warn the patient about the upcoming blood draw and explain that blood is taken on an empty stomach, before taking medications, and that fatty foods should not be eaten for dinner.

When collecting blood from a vein, the time for applying a tourniquet should be as minimal as possible, since prolonged blood stasis increases the content of total protein and its fractions, calcium, potassium and other components. Depending on the purpose of the study, blood is collected for laboratory analysis from a finger (capillary blood) and from a vein (venous blood).

- A laboratory assistant takes blood from a finger; This analysis is necessary for the quantitative and qualitative study of blood cells (erythrocytes, leukocytes, platelets), determining the amount of hemoglobin in the blood and the erythrocyte sedimentation rate (ESR). This test is called a general blood test or general clinical blood test. In addition, in some cases, blood is taken from a finger to determine the level of glucose in the blood, as well as blood clotting and bleeding time.

Currently, devices have been created (for example, "Cholestekh", USA), in which, based on a wax matrix, it is possible to determine the content of total cholesterol and lipoprotein cholesterol in the blood from a drop of blood taken from a finger

high, low and very low density, triglycerides and glucose, calculate the atherogenic index and the risk of developing coronary artery disease.

- Blood from a vein is taken by a procedural nurse through puncture in most cases of the ulnar vein; the blood is mixed in a test tube with an anti-clotting agent (heparin, sodium citrate, etc.). Blood is taken from a vein for the purpose of quantitative study of biochemical blood parameters (so-called liver tests, rheumatological tests, glucose, fibrinogen, urea, creatinine, etc.), detection of infectious agents (taking blood for blood culture and determining sensitivity to antibiotics) and antibodies to HIV. The type of biological material required depends on the purpose of the study: whole blood with an anticoagulant is used to study substances evenly distributed between red blood cells and plasma (urea, glucose, etc.), serum or plasma - for unevenly distributed substances (sodium, potassium, bilirubin, phosphates, etc.). The volume of blood taken from a vein depends on the number of components being determined - usually at the rate of 1-2 ml for each type of analysis.

18. How care is provided for patients of different ages suffering from diseases of various organs and systems and their transportation.

Standard answer. **Diseases of the nervous system.** With some lesions of the nervous system, patients can be in such a serious condition that even transportation to the hospital itself is fraught with danger to their life. Therefore, such patients are sometimes treated at home.

Patients with acute cerebrovascular accidents require special attention. Their prolonged stay on bed rest with forced immobility is fraught with serious complications (bedsores, pneumonia, inflammation of the urinary tract and kidneys). In this regard, careful care is of paramount importance. In the first days, a patient with a stroke is given absolute rest by lying on his back with his head slightly elevated. The dentures are removed, ice is applied to the head, heating pads are applied to the legs, making sure that there are no burns. In case of prolonged absence of consciousness, the doctor may prescribe artificial nutrition. The patient, who is conscious, is spoon-fed and only liquid food (juices, compotes, cereals, tea). If the patient constantly "chokes" while eating, stop feeding. If food gets into the respiratory tract and asphyxia develops (Asphyxia), techniques are used aimed at removing foreign bodies from the respiratory tract: applying abrupt blows to the interscapular area of the patient, pressing on the upper half of the abdomen.

Careful oral care and skin monitoring are necessary to prevent bedsores. You need to monitor regular bowel movements and urination. In case of involuntary urination and defecation, place a rubber bed.

To avoid contractures, the limbs are given a certain position, the arm is abducted, the palm is turned upward, the elbow is bent, the fingers are spread; the leg is extended. If sensitivity is lost, the patient is protected from touching hot or cold things.

To prevent pulmonary complications, as prescribed by the doctor, from the 3rd to the 6th day the patient is turned on his side and elements of breathing exercises are used. After 7-10 days, passive therapeutic exercises usually begin, after 10-15 days - light massage. Patients with paralysis of the limbs especially need outside support.

We need to help them overcome their depressed state and promptly engage them in physical activity, which will allow them to achieve a better outcome of the disease.

When a seizure occurs, its features are noted and reported to the doctor; It is important to monitor whether there was loss of consciousness, tongue biting, foam at the mouth, involuntary urination and defecation during the convulsion.

During a seizure, the patient must be protected from injury: the head is placed on a soft mat or one's leg is placed under it and held with hands. To avoid biting the tongue, a blunt object wrapped in gauze (for example, a spoon) or the folded edge of a towel or napkin is inserted between the teeth from the side. The limbs are slightly supported, protecting them from bruises, but cramps should not be resisted. The patient can be shifted only after the seizure has ended, ensuring conditions for restful sleep.

In case of injuries and a number of diseases of the spine, the patient is placed on a hard bed (a wooden or plastic shield is placed under a thin mattress).

Patients with acute infectious diseases of the nervous system, as well as with traumatic brain injury, often experience mental disorders. During this period, they need bed rest, maximum rest, a gentle diet, and if swallowing is impaired, as directed by a doctor, they use nutritious enemas and feeding through a tube. Silence, cleanliness, comfort, the neat appearance of the caregivers, their patience, sincere, friendly attitude have a beneficial psychotherapeutic effect, especially when the patient is actively focused on a speedy recovery.

Mental illnesses. Mentally ill people in certain conditions are unable to manage their actions, be aware of them, cannot assess their condition. As a result, they may turn out to be dangerous to others, to themselves, or become helpless or suffer from an accident. Caring for mentally ill people involves monitoring their behavior and condition. Difficulties arise due to their lack of contact, isolation in some cases and excitement and anxiety in others. They require endurance, patience and at the same time a vigilant attitude towards them.

In home treatment, the most important role is played by a favorable environment (cleanliness, comfort, silence, absence of fuss, turmoil, compliance with the prescribed regimen), as well as the ability to dispel the patient's unreasonable fear for the outcome of the disease and instill in him faith in his own abilities. It is useful in such cases to switch it to active actions, positive emotions (suitable literature, radio and television programs, etc.). Relatives should vigilantly monitor the timely intake of prescribed medications and adherence to the regimen.

Eye diseases. Caring for ophthalmic patients has a number of features. It is useful to learn, under the guidance of medical staff, to carry out special manipulations: rinse the eyes, administer eye drops, administer ointments, apply bandages to the eyes. When instilling eye drops with a pipette (usually one or two onto the mucous membrane of the lower eyelid), the patient is asked to look up, pull the lower eyelid down with a damp cotton swab, making sure that the tip of the pipette does not touch the eye, eyelids or eyelashes; otherwise, the pipette must be sterilized after the procedure, which is especially important for infectious eye diseases.

For hygienic eye washing (removal of discharge, foreign particles, disinfection of the mucous membrane), a 2% solution of boric acid and a sterile cotton swab are usually used. If the desired effect is not achieved, the patient is referred to a doctor.

To place the ointment behind the eyelids, use a sterile glass rod, while the patient should look up. The ointment is carefully placed on the transitional fold of the conjunctiva of the retracted lower eyelid, then it is suggested to close the eye and at this time the stick is removed, pulling it horizontally towards the temple; the stick should not touch the mucous membrane of the eye. After this, lightly massage the closed eyelids.

Bandages are placed on the eye to protect, warm and create peace when it is injured or sick. First, several layers of gauze are placed on the closed eyelids, then loose layers of cotton wool are placed so that it fills the eye socket, and the eye is bandaged, the width of the bandage is 4-5 cm. They are often limited to a light bandage, which is applied from the earlobe on the side of the affected eye obliquely through the eye and further through the crown to the opposite side of the head.

When caring for patients with contagious eye diseases, measures are taken to prevent the spread of infection.

Pipettes and eye sticks are boiled after each use. After completing the procedure, wash your hands thoroughly with clean running water and soap, wipe them with a solution of furatsilin 1:5000 or 70% alcohol. For such a patient, you need to have separate medications, a pipette and a glass rod. Used cotton balls, bandages, etc. put in a closed vessel and burn.

Diseases of the ear, nose and throat. For acute and chronic purulent otitis several times a day carry out a thorough toilet of the ear. The drops are heated to body temperature, the patient lies on his side, the auricle is pulled back and upward, the drops are poured in, after which the patient should lie down for 10-15 minutes. When applying a warming Compress to the ear, to ensure a tight fit, a longitudinal incision is made in the center of the napkin, through which the auricle is brought out.

When gargling, it is important that the solution is warm. In case of phlegmonous sore throat or retropharyngeal ulcers, the patient's mouth should be rinsed (using a rubber bulb) if he cannot do this himself.

If you don't have an inhaler, but inhalations are prescribed, you can breathe water vapor from a pan removed from the heat. To avoid burns to the respiratory tract, steam is brought to the mouth through a tube made of folded paper. The duration of inhalation is determined by the doctor.

Nasal drops (or emulsions) in preheated form can be administered to the patient in a sitting position with his head thrown back, but it is better in a supine position.

Respiratory diseases. Seriously ill patients are regularly turned in bed to avoid complications; in case of shortness of breath, they are given a sitting or semi-sitting position with their legs down and arm support (if possible, use a chair), and provide an influx of fresh air into the room. During chills, the patient is covered with an additional blanket, given hot tea, and covered with heating pads.

Complete coughing up of sputum is of great importance, which sometimes depends on the patient's position. Thus, sputum discharge can be facilitated if the patient lies on his healthy side. As directed by your doctor, you should start breathing exercises in a timely manner, gradually expanding the set of exercises. When monitoring the state of the respiratory organs, the frequency and rhythm of breathing, the amount of sputum released per day, its nature (admixture of blood, pus, food, smell) are determined.

The sputum is collected in a special jar with a screw-on lid. To eliminate odor, a solution of potassium permanganate is poured into the bottom of the jar. The patient's complaints, the nature and frequency of pain, cough, and shortness of breath are recorded. Treatment is carried out strictly according to the doctor's recommendations.

If severe hemoptysis or asthma attacks occur, patients need immediate medical attention. **Cardiovascular diseases.** The main task of care is to provide bed regimen for exacerbation of the disease and training regimen for improvement. Symptoms of heart failure - shortness of breath, cyanosis, cough, hemoptysis, swelling - may increase or decrease.

Particular concern should be caused by a sudden attack of suffocation, accompanied by cyanosis of the face, and sometimes the release of foamy pink sputum. This may indicate an attack of cardiac asthma, pulmonary edema, requiring emergency medical attention; Before the doctor arrives, the patient is given a semi-sitting position or the head end of the bed is raised, the legs are lowered down, and an influx of fresh air is provided.

When edema appears, it is necessary to approximately determine the amount of liquid in the diet and measure the volume of urine excreted. Consumption of liquid and table salt is sharply limited. The resulting feeling of thirst and dry mouth can be alleviated by giving the patient drinks in small portions (1-2 sips), moisturizing the oral cavity with fruit pulp

(lemon, orange). Excluding pickles, spices, and sweet dishes from the diet also reduces the feeling of thirst.

In case of dizziness or severe headache in people suffering from hypertension, call a doctor. Before his arrival, the previously recommended prescriptions must be carried out: mustard plasters are placed on the back surface of the cervicothoracic spine, medications are given, etc. If chest pain occurs in a patient suffering from angina pectoris, it is necessary to give him nitroglycerin, Votchal drops, and apply mustard plasters to the area of the heart and sternum. If the treatment does not bring a quick enough effect, call an ambulance.

During an attack of palpitations, the patient is given medications prescribed by the doctor.

Attempting to treat these attacks on your own is very dangerous.

Diseases of the gastrointestinal tract may be accompanied by sudden pain of various localizations, dysfunction of the gastrointestinal tract. Until the diagnosis is clarified, you should not give painkillers and laxatives, use enemas, heating pads, or artificially induce vomiting in order to avoid serious complications; A change in the disease picture may cause a diagnostic error. It is better to save vomit and bowel movements until the doctor arrives.

For chronic diseases of the stomach and intestines (gastritis, colitis, pancreatitis, peptic ulcer) and especially their exacerbations, it is recommended to strictly follow the diet and other doctor's prescriptions.

For liver and gallbladder diseases, it is also important to strictly follow a diet with sufficient vitamins. Painkillers are taken, and tubing and thermal procedures are carried out only as prescribed by a doctor.

Injuries, wounds, burns. Care for surgical patients at home is required mainly for minor injuries that do not require hospitalization, after providing qualified care in a clinic or trauma center. Such injuries include simple closed fractures of the bones of the hand, foot, fingers, end of the radius, ankle and some others.

If a plaster cast is applied, then at home you must first of all take care of its integrity. The plaster acquires proper strength only after complete drying, so during the first day the bandage is not covered with clothing so as not to slow down the evaporation of moisture, and is protected from pressure, kinks, etc. The injured limb is kept in an elevated position: this reduces tissue swelling, which always develops after a fracture and can make the bandage tight and constricting. Such compression is manifested by increased pain, bluish discoloration of the skin of the fingers, their numbness, and impaired mobility. If these signs occur, you should immediately consult a doctor. Attempts to independently cut the bandage, remove bandages from a plaster splint, etc. unacceptable. When the plaster has hardened, they begin, as prescribed by the doctor, to systematically make movements in the joints of the affected limb that are not under the bandage. Finger movements are extremely important when the radius is fractured, especially in the elderly. It is at this age that such fractures are most common.

Therapeutic gymnastics promotes healing of the fracture and rapid restoration of limb movements after removal of the plaster cast. If a rib is fractured, the difficulty in breathing can be eliminated by having the patient sit in a semi-sitting position. If this does not help and breathing is difficult, and even more so if hemoptysis appears, you should immediately call an ambulance.

Home care for wounds, burns and after minor surgical operations comes down to monitoring the serviceability and dryness of the bandage. If the bandage has become loose, you need to bandage the patient without opening the wound; if the bandage is wet, apply a second, sterile one over it.

Infectious diseases. Proper care for these diseases is not only a component part of the treatment - it helps prevent infection of those living with the patient.

All principles and procedures of general nursing apply to patients with infectious diseases. But hygiene measures must be more stringent.

First of all, the patient is isolated as much as possible; it is preferable to place it in a separate room. During the period when the patient is contagious, visiting his friends and acquaintances should be excluded. It is better for someone in the family to constantly look after him. The patient is given individual dishes, which are washed and disinfected separately. His linen is washed and boiled with the addition of disinfectants separately from the linen of other family members.

Special care is needed for febrile patients. During the period of rising temperature and chills, the patient should be covered warmly and given a hot drink. Drinking plenty of alkaline water (for example, warm alkaline mineral water, milk with baking soda) is beneficial, reducing the concentration of harmful substances in the blood and tissues of the body and neutralizing them.

An infectious disease can occur with a sharp decrease in body temperature, accompanied by significant weakness and symptoms of cardiovascular failure (the so-called crisis). In this condition, the patient needs urgent medical attention.

In infectious diseases, especially in a febrile state, the function of the digestive tract is disrupted, so you need to carefully monitor oral hygiene. Often, when treating patients with antibiotics, white deposits may appear on the oral mucosa, which should not be mechanically removed. Intestinal and stool dysfunctions (diarrhea, constipation) should be noticed promptly; If there is a change in the color of stool or the presence of impurities, inform the doctor.

Diseases of the female genital organs. Patient care, in addition to general measures, may include douching and administration of medications into the vagina. Toilet of the external genitalia is carried out twice a day (morning and evening); in case of discharge from the genital organs, especially in patients suffering from uterine bleeding, more frequent washing and changing of diapers or sanitary dressings are necessary. If the patient is allowed to walk, it is better to wash in the bathroom or toilet.

Diseases of the urinary system. Among these patients, many elderly people, which requires particularly strict adherence to the rules of general care; untidiness can cause their condition to worsen.

It is necessary to monitor the amount and color of urine and the rhythm of urination daily, promptly informing the doctor about this.

Information about the nature, place and time of pain, its duration, spread to other areas, frequency of the urge to urinate, its delay, false urges or involuntary urination is also important. If urination is delayed, on the recommendation of a doctor, you can place a warm heating pad on the lower abdomen, above the womb, or a cleansing enema; It is also useful to change position. Sometimes the sound of water flowing into the sink when the tap is opened helps restore the urination reflex. In patients with chronic inflammation of the kidneys, the appearance of a sharp headache, drowsiness, twitching of individual muscle groups, nausea, and vomiting should be alarming - the development of renal failure is possible. If these symptoms occur, call an ambulance immediately.

For chronic kidney damage and insufficient kidney function, diet is important. Most often, patients are advised to limit foods containing proteins (especially animals), table salt, and in case of edema, take less liquid. Food should be richly fortified, especially with vitamin C.

These patients are sensitive to cold, so they need warm clothes and bed, a rational thermal regime, and protection from hypothermia.

In patients who have undergone surgery, it is necessary to monitor temporary drainages, used to drain urine from the bladder. Drains can become clogged with blood clots, mucus, and salt deposits, which leads to urinary retention. It is necessary to rinse the drainage tube in a timely manner, and if it is not possible to restore patency, then replace it with a new one. This is done by a doctor or a specially trained nurse. To prevent infection, all drainage tubes that provide urine outflow are connected to sterile urine collection vessels. The hair on the skin surrounding the drainage tube is carefully shaved. If after surgery it is recommended to constantly wear a urine bag, you need to know the rules for caring for it.

As it fills, remove it, pour out the urine and rinse with running water. Periodically (at least once every 2-3 days) they are boiled or treated with disinfectant solutions (potassium permanganate, furatsilin, etc.). For patients with limited range of motion, timely changing of the bandage, wiping the body and changing linen are of particular importance.

Tumor diseases. Caring for patients with malignant tumors has its own peculiarities. When communicating with them, it is necessary to strive to ensure that the patient does not subjugate himself to fear or a feeling of doom. For most tumors, regardless of the stage of the process, a significant effect can be achieved if treatment is started in the early stages of the disease. But even with severe forms, good care alleviates suffering and often leads to long periods of light during the course of the disease. Such patients, as a rule, are on bed rest for a long time, so the prevention of bedsores is of particular importance when caring for them. Medicines (including painkillers) are given strictly as prescribed by the doctor.

Skin diseases. First of all, it is necessary for patients to observe personal hygiene; It is important to provide them with hygienic and therapeutic baths (as prescribed by a doctor), and frequent changes of linen. Patients with weeping rashes, severe attacks of itching and burning in areas of skin lesions need especially careful care.

When treating patients with infectious skin diseases, first of all, the possibility of transmitting infectious agents should be prevented. Patients with fungal infections of the scalp wear gauze or linen caps; When epilating (artificial hair removal), cutting and washing your hair, hair and skin flakes should not be allowed to scatter.

To prevent the spread of mycosis of the feet, the patient's shoes are disinfected and other family members are not allowed to wear them. When dressing patients with pyoderma, measures are taken against the dispersion of microbes, the skin around the affected area is treated with an alcohol solution (boric-camphor, salicylic, etc.), the removed contaminated dressings are collected separately and immediately destroyed. Patients with acute purulent skin lesions are allowed to use a bath or shower by their doctor, subject to special rules.

It is important to learn how to correctly apply lotions, wet drying dressings, shaken suspensions, ointments, pastes that your doctor allows you to use at home. A wet, drying dressing consists of gauze folded into 5-6 layers, moistened with medicinal solutions; it is applied to the skin, covered with a thin layer of absorbent cotton wool and fixed with one or two passes of the bandage; usually change after 3-4 hours.

A shaken suspension ("chatter") is applied with a soft brush or gauze-cotton swab to the affected area of the skin twice a day; no dressing is usually required. Ointments are directly applied to the skin or first applied to a soft tissue, which is applied to the skin and secured with a light bandage; sometimes the ointment is rubbed into the skin (for example, for scabies). The paste is applied to the affected areas of the skin with a metal or wooden plate - a spatula. The paste can also be spread on a cloth that

Apply to the skin and bandage (once or twice a day). Ointments and pastes are removed from the skin with a cotton swab moistened with vegetable oil.

19. How to feed patients.

Standard answer. **Basics of rational nutrition.** The basics of rational nutrition for a healthy person are: Compliance with the daily diet, the total amount of food (sufficient energy value of food is 2800-3000 kcal per day) and depends on the person's lifestyle. For the body to function normally, it is useful to take food 4 times during the day. The daily diet should be composed in the following proportions: breakfast - 25%, lunch - 30%, afternoon snack - 20%, dinner - 25% of the daily diet. Protein at night is not recommended, because... it excites the nervous system. The intake of proteins, fats, carbohydrates (1:1:4), minerals, vitamins, water must be balanced and depends on the body's energy consumption (gender, age, working conditions).

Feeding the sick. Depending on the method of eating, the following are distinguished: forms of nutrition for patients.

Active nutrition - the patient eats independently. During active nutrition, the patient is seated at the table if his condition allows.

Passive nutrition - the patient eats with the help of a nurse. (Seriously ill patients are fed by a nurse with the help of junior medical staff.)

Artificial nutrition - feeding the patient with special nutritional mixtures through the mouth or tube (gastric or intestinal) or by intravenous drip administration of drugs.

Passive nutrition. When clients cannot eat actively, they are prescribed passive nutrition. During strict bed rest, weakened and seriously ill clients, and, if necessary, elderly and senile patients, are provided with feeding assistance by a nurse. When passive feeding, you should lift the patient's head with the pillow with one hand, and with the other hand, bring a sippy cup with liquid food or a spoon with food to his mouth. The patient should be fed in small portions, always leaving the patient time to chew and swallow; You should drink it using a sippy cup or from a glass using a special straw. Depending on the nature of the disease, the ratio of proteins, fats, and carbohydrates may vary. It is mandatory to drink 1.5-2 liters of water per day.

Regularity of meals with a 3-hour break is important. The patient's body needs a varied and nutritious diet. All restrictions (diets) must be reasonable and justified.

A sedentary lifestyle adversely affects human health, which causes many unpleasant consequences: the abdominal muscles become weak, the intestines do not function properly; in a lying position there is not enough good mood, which is why appetite disappears; Difficulties arise with the reflex of swallowing food. A properly designed menu for bedridden patients plays a big role in the patient's recovery. It affects the physical and mental state of the pensioner, makes his life easier, and therefore his well-being improves faster. How to create a menu for bedridden elderly people. There are several well-established principles of proper nutrition that will be useful for any organism, therefore the menu of a bedridden sick elderly person includes the following conditions: Sufficiency. Energy consumption in a supine position is present, although small, so it is important to choose a diet that corresponds to it. Balance of substances. The menu should include all the nutritional elements necessary for the health of an elderly patient. Regularity. You need to monitor the number of meals you eat. Safety. It is important to distinguish products that are no longer fresh so that

do not aggravate the condition of the gastrointestinal tract by including them in the menu, and also follow the rules of hygiene.

20. How to carry out disinfection and pre-sterilization preparation of medical instruments, materials and patient care products.

Standard answer. The purpose of disinfection and sterilization of medical devices is to neutralize and destroy microorganisms. In an effort to save money, some clinic managers neglect compliance with sanitary standards. The result is an increased risk of spreading infectious diseases among patients and staff. Proper decontamination of medical devices is important to maintain a healthy environment. The quality of disinfection is assessed by washing to identify infectious pathogens. Inspection is carried out on 1% of the batch of products that have undergone processing, but not less than three pieces. If there is no increase in the number of microorganisms, the cleaning is considered successful.

Processing stages: Disinfection. Pre-sterilization cleaning. Sterilization. Disinfection treatment involves the elimination of opportunistic and pathogenic flora on interior items, room surfaces, devices and consumables used in the work of a medical institution. The task of disinfection cleaning is to prevent and eliminate the accumulation, reproduction and spread of pathogenic microorganisms. There are two types of processing.

Prophylactic minimizes the risk of infection. The procedure consists of regular wet cleaning and weekly general cleaning of premises with high sterility requirements.

Focal is performed when an infectious focus is suspected and identified.

Preparations for disinfection

The type and concentration of the drug is determined by the causative agent of the infection. Based on the type of medical item, high, intermediate or low level disinfection is carried out.

Classification of processed products: "Non-critical". Are in contact with intact skin. "Semi-critical". Interact with damaged skin and mucous membranes. "Critical". Immersed in sterile tissues and vessels. Interact with blood and injection solutions. The TLD is used for "critical" products. Destroys germs, but not bacterial spores. DPU provokes the death of vegetative forms of bacteria, fungi, and viruses. Does not affect bacterial spores. Small non-lipid viruses demonstrate resistance to the method. "Semi-critical" tools are processed. DNU is used against vegetative forms of microorganisms. Some "semi-critical" and "non-critical" products are processed.

Disinfection treatment methods: Mechanical. Washing surfaces, vacuuming, ventilation, airing. Physical. Boiling, autoclave, dry-heat oven. Chemical. Immersion in disinfectant solution. Bacteriological. Narrowly specific bacteriophages are used.

Rules of the event. The instruments are placed in a disinfectant solution after use, so that the liquid covers the products 1 cm above the surface. Items of complex design are processed in disassembled form. There should be no air bubbles in the cavities. For severe contamination, a double procedure is performed. Devices made of glass, plastic, and rubber are treated with chlorine-containing products. It is prohibited to use a brush for rubber products. Metal tools for long-term use are treated with non-corrosive substances. Upon completion of the procedure, the devices are washed with water.

Precautions: working solutions are prepared in places with good ventilation; gloves, goggles and respirators are used; storing solutions in sealed containers;

the concentrate must not be diluted with water at elevated temperatures; Washing items with running water before disinfection is not permitted.

Disinfection responsibilities are assigned to nursing staff. Pre-sterilization treatment

Instruments that come into contact with wounds and mucous membranes require sterilization. At the preliminary stage, small particles and protein compounds are removed. Disinfectants or special solutions are used. The quality of cleaning is assessed every day through biological and chemical tests.

Sterilization "Critical" items undergo absolute sterilization to kill microorganisms and bacterial spores.

Types of sterilization:

Chemical. Plasma method or exposure to chemical solutions. Physical. Involves exposure to steam, heated air, and UV radiation. In dentistry, the glasperlene method is used.

Gas. Exposure to a mixture of ethylene oxide and carbon dioxide.

Successful sterilization is possible if the following conditions are met: steam supply under pressure, temperature mode, exposure period.

Types of sterilizers

Devices whose operating principle is based on UV radiation. Tools are processed for 25 minutes. Various models of equipment for processing small instruments are available. For example, a glasperlene sterilizer is a chamber with glass balls that heat up to 240 degrees. Used in dentistry. Some health care facilities use gas sterilizers. Such devices provide the possibility of sterilizing packaged materials. Disadvantages: high cost and long exposure. SPS plasma sterilizers are a modern technique for processing instruments and equipment that are sensitive to humidity and elevated temperatures.

21. How to perform different types of enemas.

Standard answer. An enema is a therapeutic and diagnostic manipulation, the essence of which is the introduction of various solutions and liquids into the lower segment of the colon, which is performed for diagnostic or therapeutic purposes. Types of enemas depend on their main purpose.

Today, several varieties are classified, which differ depending on the functional purpose and method of installation. An enema can only be administered if you have certain skills, technical devices, and precise knowledge of all indications and contraindications for use.

Types of enemas

Types of enemas can be very diverse depending on the purpose of use, the volume of administered therapeutic fluid, its temperature and composition. (cleansing; medicinal; nourishing; laxative.)

Depending on the texture of the liquid administered, enemas can be oil or water. Based on the amount of medicinal fluid administered, procedures are divided into microenemas and standard ones.

Indications and contraindications for the procedure

Indications for the use of enemas depend on their type. Types of enemas and their administration, as well as indications for use are as follows:

Cleansing

The procedure is performed before childbirth, abortion or surgery. Stool disorders or prolonged absence. In case of food poisoning. Before endoscopy. A cleansing enema is used before various diagnostic procedures.

Medical

Local beneficial effect on the intestines and other organs of the digestive system. General therapeutic effect on the human body. Use when administering medications through the oral cavity is contraindicated. Used when the large intestine is inflamed.

Laxative

If necessary, cleanse the intestines. When the effectiveness of a cleansing enema is low. With extensive swelling.

Nutritious

Used when necessary to provide the body with nutrients. In case of dehydration. In the absence of the possibility of receiving nutrients or medications through the mouth.

Enema is a popular therapeutic procedure, but it also has a wide range of contraindications. Enema is strictly contraindicated for the following diseases: Presence of bleeding from the digestive system. Painful abdominal cramps of uncertain nature. Benign or malignant neoplasms in the rectal cavity. Hemorrhoids accompanied by bleeding. Intestinal infections and inflammatory processes in the rectal area.

It should be remembered that such a medical procedure as an enema should be prescribed exclusively by a doctor. You should not self-medicate, as improper use of an enema can cause serious harm to the body.

Important rules for the treatment procedure

To carry out an enema, a special device called an Esmarch mug, made of glass or rubber, is used. This tank can have a volume of 1 to 2 liters. It is imperative to strictly observe the temperature regime of the administered drug. The tip of the Esmarch mug must be sterile. Care must be taken to ensure that no unpleasant or painful sensations arise when inserting the tip. If they occur, the position of the enema must be changed.

Enema solution. Water or medication should be administered slowly in small portions. When injecting liquid, you should not experience painful spasms. A one-time administration of therapeutic fluid should in no case exceed a volume of 2 liters. After administering the enema, you should take a relaxed position and behave as calmly as possible, avoiding any sudden movements. If, after performing an enema, bowel cleansing has not been achieved, in no case should you immediately repeat the procedure - this can only be done after the intestines are cleared of contents.

Cleansing enema

As the name implies, a cleansing enema is used to cleanse the intestinal cavity and rectum of accumulated feces. It can also be used before various types of examination of the intestinal cavity, childbirth, abortion or surgical interventions. In some cases, the use of a cleansing enema is recommended for food poisoning. Most often, the cleansing procedure is used before an X-ray examination of the digestive or urinary system, as well as the pelvis. During the cleansing procedure, warm water in a volume of 0.5-2 liters is introduced into the intestinal cavity. The maximum volume of a single infusion is determined based on the age and waist circumference of the patient.

Cleansing enema In the case of minimal peristalsis of the intestinal walls, enemas using cool water can be used; for painful cramps in the stomach, cleansing procedures with warm or hot water can be used.

It should be remembered that when performing a cleansing enema, only the lower segment of the colon is emptied. This occurs due to increased peristalsis of the intestinal walls and subsequent liquefaction of stool. Laxative enema

A laxative procedure is used for constipation and stool disorders. It is recommended when the patient does not have stool for more than 48 hours. To set the Esmarch mug, an oil composition or a certain drug is used, for example, an isothermal hypertonic sodium chloride solution. It is for this reason that in some cases such enemas are also called hypertensive. These medicinal compositions perfectly dilute accumulated feces without increasing the peristalsis of the intestinal walls. Isothermal hypertonic sodium chloride solution is administered using an Esmarch cup. After administration, you should try to hold it for at least 25-30 minutes, after which you can go to the toilet. Oil enemas are recommended in the evening, before bedtime. This is due to the fact that after performing an oil enema, it is recommended to spend at least 8-10 hours in a comfortable lying position. As a rule, bowel movement occurs 10-11 hours after the procedure.

Therapeutic enemas

Therapeutic therapy is used when it is not possible to administer the required drug orally. This procedure can be used for the purpose of a general or systemic therapeutic effect - that is, for a positive effect exclusively on the intestines or the entire human body. This procedure is carried out in several stages - first you need to do a cleansing enema and rid the intestines of feces, and only after that a therapeutic enema is performed. The volume of the drug administered using an Esmarch mug usually does not exceed 50-100 ml.

Nutrient enema

Nutrient enemas are most often used when the body is dehydrated, as well as when certain nutrients are needed. Through the mucous tissue of the rectum, all administered substances are quickly absorbed and distributed throughout the body through the bloodstream. Sodium solution. Therapeutic nutritional fluids are administered at different temperatures depending on their type. In case of severe dehydration, it is recommended to administer a hot isotonic sodium solution, which helps replenish fluid in the human body. A nutritional enema is carried out when it is impossible to receive therapeutic fluid or other substances through the oral cavity. As in the previous case, it is carried out exclusively after a bowel cleansing procedure. Today, nutritional procedures are used extremely rarely. This is due to the fact that this procedure is accompanied by a number of difficulties, lack of necessary skills and appropriate equipment. Staging technique

To perform a cleansing enema, you will need an Esmarch rubber mug and approximately 1-1.5 liters of warm water. To improve the liquefaction of feces, you can add a little glycerin or any vegetable oil to the water. The can must be filled with the prepared composition, the tip must be lubricated with baby cream or Vaseline. The patient lies on the couch, on his left side, with his legs bent and slightly pulled towards the body, after which the tip is carefully inserted into the anus. There should not be any uncomfortable or painful sensations. After inserting the canister into the anus, the liquid is injected into the rectal cavity with soft, leisurely movements, then the tip of the rubber canister is carefully removed. The patient must try to hold the liquid in himself for at least 10-15 minutes, after which he can go to the toilet. Other types of procedures are performed in the same way - the differences are only in the volume of the drug administered. For example, in

When using an oil enema, it is quite enough to introduce 100-200 ml of oil at room temperature into the body. After just 15 minutes, a person can go to the toilet to have a bowel movement.

Things to remember

Every person who has heard about the benefits of cleansing or other enemas should remember that in any case this is a medical procedure that is strictly not recommended to be carried out on your own. Esmarch's irrigator. The use of Esmarch's mug is permitted only in exceptional cases - when there is a serious need for it. Carrying out the procedure on your own and regularly is strictly not recommended, as this can cause serious harm to the body. During the procedure, care must be taken to carefully follow all antiseptic rules - the tip of the rubber can must be sterile. After the procedure, it should be thoroughly rinsed with hot water, then treated with an antiseptic solution. In no case should you administer the medicinal liquid at a rapid pace - this can provoke painful spasms in the intestinal area. The composition is introduced slowly and carefully, in some cases even drop by drop.

22. How to carry out oxygen therapy using various methods.

Oxygen therapy can be carried out by inhalation - through the respiratory tract (Bobrov apparatus, oxygen cushion, ventilator) or by non-inhalation - through the digestive tract, subcutaneously.

Oxygen supply through a nasopharyngeal catheter

Preparation for the procedure:

- if possible, establish a trusting relationship with the patient;
- explain to the patient the purpose and course of the procedure;
- prepare the Bobrov apparatus for operation;
- pour sterile distilled water with a temperature of 30-40 degrees into the container to humidify oxygen or other liquid prescribed by the doctor;
- tightly close the screw on the plug;
- connect the rubber tubes with the glass ones on the Bobrov apparatus (the long one to the oxygen source, the short one to the patient);
- place the patient in an elevated position;
- wash your hands, put on gloves.

Performing the procedure:

- open the package with the catheter;
- determine the length of the inserted part of the catheter (the distance from the tragus of the auricle to the entrance to the nose, this is approximately 15 cm), put a mark;
- transfer the catheter to your right hand and grasp it like a pen at a distance of 3-4 cm from the inserted end;
- moisten the inserted part of the catheter with sterile Vaseline;
- insert the catheter along the lower nasal passage to the mark;
- inspect the pharynx by pressing the back of the tongue, the tip of the catheter should be 1 cm below the small tongue;
- secure the outer part of the catheter on the patient's cheek with an adhesive tape;
- connect the catheter through a rubber tube to the short glass tube of the Bobrov apparatus;
- open the valve of the oxygen source, adjust the oxygen supply rate (2-3 liters per minute).

Completing the procedure:

- monitor the patient's condition (duration of inhalation 40-60 minutes);
- remove the catheter;

- disinfect the catheter and gloves;

- Wash and dry your hands.

Note: the catheter can remain in the nasal cavity for no more than 12 hours. If it is necessary to continue oxygen supply, then in order to prevent bedsores and dryness of the nasal mucosa, change the position of the catheter by inserting it into the other nasal passage after first turning off the oxygen.

Oxygen supply from an oxygen bag

Preparation for the procedure:

- explain to the patient the purpose and course of the procedure, obtain consent for the procedure;

- fill the pillow with oxygen from a cylinder:

- remove the mouthpiece from the pillow;

- connect the rubber tube of the cushion to the cylinder through the cylinder reducer;

- open the valve on the pillow tube, then on the cylinder;

- fill the pillow with oxygen (the oxygen pressure on the pressure gauge should not be more than 2-3 atm.);

- close the valve on the cylinder, then on the pillow;

- disconnect the tube from the cylinder reducer;

- put a pillowcase on the pillow;

- treat the mouthpiece with 70 degree alcohol and connect it to the pillow tube;

- wrap the mouthpiece with a damp gauze cloth (to humidify oxygen, which prevents burns of the mucous membranes of the respiratory tract).

Performing the procedure:

- place the mouthpiece to the patient's mouth and open the valve on the pillow;

- adjust the oxygen supply rate (inhale through the mouth, exhale through the nose);

- press on the pillow and roll it up from the opposite end until the oxygen is completely released.

Completing the procedure:

- remove the mouthpiece with the pillow;

- throw the napkin into the waste tray;

- place the mouthpiece in a disinfectant solution;

- wash your hands.

23. How to determine the characteristics of the pulse on the radial artery.

Standard answer. The sequence of the procedure: 1) take a watch or stopwatch, a temperature sheet, a red pencil; 2) psychologically prepare the patient for manipulation; 3) take both hands of the patient and clasp them in the area of the wrist joints so that the thumbs are on the outer surface of the patient's forearms from below, and the tips of the second, third and fourth fingers are on the inner surface of the forearms from above; 4) palpate the arteries on both arms, pressing them with moderate force against the radial bones, and determine the synchronicity and rhythm of the pulse waves; 5) lower one arm of the patient, mark the time on the stopwatch and count the pulse rate for 1 minute; 6) determine the pulse tension, pay attention to its rhythm and filling; 7) register the heart rate value in the temperature sheet in red.

24. How is blood pressure measured?

Standard answer. One of the most important indicators of human health is blood pressure. Monitoring your blood pressure will help you detect the development of dangerous diseases in time and take timely measures to treat and prevent them. In order to control blood pressure, it is necessary not only to purchase

a reliable and accurate device for measuring it, but also know how to measure blood pressure correctly.

Rules for measuring blood pressure.

It is very important to follow the rules for measuring pressure, because the accuracy of the measurement results depends on it. The existing rules are quite simple and their implementation will not cause difficulties even if you independently measure blood pressure. Before measuring your blood pressure, you should not eat, drink caffeinated drinks, smoke, or drink alcohol. If the above steps have been completed, then you should start measuring pressure no earlier than after 1.5 hours. It is recommended to measure blood pressure while sitting or lying down. It is necessary to take a relaxed position - lean your back against the back of a chair or armchair, place your hand on a table or other surface so that the cuff is at heart level. Pressure is measured on the non-working hand (for right-handers - left, for left-handers - right). Correct placement of the cuff on the arm is important. The cuff should follow the contour of the arm, tightly covering it. The OMRON fan-shaped cuff fits well, providing even compression, which is important for accurate and comfortable measurements. The lower edge of the cuff should be 2 cm above the elbow. During measurement, you should not move, talk, or be distracted by extraneous stimuli

- TV, radio, conversations of household members and telephone conversations, loud music and the like. The pressure should be measured three times with an interval of 2 minutes. If your blood pressure level is normal, then measuring once a day will be enough to control your blood pressure. If the pressure level deviates from the norm, then it is necessary to monitor its fluctuations, measuring three times a day - morning, afternoon and evening.

Features of measuring pressure with a wrist tonometer. Automatic wrist blood pressure monitors are very convenient to use. They are not inferior in accuracy to traditional shoulder blood pressure monitors, but at the same time they are lightweight and mobile - you can easily take them with you to the gym, to work, for a walk, or on a trip. The accuracy of wrist tonometer measurements depends greatly on how accurately the measurement rules have been followed. When using wrist tonometers, the general recommendations listed above must be followed. The edge of the cuff should be above the bone on the arm. You need to place the hand with the tonometer on the middle of the shoulder of the other hand, at the level of the heart. With the other hand, you need to press the "Start" button, and then hold the hand with the tonometer by the elbow until it stops measuring. Compliance with all measurement rules will allow you to obtain accurate results of blood pressure levels, be aware of its fluctuations and take timely measures that can save your health and life.

25. How is an oral examination performed?

Standard answer. Begin by examining the vestibule of the mouth with the jaws closed and the lips relaxed, raising the upper lip and lowering the lower lip or pulling the cheek with a dental mirror. First of all, the red border of the lips and the corners of the mouth are examined. Pay attention to color, formation of scales and crusts. On the inner surface of the lip, as a rule, there is a slight bumpy surface due to the localization of small salivary glands in the mucous layer. In addition, you can see pinholes - the excretory ducts of these glands. At these holes, when the mouth is fixed in an open position, an accumulation of droplets of secretion can be observed. Then use a mirror to inspect the inner surface of the cheeks. Pay attention to its color and moisture content. Along the line where the teeth meet in the posterior part, there are sebaceous glands (Fordyce glands), which should not be mistaken for pathology. These are pale yellow nodules with a diameter of 1-2 mm, not rising above the mucous membrane, and sometimes visible only when the mucous membrane is stretched. At the level of the upper second molars there are papillae on which the excretory ducts of the parotid salivary glands open. They are sometimes mistaken for signs of illness. On

the mucous membrane may contain dental imprints. An important role is played by determining the relationship between the dentition and bite. According to modern classification, all existing types are divided into physiological and pathological. Following the examination of the oral cavity, the gums are examined. Normally, it is pale pink and tightly covers the neck of the tooth. The gingival papillae are pale pink and occupy the interdental spaces. A groove is formed at the site of the periodontal junction (previously it was called a periodontal pocket). Due to the development of the pathological process, the gingival epithelium begins to grow along the root, forming a clinical, or periodontal (pathological), dentogingival pocket. The condition of the formed pockets, their depth, and the presence of tartar are determined using an angled button probe or a probe with notches applied every 2-3 mm. Examination of the gums allows you to determine the type of inflammation (catarrhal, ulcerative-necrotic, hyperplastic), the nature of the course (acute, chronic, in the acute stage), prevalence (localized, generalized), severity (mild, moderate, severe gingivitis or periodontitis) of inflammation. There may be an increase in the size of the gingival papillae due to their swelling, when a significant part of the tooth is covered. To determine the CPITN' (index of need for the treatment of periodontal diseases), proposed by WHO, it is necessary to examine the surrounding tissues in the area of 10 teeth (17, 16, 11, 26, 27, which corresponds to teeth 7, 6, 1, 6, 7 in the upper jaw, and 37, 36, 31, 46, 47, which corresponds to 7, 6, I, 6, 7 teeth on the lower jaw). This group of teeth allows you to create a complete picture of the condition of the periodontal tissues of both jaws. Its formula is as follows: In the corresponding cells, the condition of only 6 teeth is recorded. When examining teeth 17 and 16, 26 and 27, 36 and 37, 46 and 47, codes corresponding to a more severe condition are taken into account. For example, if bleeding is detected in the area of tooth 17, and tartar is detected in area 16, then code 2 is entered in the cell, indicating tartar. If any of these teeth is missing, then examine the tooth next to it in the dentition. If there is no tooth nearby, the cell is crossed out with a diagonal line and does not participate in the summary results.

Examination of periodontal tissues is carried out by probing to detect bleeding, supra- and subgingival calculus and pathological pockets using a special (button) probe. The load on the periodontal probe during examination should be no more than 25 g. A practical test to establish this force

- pressing with a periodontal probe under the thumbnail without causing pain or discomfort. The probing force can be divided into a working component (to determine pocket depth) and a sensing component (to detect subgingival calculus). The patient's pain during probing is an indication that too much force is being used. There are no clear rules determining the number of probings, which depends on the condition of the tissues surrounding the tooth. However, it is unlikely that probing more than 4 times will be required in the area of one tooth. The sign of bleeding can appear either immediately after probing or after 30-40 seconds. Subgingival tartar is determined not only by its obvious presence, but also by subtle roughness, which is revealed when the probe moves along the root of the tooth according to its anatomical configuration.

CPITN assessment is carried out using the following codes: 0 - no signs of disease; 1 - gum bleeding after probing; 2—presence of supra- and subgingival tartar; 3—pathological pocket 4-5 mm deep; 4 - pathological pocket with a depth of 6 mm or more. Assessing the hygienic state of the oral cavity is an important indicator of the occurrence and course of pathological processes in it. At the same time, it is important to have not only a qualitative indicator, which would allow us to judge not only the presence of dental plaque. Currently, many indices have been proposed that can be used to determine the hygiene index according to Green-Vermillion and Fedorov-

Volodkina. quantify the various components of oral hygiene.

Green and Vermillion (1964) proposed the Simplified Oral Hygiene Index (SHI). To do this, determine the presence of plaque and tartar on the buccal surface of the first upper molars, the lingual surface of the first lower molars and the labial surface of the upper incisors: On all surfaces, plaque is first determined, and then tartar. The following ratings are used: 0—no plaque; 1 - dental plaque covers no more than 1/3 of the tooth surface; 2 - dental plaque covers from 1/3 to 2/3 of the tooth surface; 3 - dental plaque covers more than 2/3 of the tooth surface.

When determining the oral hygiene index according to Fedorov-Volodkina (Fig. 4.3,6), a solution of iodine and potassium iodide (crystalline iodine 1 g, potassium iodide 2 g, distilled water 40 ml) is used to lubricate the vestibular surfaces of the 6 frontal teeth of the lower jaw. Quantitative assessment is carried out on a five-point scale: staining the entire surface of the crown - 5 points; 3/4 surface - 4 points; 1/2 surfaces - 3 points; 1/4 surfaces - 2 points; absence of staining - 1 point. The average index value is calculated using the formula: Indicator 1 - 1.5 indicates good hygienic condition, and indicator 2-5 indicates unsatisfactory condition of the oral cavity. Podshadlei and Haley (1968) proposed an oral hygiene performance index. After applying dyes and rinsing with water, a visual inspection of six teeth is carried out: 16 and 26 - buccal surfaces, 11 and 31 - labial surfaces, 36 and 46 - lingual surfaces.

The surface of the teeth is conventionally divided into 5 sections: 1 - medial; 2 - distal; 3 - mid-occlusal; 4 - central; 5 - mid-cervical. In each area, codes are determined: 0 - no painting, 1 - painting of any surface. The calculation is made according to the formula: where ΣH is the sum of codes for all teeth; n is the number of teeth examined. An indicator of 0 indicates excellent hygienic condition of the oral cavity, and 1, 7 and more - unsatisfactory. Tumors and swellings of various shapes and consistencies may form on the gums. The most common abscesses are a sharply hyperemic area of the gum mucosa with an accumulation of purulent exudate in the center. After opening the abscess, a fistula tract occurs. A fistulous tract can also occur if there is a focus of inflammation at the apex of the root. Depending on the location of the fistula tract, its origin can be determined. If it is located closer to the gingival margin, then its origin is associated with an exacerbation of periodontitis, and if it is located closer to the transitional fold, then its occurrence is due to changes in periodontal tissues. It should be remembered that X-ray examination is of decisive importance.

26. How the gas outlet tube is inserted.

Standard answer. A gas outlet tube is a soft rubber tube 30-50 cm long, 3-5 mm in diameter with a rounded end, which is used to remove gases from the intestines, as well as when performing some enemas (medicinal, hypertonic, oil).

Purpose: - removal of gases from the intestines.

Indications: - flatulence.

Contraindications: - intestinal bleeding; - acute inflammatory or ulcerative processes in the colon or anus; - malignant formations in the rectum; - cracks in the anus; - rectal prolapse; - bleeding hemorrhoids.

Equipment: sterile gas outlet tube, petroleum jelly, oilcloth, oilcloth apron, gloves, sterile tweezers, diaper, vessel or tray with water, sterile napkins,

containers with disinfectant solution, container for waste materials, screen (when performing the procedure in the ward), toilet paper, spatula.

Manipulation algorithm: 1. Prepare everything you need. 2. Prepare the patient and receive it. 3. Separate the patient with a screen (if the procedure is carried out in the ward). 4. Put on gloves and an apron. 5. Place an oilcloth with a diaper under the patient. 6. Place the patient on his left side with his knees bent and legs brought to his stomach (or lying on his back with his knees bent and legs apart). P. Performing manipulation. 7. Use a spatula to take petroleum jelly and lubricate the rounded end of the tube at a distance of 15-20 cm. 8. Take the gas outlet tube in your right hand at a distance of 4-5 cm from its rounded end like a "writing pen", and bend the free (widened) end of the tube and fix it 4-th and 5th fingers of the right hand. 9. Spread the buttocks with the 1st and 2nd fingers of the left hand and with rotational movements with the right hand, carefully insert the tube to a depth: - 5-8 cm in children under 1 year; - 8-10 cm from 1 to 3 years; - 10-15 cm from 3 to 7 years; - 20-30 cm for older children and adults, placing the outer end at least 10 cm. 10. Lower the free end of the tube into a vessel or tray of water. 11. Cover the patient with a blanket and leave it for 1 hour. 12. Remove gloves and immerse them in the disinfectant solution. 13. Wash and dry your hands. 14. Monitor the patient every 15-20 minutes (general condition, release of gases). III. End of manipulation. 15. Put on gloves. 16. Carefully remove the gas outlet tube through a napkin and place them in the disinfectant solution. 17. Carry out dez. treatment of used vessel or tray. 18. Wipe the anus with a napkin and then disinfect it. 19. Remove the oilcloth and diaper and then process them. 20. Remove gloves and apron and immerse them in disinfectant solution. 21. Wash and dry your hands. 22. Make a note about the performed manipulation in the medical documentation. Note: when dense feces accumulate in the intestines, insertion of a gas outlet tube is difficult, so in such cases it is necessary to administer a microenema with glycerin or chamomile.

27. How the technique of performing intramuscular injections is carried out.

Standard answer. Intramuscular injections are most often carried out in the upper outer quadrant of the gluteal region (to determine the injection site, the buttock area is conventionally divided into four squares by two lines (Fig. 9, Appendix)) or the anterior outer surface of the thigh. The patient's position is lying on his stomach or on his side (this position helps to relax the muscles of the gluteal region).

Procedure: preparing a syringe with a medicine for injection: wash your hands thoroughly with soap and running warm water; without wiping with a towel, so as not to disturb the relative sterility, wipe them with alcohol; put on sterile gloves; - open the packaging of the disposable syringe, take the needle by the coupling with tweezers in your right hand, place it on the syringe; - check the patency of the needle by passing air or sterile solution through it, holding the coupling with your index finger, put the prepared syringe in a sterile tray; - before opening an ampoule or bottle, carefully read the name of the medicine to make sure it corresponds to the doctor's prescription, check the dosage and expiration date; - lightly tap the neck of the ampoule with your finger so that the entire solution ends up in the wide part of the ampoule; - file the ampoule in the area of its neck and treat it with a cotton ball soaked in a 70% alcohol solution; when taking the solution from the bottle, remove the aluminum cap from it with non-sterile tweezers and wipe the rubber stopper with a sterile cotton ball moistened with a 70% alcohol solution; - use the cotton ball that was used to wipe the ampoule, break off the upper (narrow) end of the ampoule; - take the ampoule in your left hand, holding it with her thumb, index and middle fingers, and in her right hand - a syringe; - carefully insert a needle placed on the syringe into the ampoule, and, pulling back the piston, gradually draw the required amount of the contents of the ampoule into the syringe, tilting it if necessary; - when drawing a solution from pierce the rubber stopper of the bottle with a needle, put the needle with the bottle on the cone of the syringe, lift the bottle upside down and draw the required amount of medicine into the syringe

substances; - remove the syringe from the needle to collect the drug and put an injection needle on it; - remove the air bubbles present in the syringe, to do this, turn the syringe with the needle up and, holding it vertically at eye level, pressing on the piston, release the air and the first drop of the medicinal substance, holding the needle by the sleeve with the index finger of the left hand; - treat the injection site sequentially with two cotton balls with alcohol: first the large area, then the injection site itself; - perpendicular to the surface of the skin, with a vigorous movement at an angle of 90°, insert the needle to a depth of 3/4 its length (it is necessary to insert the needle so that 2-3 mm remains between the needle sleeve and the patient's skin); - then, slowly pressing on the syringe plunger, inject the medicinal substance evenly; - remove the needle from the patient's body with a sharp movement, at the same angle without making unnecessary movements of the needle in the tissue; - treat the injection site with a clean cotton swab soaked in 70% ethyl alcohol.

28. How the technique of performing subcutaneous injections is carried out.

Standard answer. Due to the fact that the subcutaneous fat layer is well supplied with blood vessels, subcutaneous injections are used for faster action of the drug.

Subcutaneously administered medicinal substances have an effect faster than when administered orally, because they are quickly absorbed. Subcutaneous injections are made with a needle of the smallest diameter to a depth of 15 mm and up to 2 ml of medications are injected, which are quickly absorbed into the loose subcutaneous tissue and do not have a harmful effect on it.

The most convenient areas for subcutaneous administration are: - the outer surface of the shoulder; - the subscapular space; - the anterior outer surface of the thigh; - the lateral surface of the abdominal wall; - the lower part of the axillary region. In these places, the skin is easily caught in the fold and there is no danger of damage to blood vessels, nerves and periosteum. It is not recommended to inject: - into places with swollen subcutaneous fat; - into seals from poorly resolved previous injections.

Procedure: - wash your hands thoroughly with soap and running warm water; without wiping with a towel, so as not to disturb the relative sterility, wipe them with alcohol; put on sterile gloves; - prepare a syringe with the drug (see intramuscular injection); - treat the injection site sequentially with two cotton balls with alcohol: first the large area, then the injection site itself; - place the third ball with alcohol under the 5th finger of the left hand; - take the syringe in your right hand (hold the needle cannula with the 2nd finger of your right hand, hold the syringe piston with the 5th finger, hold the cylinder with the 3rd-4th fingers from below, and hold the cylinder from the top with the 1st finger); - assemble with your left hand, insert the skin into a triangular fold, base down; - insert the needle at an angle of 45° into the base of the skin fold to a depth of 1-2 cm (2/3 of the needle length), hold the needle cannula with your index finger; - move your left hand to the piston and insert medicine (without transferring the syringe from one hand to the other). - remove the needle, holding it by the cannula; - press the injection site with a cotton ball with alcohol; - do a light massage of the injection site without removing the cotton from the skin.

29. How the technique of performing intravenous injections is carried out.

Standard answer. To perform intravenous injections, it is necessary to prepare on a sterile tray: a syringe (10.0 - 20.0 ml) with a drug and a 40 - 60 mm needle, cotton balls; tourniquet, roller, gloves; 70% ethyl alcohol; tray for used ampoules, vials; container with a disinfectant solution for used cotton balls.

Procedure: - wash your hands thoroughly with soap and running warm water; without wiping with a towel, so as not to disturb the relative sterility, wipe them

alcohol; put on sterile gloves; - draw the medicine from the ampoule into a disposable syringe; - help the patient take a comfortable position - lying on his back or sitting; - give the limb into which the injection will be made the required position: the arm is extended, palm up; - under the elbow place an oilcloth pad (for maximum extension of the limb in the elbow joint) - apply a rubber band (on a shirt or napkin) to the middle third of the shoulder so that its free ends are directed upward, the loop is directed downward, the pulse on the radial artery should not change; - ask the patient to work with his fist (for better pumping of blood into the vein); - find a suitable vein for puncture; - treat the skin in the area of the elbow with the first cotton ball soaked in 70% ethyl alcohol, in the direction from the periphery to the center, discard it (preliminary skin treatment); - take the syringe in your right hand: fix the needle cannula with your index finger, with the rest cover the cylinder from above; - check that there is no air in the syringe, if there are a lot of bubbles in the syringe, you need to shake it, and small bubbles will merge into one large one, which is easy to displace through the needle into the tray; - again with your left hand, treat the venipuncture site with a second cotton ball with alcohol, discard it; - fix the skin in the puncture area with your left hand, stretching the skin in the area of the elbow with your left hand and slightly shifting it to the periphery; - holding the needle with the cut upward insert it under the skin at an angle of 45°, then reducing the angle of inclination and holding the needle almost parallel to the surface of the skin, move it along the vein and carefully insert the needle 1/3 of its length (with the patient's clenched fist); - continuing to fix the vein with your left hand, slightly change direction of the needle and carefully puncture the vein until you feel "entering a void"; - pull the plunger towards you - blood should appear in the syringe (confirmation of the needle entering the vein); - untie the tourniquet with your left hand, pulling one of the free ends, ask the patient unclench your hand; - without changing the position of the syringe, press the plunger with your left hand and slowly inject the medicinal solution, leaving 0.5 ml in the syringe (if it was not possible to completely remove air from the syringe); - apply a cotton ball with alcohol to the injection site and remove gently moving the needle out of the vein (prevention of hematoma); bend the patient's arm at the elbow joint, leave the ball with alcohol in place, ask the patient to fix the arm in this position for 5 minutes (to prevent bleeding); - dump the syringe into a disinfectant solution or cover the needle with a cap; - after 5-7 minutes, take the cotton ball from patient and dump it into a disinfectant solution or into a bag from a disposable syringe; - remove gloves, dump them into a disinfectant solution; - wash your hands.

30. How to prepare the system for intravenous transfusion.

Preparing the system for intravenous transfusion.

1. Put on a mask, wash your hands thoroughly with soap and running warm water, without wiping with a towel, so as not to disturb the relative sterility, wipe them with 70% ethyl alcohol, put on sterile gloves.
2. Check the expiration date and tightness of the packaging with the system by squeezing it on both sides.
3. Prepare a sterile tray with napkins and cotton balls.
4. Take a bottle with a medicinal substance, check the expiration date, appearance, and compare it with medical prescriptions.
5. Remove the central part of the metal cap from the bottle with tweezers and treat the bottle stopper twice with cotton balls soaked in 70% ethyl alcohol.
6. Open the package and remove the system.
7. Close the clamp on the system.
8. Remove the cap from the polymer needle and insert it into the bottle until it stops.
9. Turn the bottle upside down and secure it on a tripod.
10. Open the air duct plug on the system.

11. Fill the dropper to half the control container, periodically pressing on its body.
12. Open the clamp and release air from the tube system.
13. Close the clamp and fix the system on the tripod.
14. Perform venipuncture.
15. Use the clamp to adjust the required infusion rate.
16. After the manipulation, the used system must be disinfected (before soaking the system in the solution, it must be cut with scissors).

31. How wet cleaning of surgical hospital premises is carried out.

Cleaning the premises of the surgical department

The design and equipment of the surgical department must be such that repeated cleaning can be easily done. Wet cleaning is done twice a day, morning and evening. The walls are washed once every three days. When carrying out wet cleaning, various antiseptics can be used (hydrogen peroxide, chloramine, anolyte). An obligatory element of sanitary and hygienic measures is wet cleaning of furniture and processing of patient care items. An important measure to prevent airborne infection is ventilation of premises. It must be carried out on schedule. Ventilation alone reduces air contamination by 30%. In addition, all wards and diagnostic and treatment rooms are equipped with bactericidal lamps.