MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
V. N. Karazin Kharkiv national university

THE MAIN TYPES OF ENEMAS AND THE RULES OF THEIR APPLICATION. PATIENT PREPARATION AND NECESSARY EQUIPMENT FOR TAKING FECES FOR EGGS OF HELMINTH, OCCULT BLEEDING, COPROGRAM. RULES FOR TAKING URINE ANALYSIS FOR ZIMNYTSKY, ADDIS-KAKOVSKY STUDY AND THEIR DIAGNOSTIC VALUE

Methodological recommendations
for independent preparation for practical classes
for the 3rd year higher medical education applicants
in the discipline «Nursing practice. The main duties and professional activities of medical nurse in therapeutic department»

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М19 The main types of enemas and the rules of their application. Patient preparation and necessary equipment for taking feces for eggs of helminth, occult bleeding, coprogram. Rules for taking urine analysis for Zimnytsky, Addis-Kakovsky study and their diagnostic value : methodological recommendations for independent preparation for practical classes for the 3rd year higher medical education applicants in the discipline «Nursing practice. The main duties and professional activities of medical nurse in therapeutic department» : translation from Ukrainian language / edited by : Mariia S. Brynza, Ella V. Karnaukh, Olena S. Makharynska and others. – Kharkiv : V. N. Karazin KhNU, 2020. – 28 p. : website : http://medicine.karazin.ua/en/kafedri/kafedra-propedevtiki-vnutrishnoi-meditsini-i-fizichnoi-reabilitatsii-/navchalno-metodichni-materiali-dlya-studentiv

The methodological recommendations were developed by the team of teachers of the Department of internal medicine propaedeutic and physical rehabilitation of V. N. Karazin Kharkiv national university of the School of medicine. An indicative map of the applicants work for higher medical education is provided, with clear, consistent and detailed recommendations for preparation at each stage of the practical training. The list of basic theoretical questions and practical skills, structure and content of topics, test modules for the initial and final level of knowledge control are given, the basic and additional literature is specified, there are references to the electronic resources of department's educational materials in the annexes.

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CONTENTS

Estimated map of work for higher medical education applicants for practical classes preparation ……. 4

Purpose and main tasks of the work on the topic of the practical lesson **THE MAIN TYPES OF ENEMAS AND THE RULES OF THEIR APPLICATION. PATIENT PREPARATION AND NECESSARY EQUIPMENT FOR TAKING FECES FOR EGGS OF HELMINTH, OCCULT BLEEDING, COPROGRAM. RULES FOR TAKING URINE ANALYSIS FOR ZIMNYTSKY, ADDIS-KAKOVSKY STUDY, AND THEIR DIAGNOSTIC VALUE**.

MAIN QUESTIONS (the main theoretical questions and basic practical skills on the topic of the practical lesson) ……..…….. 7

Tests to control the INITIAL LEVEL OF KNOWLEDGE ……..……. 9

STRUCTURE AND CONTENT OF THE TOPIC …...……... 11

Test to control the FINAL LEVEL OF KNOWLEDGE ……..…….. 19

SELF-WORK of the 3rd year higher medical education applicants on the topic of the practical lesson ……...…….. 22

Recommended literature (Basic, Additional) …….…….…. 23

Annex 1. Official site of V. N. Karazin Kharkiv national university and page of the Department of propaedeutic of internal medicine and physical rehabilitation of the School of medicine …….…….…..……. 25

Annex 2. Electronic V. N. Karazin Kharkiv national university institutional Repository (eKhNUIR) ….……...…… 26

Annex 3. The official Facebook group of the Department of propaedeutics of internal medicine and physical rehabilitation of the V. N. Karazin Kharkiv national university.
News, announcements, useful information for students ....…..……..…. 27

ESTIMATED MAP OF WORK FOR HIGHER MEDICAL EDUCATION APPLICANTS FOR PRACTICAL CLASSES PREPARATION

Preparatory phase:	
1.	To know **the interdisciplinary integration** of practical classes topic with the acquired theoretical knowledge and practical skills in basic disciplines (medical biology, medical and biological physics, Latin language, human anatomy, normal and pathological physiology, biological and bioorganic chemistry, pathological anatomy, microbiology, virology and immunology, pharmacology etc.). Acknowledge the terminology (including Latin transcription).
2.	**Motivational characteristic** and **substantiation of the topic** of the practical lesson **on behalf of the formation of clinical thinking,** in particular for the further development of skills to apply knowledge and certain practical skills established on the basis of the educational-qualification characteristic (EQC) and the educational-professional training (EPT) of the medical specialty.
3.	To give better insights into the types of student's educational activity, information provided on the reference stands of the department: **thematic-calendar plans of lectures**, **practical classes and extra-curriculum independent work of students (ISW)**, corresponding to the curriculum and to the working program in discipline «**Nursing practice. The main duties and professional activities of medical nurse in therapeutic department**».
4.	Utilization of the basic and additional **educational and methodical literature**: ● **textbooks** and **tutorials** (printed and electronic versions) which are listed in these guidance after the theoretical section; ● **educational and methodological materials of the department** (methodological recommendations for student's preparation for practical classes and for independent student's work);

● attendance of **lectures** (on-site supply of the educational process using multi-media presentations during lectures) – according to the thematic plan. Usage of **printed publications** for classes preparation, they can be obtained from the library, and / or **electronic versions of it**, that available on the official website of the V. N. Karazin KhNU http://www.univer.kharkov.ua/ua/departments (Section navigation: ... / Schools / Departments / Propaedeutics of internal medicine and physical rehabilitation) – ref. Annex 1; and in the open interactive database of the electronic archive of the V. N. Karazin KhNU Repository http://ekhnuir.univer.kharkov.ua (navigation: School of medicine / Educational editions) – ref. Annex 2. It is advisable to note the main issues in the form of summaries.
Main phase: Practical classes duration is 4 academic hours, they are held at **the clinical base of the department** — Specialized medical and sanitary department № 13 (Kharkiv, Kyivsky district, Academika Kurchatova avenue, 29) – future V. N. Karazin KhNU Clinic – ref. Annex 3. **NOTE!** It is forbidden to attend department classes without a medical uniform, replaceable shoes, medical cap, mask, shoe covers, stethofonendoscope.
1. To achieve the educational goal of practical classes and mastering the theoretical part of the subject it is necessary to **LEARN** and **ASKKNOWLEDGE** the answers **to the main theoretical questions** of the lesson's topic (ref. the list of the main theoretical questions) that will be checked by the teacher through an oral and/or written survey (correction, refinement, additional answers) during the main phase of the practical classes conduction.
2. **TO BE ABLE TO** solve theoretical, multiple choice test with explanation (to control the initial and final levels of knowledge), situational tasks proposed for mastering of the topic.

3.	**TO MASTER PRACTICAL SKILLS** on the topic: ● To take an active part in the demonstration by a teacher of skills: conducting, questioning, reviewing the patient and rules for determining the main indicators of the cardiovascular and respiratory systems (pulse, blood pressure, respiration) and providing first aid to patients with violations of these systems. ● Make a preliminary assessment of the patient's temperature homeostasis as a result of determining the body temperature and registering the temperature curves, demonstrating the skills of caring for patients with fever. ● Demonstrate skills in personal hygiene and care for patients who are seriously ill. ● Demonstrate ownership of the basic methods of intensive care. ● To know and fulfill the basic duties of junior medical personnel at all stages of the patient's stay in the departments and units of the therapeutic hospital (polyclinic, reception, in-patient department, transportation and sanitary-hygienic mode of stay in specialized departments, basic rules for nursing practice and implementation of medical appointments (medical, physiotherapeutic, perform the necessary medical manipulations, etc.), especially the cleaning of the premises of the therapeutic department, the filling of the medical documentation, etc.).
4.	**EXECUTE** obligatory tasks foreseen for student's independent work.
	Final phase:
1.	On the basis of mastering of theoretical knowledge and practical skills from the subject of practical training, to introduce the basic principles of nursing practice of adult age in the conditions of a general-therapy permanent establishment in the process of further training and professional activity.
2.	During practice, fill out a diary of practice.

The purpose and main tasks of the work

The goal is to achieve the main endpoints defined in the Master's Degree Program (MDP) (second level of high education), Discipline 22 «Health care» Specialty 222 «Medicine» which was established on the basis of educational qualification characteristics (EQC) and educational-professional training (EPT) of a medical specialty «**Nursing (practice). The structure and main tasks of care of patients in the general system of treatment of patients of therapeutic profile**», which is made on the basis of the program for the nursing practice of therapeutic profile for higher medical institutions of education of Ukraine III-IV accreditation levels.

Main tasks:

1. Acquiring and improving the professional skills of a nurse.
2. Fixing in practice theoretical knowledge of basic disciplines.
3. Deepening and systematization of knowledge and skills in the nursing practice in accordance with the principles of medical ethics and deontology.

As a result of studying the discipline the 3rd year higher medical education applicants must:

TO KNOW: moral and deontological principles of a medical professional and principles of professional subordination in the therapeutic clinic.

TO BE ABLE: to organize the regime and nursing work with various therapeutic diseases, to perform necessary medical manipulations.

SELF-WORK of the 3rd year higher medical education applicants on the topic of the practical lesson:

- Transmission training for practical classes.
- Realization of practical skills of nursing manipulations.
- Work in in-patient departments as a nurse.
- Individual work.

THE MAIN TYPES OF ENEMAS AND THE RULES OF THEIR APPLICATION. PATIENT PREPARATION AND NECESSARY EQUIPMENT FOR TAKING FECES FOR EGGS OF HELMINTH, OCCULT BLEEDING, COPROGRAM. RULES FOR TAKING URINE ANALYSIS FOR ZIMNYTSKY, ADDIS-KAKOVSKY STUDY AND THEIR DIAGNOSTIC VALUE

MAIN QUESTIONS

As a result of studying the 3rd year higher medical education applicants must KNOW (the main theoretical questions):

1. The main types of enemas.
2. Indications and contraindications to use an enemas.
3. Equipment and methods administration of enemas.
4. The rules taking stool for identification of helminth eggs.
5. Dietary restrictions of patients before fecal examination for coprogram and fecal occult blood test.
6. The rules taking of feces for coprogram and fecal occult blood test.
7. The rules for taking urine analysis for Zimnytsky, Addis-kakovsky study.

must BE ABLE (basic practical skills on the topic of the practical lesson):

1. Explain to the patient the rules and methods administration of enemas.
2. To prepare the necessary equipment for administration different types of enemas.
3. Assess the patient's condition during the enema and their effectiveness.
4. Explain to the patients the rules and measures regarding preparation for the taking stool for identification of helminth eggs, coprogram, fecal occult blood test.
5. Be able to mark tools for feces and urine tests.
6. Explain to the patients the purpose and peculiarities of urine collection for urine analysis by the methods of Zimnytsky and Addis - Kakovsky.
7. Be able to evaluate the results of urine tests.

Test to control the INITIAL LEVEL OF KNOWLEDGE

1. What purpose enemas are carried out:
   A. Therapeutic
   B. Diagnostic
   C. Nutrition
   D. Cleansing
   E. All answers are correct.
2. Contraindications to cleansing enemas:
   A. subfebrile temperature
   B. acute appendicitis
   C. constipation
   D. labor contractions
   E. preparation of the patient for nutritional enema.
3. For administration of cleansing enema used:
   A. rubber ballon/bag
   B. Esmarch's mug (Esmarch's irrigator klistier)
   C. Janet glass syringe (Syringe type Janet)
   D. 1,5 liter funnel
   E. a plastic bag with a capacity of 10 to 75 liters, equipped with a rubber tube with a faucet and mouthpiece.
4. How much liquid is prepared for siphon enema:
   A. 1 – 1.5 liters
   B. 2 – 3 liters.
   C. 10 – 15 liters.
   D. 5 – 10 liters.
   E. 4 – 6 liters.
5. In the study of feces by macroscopically is determine:
   A. color

B. density

C. form

D. impurities (admixture)

E. all of the above.

6. In the study of feces by microscopically is determine:

A. blood elements

B. helminth eggs

C. vegetable fibers

D. muscle fibers

E. all of the above.

7. What should be labeled on the specimen container/tube of the feces or urine for inpatient?

A. Patient passport data, date, diagnosis

B. Last name, initials, department name, ward number, specimens title, date

C. Last name, initials, department name, ward number, specimens name, date, diagnosis

D. Last name, initials, ward number, specimens name, date, diagnosis

E. Patient passport data, department name, ward number, specimens name, date.

8. The daily (24-hour urine volume) amounts of urine in a healthy person is:

A. 1000 ml

B. 2000 ml

C. 1500 ml

D. 3000 ml

E. 500 ml.

9. Clinical urinalysis include:

A. physical properties

B. qualitative reaction to the presence of chemicals

C. quantitative reaction to the presence of chemicals

D. precipitate microscopy

E. all of the above.

10. To determine the daily excretion of glucose with urine, it is collected:

A. overnight in a single container

B. during the day, each serving separately, marking the time of urination

C. morning urine

D. Urine secreted during 10 night hours

E. every 3 hours in a separate jar/cup with marking the portion numbers.

Standarts of answers: 1–E, 2–B, 3–B, 4–C, 5–E, 6–E, 7–B, 8–C, 9– E, 10–A.

STRUCTURE AND CONTENT OF THE TOPIC

Topic relevance. Preparing to work and clearly realizing responsibilities of the nurse is an integral part of the healing process, a way of easing the patient's condition and providing the success of the treatment. The average medical staff together with a doctor take a place in efforts near the bed of the patient for save his life and health. Because a well-established diagnosis is the basis for a patient's recovery, one of the most important responsibilities of the nurse is to prepare the patient for testing and collecting of specimens.

Basic types of enemas and rules for their used

An enema is the administration into the lower part of the large intestine of various fluids for therapeutic or diagnostic purposes.

An enemas are used for the purpose of cleansing the intestines (cleansing enemas) or administration nutrients or medical agents (nutrients, treatment enemas).

Enema enhances the peristalsis of the large (reflex) and small intestine, has a laxative effect, in some cases to relieve obstruction.

Indications and contraindications to the cleansing enema:

Cleansing enema is prescribed for constipation, with the aim to cleanse the intestines from feces and gases, poisoning, during preparation for surgery, radiological examination of the stomach and intestines, gall bladder, kidneys, radiography of the lumbosacral spine, coccyx and pelvis bones, preparation endoscopic examination of the gut, before carrying out therapeutic and nutritional enemas.

Cleansing enemas can not be used, if inflammatory, ulcerative and purulent processes in the area of anal sphincter, rectum and colon, fragmentation of a tumor of a rectum are found. They are also contraindicated in gastrointestinal bleeding, appendicitis, peritonitis, after operations on abdominal organs, at collapse.

Next complications are possible: intestinal bleeding, injury and rupture of the rectum.

For enemas use rubber, pear-shaped balloons/bag of various sizes from 30 to 100 ml and larger.

Cleansing enemas require significant amounts of water administrated by Esmarch's mug (Esmarch's irrigator klistier). It is also necessary to prepare enema kits includs oil (lubricant), urinals, vaseline, tripod.

All items used for cleansing enema are boiled. Boiled water of 25-30 ◦C temperature is administrate into the intestines.

In case spastic constipation, to relive spasms of smooth muscle of the intestine, water with high temperature (37-38 ◦ C) is taken.

Atonic constipation uses cool water, the temperature of which is 22-24 ◦C and even 20◦C, which increases tonus and peristalsis of the large intestine.

One cleansing enema requires a quantity of water: 1.5-2 liters, temperature 25-35 ◦C

Fill the enema bag with warm water, lubricated the end of the tube with mineral oil or Vaseline, then turning the enema bag with the tip up, careful pressing on its bottom to get rid of any air until the water from the tip.

The patient is placed on the left side and pull the knees and legs to the chest (left-lateral Sims' position).

The distal end of the rectal tube of the enema bag is inserted into the anus towards to the umbilicus by 3 - 5 cm, and then it in parallel to the coccyx to a depth of 10-12 cm, then gently squeeze the fluid into the rectum. Pour no more than 1-1.5 liters of water. A large amount of fluid can stretch the rectum, cause spastic pain and urge to defecate. If these things are too pronounced, it is necessary to temporarily reduce the water pressure by lowering the Esmarch mug below, or stop the infusion at all. At the bottom of the enema bag leave some water to prevent air from entering the gut. Keep the buttocks closed for 8-10 minutes so that the liquid does not spill out. It is easier to reach the needed fluid retention time, if patient lie on your back and breathe deeply. Then the patient is offered to empty the intestine. If the enema has not worked, it can be repeated in a few hours.

Hypertonic enema (enemas that uses hypertonic solutions) more indused intestinal peristalsis than usual, so it is prescribed to relieve intestinal paresis in adults. In the rectum entered 25 - 100 mL of 10% solution of salt (hypertonic sodium solution).

Excessive constipation is sometimes need to apply oil enemas (oil retention enema), they are administrated with a small balloon, the tip of which should be entered 10 -12 cm (to keep oil inside the patient as long as possible to allow sufficient time for the oil to be effective) and instilled into the rectum, usually 30 to 100 mL of any oil (Proven, linen, hemp, sunflower), heated to 37-38 ◦ C.

If oil and cleansing enemas are not effective, give the patient a return flow enema (also known as Harris flush, siphon enema).

Siphon enema is administrated for intestinal obstruction, poisoning, preparation of the patient for surgery on the large intestine. This method of gut washing is based on the use of the principle of coupled vessels. One is the intestine and the other is the funnel at the outer end of the rubber tube entered into the rectum. Before the siphon it is necessary to put a cleansing enema.

For a siphon enema you will prepare: a funnel with a volume of 1-1,5 L, a rubber tube 1 - 1.5m with a rectal tip, vaseline (mineral) oil, a solution container of 3- 5 Liters with warm boiled water (35- 36 ◦ C), linen-saver pads, washbowl or wash water bucket.

The method of siphon enema: the patient is placed on the left side with pull the knees and legs to the chest, under the buttocks place the linen-saver pads so that the other end of it reaches the bucket or pelvis, where the wash water will flow. Vaseline lubricated flexible tip with gentle rotational motions is entered 20 - 40 cm into the rectum. The funnel filled with water hold to a height of 1-2 m above the patient. After administration most of the prescribed amount of solution, stop the flow by lowering the solution container below bed level and allowing gravity to siphon the enema from the colon. Continue to raise and lower the container until gas bubbles and pieces of feces cease. Do not allow the solution container to empty completely before lowering it because this may introduce air into the bowel. The enema may requires 10 - 15 Liters of water. After the procedure, the rubber tip is left in the colon for 15 -30 minutes instead of a gas tube. In addition to gases from the intestine, residual water is also discharged through the tip.

The condition of the patient should be monitored as this procedure is a difficult manipulation for the patient. In case severe abdominal pain, worsening of condition, the appearance of blood in the wash water, the procedure is immediately stopped.

Medicating enemas - used if necessary to enter into the rectum medical substances. Carried out immediately after voluntary bowel cleansing, or after 10

- 15 minutes after cleansing enema. The volume of therapeutic enema 1-2 liters administrated by instilled method. The medicated enema includs of an Esmarch's mug, two rubber tubes connected by a dropper, a glass adapter and a thick rubber probe. On the rubber tube above the dropper, a screw clamp is secured to regulate the rate of flow of the solution into the gut. For the manipulation also requires a therapeutic solution (up to 3 liters per day), heated to a temperature of 38-40° C, lubricant, tripod, hot water bottle. Esmarch's mug is hold on a tripod at a height of 1 m above the bed. To keep the solution warm, the Esmarch mug is wrapped in a cotton pad or attached to its back wall by a hot water bottle.

The patient is put in a comfortable position. The enema tip is enter to a depth of 20-25 cm. The clamp regulates the frequency of flow of solution drops (60-100 per 1 min). In the form of medicating enemas entering: 0.5% tannin solution; chamomile broth, rosehip oil, sea buckthorn and commercially prepared small-volume enemas. To reduce intestinal peristalsis, it is a commonly used starch enemas (5 g of starch) shake in 100 mL of warm water and fill with 100 mL of boiling water, then cool to 40 - 42 ◦ C. An example of medicating enemas is a Kayexalate enema, administrated for the purpose of lowering a very high potassium.

Since this procedure takes several hours (it depend on types of enemas and purposes of procedure), the patient should be covered with a blanket. The nurse should constantly monitor the rate of fluid flow and its temperature. After the enema, the patient should lie down for at least 1 hour.

Preparation of patients and necessary equipment for taking feces for identification of helminth eggs, fecal occult blood test, feces general analysis (coprogram or stool test)

Fecal sampling for coprogram examination

Prior to the stool test examination of feces for 4 - 5 days the patient is transferred to a strict diet with a known chemical composition of food. The patient does not use iron, bismuth, tannin, barium, pilocarpine, atropine, belladonna, carbolen (activated charcoal), castor and vaseline oil, they do not put rectal suppositories, enemas, do not use warm procedures (sauna, bathhouse).

The laboratory delivers morning freshly taking feces in the amount of 5-10 g, collected with a spatula in a clean glass or plastic container with a wide top. Samples of feces are taken from its inner part and outer surface. Feces fragments from 2-3 places of the whole fecal mass are taken for examination. On the specimen container/tube should be labeled the patient's surname and initials, department, ward, sample name, date of sample.

In patients requiring bed rest, feces are collected in a dry container (urinals), let known the patient not to urinate in that container.

A coprogram examination is performed to determine the peristalsis function of the gut and their digestion properties. Classical coprological examination has four groups of methods: macro and microscopic, bacteriological and chemical. Macroscopic examination assesses the shape, consistency, color, smell, presence of blood and mucus; for microscopic - the presence of connective tissue, muscle fibers, neutral fat, fatty acids, undigested fiber, leukocytes, erythrocytes, epithelium, helminth eggs. For qualitative testing of a feces, the time from taking the analysis to conducting the examination should not be more than 8-12 hours.

Taking feces for identification of helminth eggs

For the identification of helminth eggs, it is recommended to carry out the study three times at intervals of 1-2 days. Feces are taken with a spatula immediately after defecation in the amount of 30-50 g in a warm form from three different sites. If the patient is taking anthelmintic drugs, the whole portion

of the feces is sent for study.

Fecal sampling for fecal occult blood test

(Gregersen reaction or Benzidine-based test)

This analysis is intended to determine the hidden bleeding from the upper gastrointestinal tract. Before the study of feces for the presence of hidden blood, the patient is prescribed a so-called hemoglobin diet for three days. Meat, fish, liver, caviar, buckwheat, egg dishes, green vegetables, tomatoes, apples, pomegranates are excluded from the diet. Excludes medicines containing iron, bromine, iodine. If the patient has bleeding in the mouth, he or she is advised to replace the brushing with a 3% sodium bicarbonate solution.

The feces are collected in clean container.

A slide smear is prepared on the slide and a freshly prepared Gregersen reagent is applied dropwise. A blue colour appears if the faeces contain blood. If the reaction is immediate, it is rated as positive (++++), if within the first 30 seconds it is positive (+++), within 1 minute it is weakly positive (++ or +). The reaction after 2 minutes is considered negative.

RULES FOR TAKING URINE ANALYSIS FOR ZIMNYTSKY, ADDIS-KAKOVSKY STUDY AND THEIR DIAGNOSTIC SIGNIFICANCE

Taking urine analysis for Addis – Kakovsky study

This method determines the number of leukocytes, erythrocytes and cylinders (casts) in the daily amount of urine.

Collection rules:

Urine collected during 10 night hours is collected in one conteiner.

At 10 pm the patient empty the bladder and tries not to urinate at night. All urine recovered at 8 am is sent for study. If the patient urinated during the night, then 4-5 drops of formaldehyde were added to the urine conteiner to prevent the mold elements from collapsing.

In the study by this method calculate the number of shaped elements in the urine sample per day.

Normal range:

- leukocytes - not more than $2 * 10^6$;
- erythrocytes - not more than $1 * 10^6$;
- hyaline casts - not more than $2 * 10^4$.

Taking urine analysis for Zimnytsky study (Zimnitsky's test)

This method determines the functional ability of the kidneys. Zimnytsky's method allows to evaluate the ability of the kidneys to concentrate urine (maximum specific gravity), the ability to osmotic dilution (minimum specific gravity), the rhythmic activity of the kidneys during the day, the adaptive capacity of the kidneys.

Before the study, the patient is avoided diuretics and limit fluid intake to 1.5 liters per day. The nurse prepares 8 cups. Attaches a label to each of them with the name of the study, the surname and initials of the patient, the ward, the ward number. It also indicates in Roman numerals the portion number and time during which the patient should fill the cup.

Collection rules: the first urination (usually at 6.00 am) is not collected, the patient freely urinates in the toilet or urinals, but this portion of urine can be used for other necessary laboratory tests, which will speed up the examination. Then, starting at 9 hours, every 3 hours the patient urinates alternately into one of the separate clean cups/conteiners, numbered according to the time of urination. During the day, the patient receives regular food. If there is a need for urination in the interval between the specified time, the patient should collection urine into the next cup, and then, at the time of urination, the patient should again do urination into the same cup. If the patient has not been urinating for some time, the conteiners remain empty. If the patient has polyuria and lacks the volume of one cup, the nurse issues an additional one, indicating the portion number and the patient's surname. At six in the morning of the next day, the last

portion is collected. The cups, including the empty ones, are delivered to the laboratory after collecting all 8 sampls.

Volume and specific gravity are determined in each sampls.

Assessment of the results take into account:

-the amount of urine excreted per day;

- the ratio of day (from 6 to 18 hours) and night (from 18 to 6 hours). Normally it is 2:1;

- indicators of specific gravity and their variation during the day. Normally, the difference between the maximum and minimum should be at least seven points. There are no contraindications to this test.

Test to control the FINAL LEVEL OF KNOWLEDGE

1. The enema kit for treatment constipation includs:

A. Pear-shaped balloon, thick gastric tube, funnel

B. Pear-shaped balloon with tip, gas flow tube.

C. Esmarch's mug, thick gastric tube, funnelи

D. Esmarch's mug, funnel, gas flow tube

E. Pear-shaped balloon, a funnel, gas flow tube

2. How is the distal end of the rectal tube of the enema bag inserted into the rectum when the enema is administrated?

A. It doesn't matter

B. 1 - 2 cm towards to the of the umbilicus, and then 3 - 4 cm parallel to the coccyx

C. First 3 - 4 cm towards of the umbilicus, then 5 - 8 cm, and then parallel to the coccyx

D. The first 5 - 6 cm towards to the of the umbilicus, and then 2 - 3 cm in

parallel to the coccyx

E. The first 5 - 6 cm towards to the of the umbilicus, and then 6 - 8 cm parallel to the coccyx

3. What type of enema can be prescribed to a patient with atonic constipation?

A. Oil enemas

B. Siphon enemas

C. Cleansing enemas

D. Hypertonic enemas

E. Emulsion enemas

4. What method of kidney assesment characterizes their concentration capacity?

A. Zimnнtsky's test

B. Blood electrolytes

C. Urine analysis by Nechyporenko

D. Reberga-Tareeva test

E. Nitrogenous blood

5. Choose the correct option for the use of hypertonic enema:

A. 10% sodium chloride solution

B. 10% solution of calcium chlorid

C. 40% glucose solution

D. 4% sodium bicarbonate solution

E. 0.9% sodium chloride solution

6. Medicating enemas of local action do not use:

A. with infusion of marigold (medicating flowers)

B. Oils

C. Starch

D. With infusion of chamomile (medicating flowers)

E. Cleaning enema

7. In case of atonic constipation using enemas with water, the temperature of which is:

A. Below 20° C.

B. 20-25° C

C. 25-30° C

D. 30-35° C

E. 40-42° C

8. Therapeutic enemas of general action are prescribed for:

A. A fecal impaction in the rectum (a solid, immobile bulk of feces).

B. Prolonged long-lasting constipation

C. Inflammatory processes in the rectum.

D. The impossibility of administrated drugs in another way

E. Pathological process in the small intestine

9. What is amount of fluid required for the cleansing enema

A. 30 mL

B. 60 mL

C. 90 mL

D. 150 mL

E. 200 mL.

10. In the patient the daily diuresis was 5430 mL. This symptom is called:

A. dysuria

B. nocturia

C. anuria

D. oliguria

E. polyuria

Standarts of answers: 1–B, 2–C, 3–D, 4–A, 5–A, 6–E, 7–A, 8–D, 9–A, 10–A.

SELF-WORK

of the 3rd year higher medical education applicants

on the topic of the practical lesson

1. Prepare the appropriate tools and demonstrate the technique of cleansing enema on the mannequin.
2. Prepare the appropriate tools and demonstrate the technique of siphon enema on the mannequin.
3. Prepare the appropriate tools and demonstrate the technique of oil enema on the mannequin.
4. Prepare the appropriate tools and demonstrate the technique of hypertonic enema on the mannequin.
5 Prepare the appropriate tools and demonstrate the technique of taking feces for identification of helminth eggs.
6 Prepare the appropriate tools and demonstrate the technique of taking fecal sampling for fecal occult blood test.
7 Prepare the appropriate tools and demonstrate the technique fecal sampling for coprogram examination.
8 Prepare the appropriate tools and demonstrate the technique of performing urinalysis for Zimnytsky study.
9 Prepare the appropriate tools and demonstrate the technique of performing urinalysis for Addis – Kakovsky study.

Recommended literature

Basic:

1. Buppert Carolyn. Jones & Bartlett Learning : Nurse Practitioner's Legal and Business Practice Guide. 6th edition. – 2017. – 516 p.
2. Care for patients (practice) : a textbook for students of higher medical educational institutions of the III-IV accreditation level / count. actors; ed. O. N. Kovaleva, V. N Forestry, R. S. Shevchenko, T. V. Frolova. – K .: VSI Medicine, 2014. – 432 p.
3. Kovalyova O. M., Safargalina-Kornilova N. A, Gerasimchuk N. M. Deontology in medicine : a textbook for students of higher medical schools of III-IY levels of accreditation. – Kharkiv, 2014. – 258 p.
4. Doenges Marilynn E., Moorhouse Mary Frances, Murr Alice C. Nursing Diagnosis Manual. 5th edition. – New York : F. A. Davis Company, 2016. – 1123 p.
5. Buppert Carolyn. Jones & Bartlett Learning : Nurse Practitioner's Legal and Business Practice Guide. 6th edition. – 2017. – 516 p.
6. Silver Spring : Guidelines by American Nursing Association. Nursing : Scope and Standards of Practice. 3rd esition. 2015. – 264 p.
7. Perrin K., MacLeod C. Understanding the Essentials of Critical Care Nursing. – New York : Pearson. 2017. – 640 p.

Additional:

1. Goroll A. H., Mulley A. G. Jr. Primary Care Medicine : Office Evaluation and Management of the Adult Patient. – Philadelphia: LWW, 2014. – 5680 p.
2. Workshop on the course "Nursing in a Therapeutic Institution" / Contributors: T. V. Ascheulova, O. M. Kovaleva, I. V Sitina. – Kharkiv : KhNMU, 2018. – 41 p.
3. Silver Spring : Guidelines by American Nursing Association. Nursing: Scope and Standards of Practice. 3rd esition. – New York : 2015. – 264 p.

4. Orders of the Ministry of Health of Ukraine governing the activities of the nurse of the therapeutic department (official site of the Ministry of Health of Ukraine). [Electronic resource]. - Access mode: http: // moz.gov.ua/

No. 120 - AIDS; No. 415 - Supplement to the AIDS Order

No. 245 - Alcohol consumption

No. 288 is an nosocomial infection

No. 334 - Disposable Material Recycling

No. 344 - Poisonous and potent substances

No. 349 - Disposal of medicines.

No. 408 - Prevention of viral hepatitis

No. 654 - Immediate message (especially dangerous infections)

No. 720 - Aseptic, antiseptic

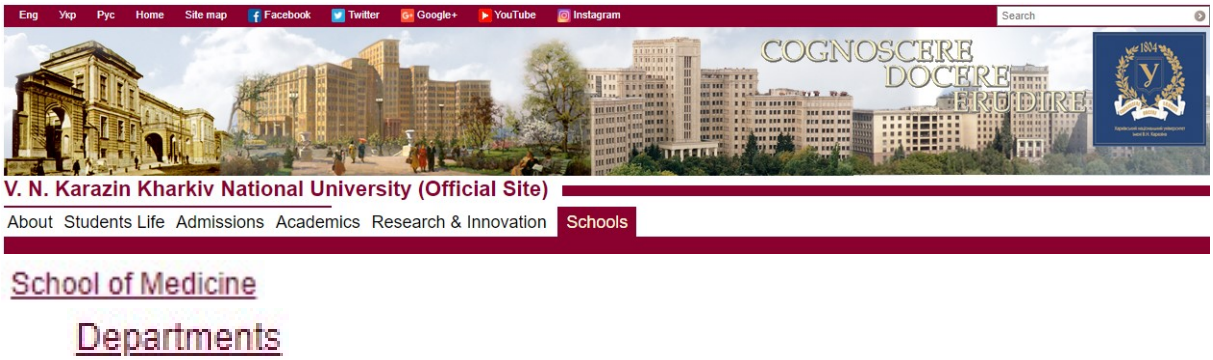
No. 747 - The expense of medical supplies

GST 42-21-2-85 - Local standard

SanPin 5179-90 - Sanitary and hygienic rules

Annex 1

Official site: http://www.univer.kharkov.ua/en/departments



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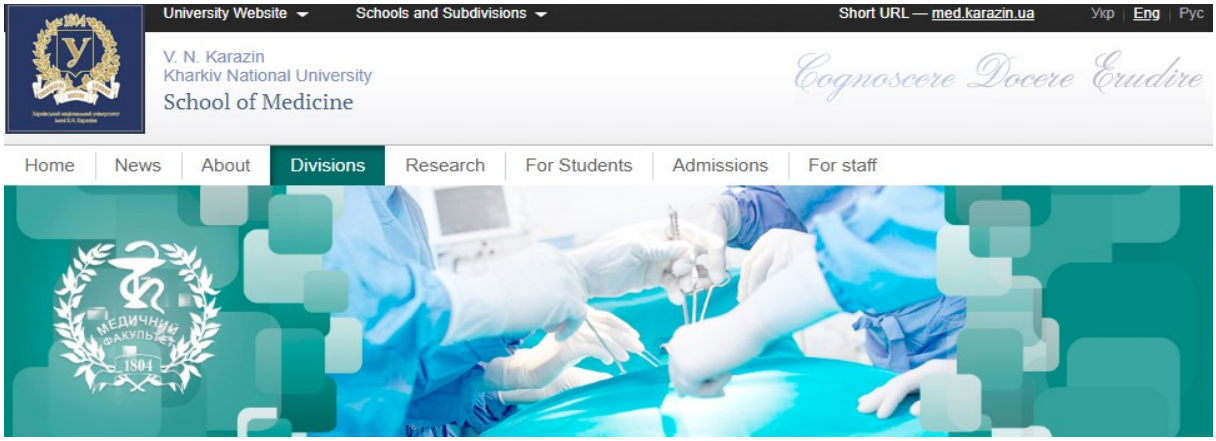

- Department of Propaedeutics of Internal Medicine and Physical Rehabilitation
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- Contact information of the Department of Propaedeutics of Internal Medicine and Physical Rehabilitation
- Educational materials for students

Annex 2

Electronic Kharkiv National University Institutional Repository

http://ekhnuir.univer.kharkov.ua/

eKhNUIR

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eKhNUIR - Electronic Kharkiv National University Institutional Repository

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2014/03/21 repository Karazin Kharkiv National University received at the International Center ISSN (within the project ROAR supported by the information sector UNESCO) own **ISSN 2310-8665**. Thus, the repository to a full online edition (a continuously updated resource), where you can publish the results of research as in the original, along with printed periodicals.

The best depositors-2018 – Gluschenko O.V. (Faculty of Economics), Kirichenko V.G. (Physics and Technology Faculty).

The best depositors – Hrytsak Y.P., Chernomaz P.O., Ivanchenko, A.O. (2017, School of International Economic Relations and Travel Business), Kysil V.V. (2017, School of Philology), Khudolii M.O. (2017, Web Communications Center), Akulov O.Yu. (2016, School of Biology), Dukarov S.V. (2015, School of Physics), Domanovski A.N. (2016, 2015, 2013, School of History), Yabluchanskiy N.I. (2015, 2014, 2013, 2012, School of Medicine), Komaristaya V.P. (2014, School of Biology), Sukhonos O.V. (2013, School of Philosophy), Tomin M.S. (2011, School of Medicine).

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- Кваліфікаційні випускні роботи здобувачів вищої освіти. Медичний факультет
- Навчальні видання. Медичний факультет [257]
- Наукові видання. Медичний факультет [62]
- Наукові роботи. Медичний факультет [524]
- Наукові роботи студентів та аспірантів. Медичний факультет [105]

View Statistics

Annex 3

Propaedeutics of Internal Medicine and Phy. Rehab. Dep V....

The official Facebook group of the **Department of propaedeutics of internal medicine and physical rehabilitation of the V. N. Karazin Kharkiv national university.**
News, announcements, useful information for students.

How to get there?
The base of the department is in a beautiful, quite place, far from the bustle of the big city.
Our address: Academika Kurchatova Avenue, 29.
You can get to this place from the city center, using the 296e bus (from «Derjprom» metro station), go to the "Church" stop, and continue to walk about 600 meters.
You are on the spot!

Instagram

instagram.com/pim_and_phr_karazin/

ПВМ І ФР PIM and Phy R
Department of Propedeutics of Internal Medicine and Physical Rehabilitation
Teach, treat , do science.
The most official informal department Instagram
www.youtube.com/channel/UCF0qgRbBKJ1dV8o6lUtRNMQ

YouTube

Марія Бринза
[illegible] подписчика

Signs and symptoms of urinary system disorders

Syndromes in diseases of blood system

Educational edition

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Ella V. Karnaukh – PhD, Associate professor
Olena S. Makharynska – PhD, Associate professor
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Yulian M. Shvets – assistant professor of department
Iryna V. Shokalo – assistant professor of department

Responsible for translation author — Maryna I. Shevchuk

THE MAIN TYPES OF ENEMAS AND THE RULES OF THEIR APPLICATION. PATIENT PREPARATION AND NECESSARY EQUIPMENT FOR TAKING FECES FOR EGGS OF HELMINTH, OCCULT BLEEDING, COPROGRAM. RULES FOR TAKING URINE ANALYSIS FOR ZIMNYTSKY, ADDIS-KAKOVSKY STUDY AND THEIR DIAGNOSTIC VALUE

Methodological recommendations for independent preparation for practical classes for the 3rd year higher medical education applicants in the discipline «Nursing practice. The main duties and professional activities of medical nurse in therapeutic department»

Коректор

Electronic publication on official website of V. N. Karazin Kharkiv national university — page of the Department of propedeutics of internal medicine and physical rehabilitation of the School of medicine, section "Educational materials for students / Guidelines"