

ODESSA NATIONAL MEDICAL UNIVERSITY  
The chair of urology and nephrology

GUIDELINES  
the practical lesson for students:

Lesson №2 Modern methods of examination of urological patients.

Academic discipline “Urology”

**Level of higher education:** Second (Master’s)

**Knowledge field:** 22 "Health Care"

**Specialty:** 222 "Medicine"

**Program of professional education:** Medicine

Approved  
methodological meeting on the chair  
28.08.2023  
Protocol № 1  
Head. Chair prof. F.I. Kostev

The theme of seminars: "Modern methods of the survey urological patients" - 2 hours

1. The relevance of the topic: Hard to imagine the progress of modern science without urological uninterrupted development tool research techniques that fully represent an effective means of therapeutic influence in many of the most common urological diseases. Over time, instrumental techniques in urology research formed the basis of modern techniques developed ендоеурологічних operations in diseases передміхурової gland, urethra, bladder, sechovoda, сечокам'яній disease, different types of obstructive nephropathy. Nowadays, most medical and diagnostic targets in diseases and sexual uric system can be solved tools that have made significant proliferation and a high level of perfection.

2. Entire classes:

2.1. Comon goal: to teach students mostly instrumental research methods urological patient and the definition of total and separate functions kidney. Identify the role and place endoscohic research methods in the diagnosis and differentionnoy diagnosis of different diseases, to send a timely manner to urologist.

2.2. Educational goals: to teach students better understand modern methods of diagnosing urological diseases and clearly distinguish between the situation if it personally should begin treating the patient (as a doctor in general practice) and where necessary to send the patient to the consultation and treatment to a specialist.

3. Specific objectives:

"Know:

1. Diagnostic and therapeutic purposes of research tool urological patient;
2. Summary and separate functional kidney samples;
3. The role tsistoskopii to determine the source of bleeding at the moment gematurii, in

identifying the causes of dysuria (stone, tumor, tuberculosis);

4. Perhaps catheterization ureter as a final therapeutic means to remove kidney colic;

5. Хромоцистоскопії differentionnoy role in the diagnosis of acute renal surgical diseases of abdominal emptiness;

6. Perhaps bilateral renal misok catheterization to determine the type of anurii. Perhaps catheterization misok kidney to treat acute pyelontphritis;

3.4. On the basis of theoretical knowledge of topics:

"Master the techniques (able):

1. Perform bladder catheterization on a phantom various types of catheters.

2. Perform catheterization patients rubber bladder catheter.

3. Perform hromotsistoskopiyu.

4. Materials to self-classroom training (interdisciplinary integration).

№ Disciplines Know Umet

Previous subjects:

1 Normal anatomy - anatomical features mochetchnikovyh ways

2 normal physiology - indicators filtration functions and secretory functions

The following discipline

1 Operational urology - perform bladder catheterization on a phantom various types of catheters;

-- Perform catheterization patients rubber bladder catheter;

-- Execute hromotsistoskopiyu.

-- different цистоскопічні picture (on phantom and Atlas);

-- radioisotope research methods of functional ability kidney;

-- Indications for modern endjsejpic interventions. -- Determine the type and designation means diagnostic tool;

-- Execute bladder catheterization and tsistoskopiya female patients.

Vnutripredmetnaya integration

1 General surgery.

-- Causes severe delays in the urine of patients who succumb to surgical intervention - execute bladder catheterization

2 Therapy - causes arterial hypertension of nephrological nature. -- Execute hromotsistoskopiya.

3 Gynecology - major complications intra- and post-surgical treatment of nature in the uterus and ovaries. -- Execute tsistoskopiya, hromotsistoskopiya, sechovoda catheterization.

5. The content of classes.

The achievement of modern urology would have been impossible without the use of instrumental research techniques. These methods are used in most diseases upper and lower urinary tract.

CYSTOSKOPIYA research is compulsory reception when gematurii total, since it allows to establish the source of bleeding and further diagnostic procedures to establish its causes.

The main method for diagnosing bladder tumors have tsistoskopiya. It not only allows diagnosis of tumor, but also to determine the location, розповсюдженість tumor process, the attitude of the tumor to ureter holes. When tsistoskopii in patients with bladder tumor is determined by the operational plan and intervention, consideration of the need radiotherapy. Tsistoskopiya in patients with bladder tumor often combined with taking pieces of tissue for histological study.

When benign papilloma tsistoskopiya often ends diatermokoagulyatsiey education. The same method allows to control, known as the propensity of tumors of the bladder to relapse.

One of the leading methods of diagnosing tuberculosis uric system is tsistoskopiya. The characteristic type of tuberculosis tubercles, втягненість holes on the side of destruction, there bulozny sometimes nabuh holes ureter, argues in favour of a specific process.

Розповсюдженість process on parauretralnim lymph vessels in difficult diagnostic cases, there

are indications for taking pieces of tissue in the bladder sechovoda plot holes. In doing so, often in material біопсійному been able to find a specific trait process, which allows timely diagnosis and carry out targeted therapy.

Hard to recalculate all urinary tract diseases in which the review gives bladder valuable information. This and various extraneous body bladder, and divertikuly bladder and міхурово-кишкові fistula, and leykoplakii and specific lesion bladder with other parasitic diseases and pathological processes.

HRMOCYSTOSKOPIYA - a method that allows not only examine the bladder, but also ascertain throughput upper urinary tract, as well as to some extent functional status kidneys. This method permits to hold differentsionny diagnosed with acute between primary and secondary acute pyelonephritis.

It is known that there is an acute secondary пієлонефрит based on violations of passage of urine from the kidney. Thus, if the allocation indigokarmina delayed or absence of holes affected kidney, establishes the diagnosis of secondary пієлонефриту. In such a case urologist efforts aimed at restoring the outflow of urine from the kidney affected by catheterization (if short-course disease) or nephrostomy.

Hromocystoskopiya as a tentative method used to assess functional state with kidney patient at йодовмісні allergy medicines.

KATHETERISATION OF URETER - may be unilateral and bilateral. Are the catheterization diagnostic, therapeutic and medical-diagnostic.

Unilateral diagnostic catheterization conducted in the performance of retrograde pyelography to establish the level of obstacles in the ureter, the definition of symptoms Shevassyu.

Bilateral diagnostic catheterization is used to separate collection of urine from the kidney with bilateral kidney lesion to resolve the issue of party operations.

Unilateral therapeutic catheterization performed for a withdrawal and the restoration of renal colics passage of urine from the kidney in acute and secondary pyelonephritis short course of

disease.

Bilateral therapeutic catheterization used for гестаційному пієлонефриті. Renovated allow passage of urine in such cases to conduct targeted antibacterial therapy.

In some situations, as a unilateral or bilateral diagnostic catheterization may take curative nature and then be called the medical-diagnostic. Thus, when anurii to establish its nature catheterization performed bilateral ureter and misok. If anuriya постренальної nature has imposed catheters and perform adequate passage of urine from the kidney, they can be left permanently for a specified period with therapeutic purpose.

In this section referred to the testimony of the main research tool for receptions. It is understandable that views to meet their broader and resolved in each case.

6. Materials methodical maintenance classes.

6.1. The challenge for self baseline knowledge - skills.

1. The role of bladder catheterization in differentsionnoy diagnosis and anurii ishurii.

2. Cystoskopiya, views, the terms of implementation.

3. Hromocystoskopiya, its clinical importance.

4. Tech bladder catheterization.

5. Catheterization ureter.

6. The role of instrumental research techniques in acute pyelonephritis.

7. The role catheterization ureter in the treatment of acute pyelonephritis pregnant.

8. Hromotsistoskopiya when pyonephrosis.

9. The role of instrumental research techniques in the diagnosis of tuberculosis uric system.

10. Role of hromocystoskopy in the diagnosis urolithyasis.

11. The role cystoskopii with bladder tumors.

12. Instrumentation research techniques in the diagnosis of BPH.

4.

Question to self:

1. The role of bladder catheterization in differentionnoy diagnosis and anurii ishurii.
2. Tsistoskopiya, views, the terms of.
3. Hromocystoskopiya, its clinical value.
4. Tech bladder catheterization.
5. Catheterization ureter.
6. The role of instrumental research techniques in acute pyelonephritis.
7. The role catheterization ureter in the treatment of acute pyelonephritis pregnant.
8. Hromotsistoskopiya when pyonephrosis.
9. The role of instrumental research techniques in the diagnosis of tuberculosis uric system.
10. Hromotsistoskopii role in the diagnosis of urolithiasis.
11. The role tsistoskopii with bladder tumors.
12. Instrumentation research techniques in the diagnosis of BPH.

Tests for the self:

1. When severe delays urinating in a patient adenoma передміхурової gland best lead catheterization:
  - A. Kateter Pettsera
  - B. Kateter Nelatona
  - S. Kateter Fole
  - D. Kateter Thyman
  - E. Kateter Maleko
2. The total renal function allowed to define the following methods, in particular:
  - A. Samples Zimnitskogo
  - B. The samples Roberga
  - C. The samples Folgarda
  - J. Proby Rappoport
  - E. Proby Royzelmana
3. The residual urine in the bladder can be found:
  - A. Ultrazvukovym study
  - B. Radiologicheskimi methods
  - S. Rentgenologicheskimi methods
  - D. Biohimicheskimi research
4. In order to anurii differential diagnosis of acute and delayed urine must be met:
  - A. Ultrasound study
  - B. Kapillyarnuyu bladder
  - S. Excretory urography
  - D. Kateterizatsiyu bladder
5. By clinic delivered patient with acute urinating because of a delay in the hanging of urethra. Research and provision of assistance should begin with:
  - A. Cystoskopy
  - B. Excretory urography
  - S. Kateterization
  - D. Buzhuvannya
6. Overfishing sexual member requires surgical care:
  - A. True
  - B. False

Tasks for the self.

1. In the morning the patient was 26 years old nagging pain in the right клубовій station, which

intensified the evening. Notespozyvy to frequent urination, the temperature increase up to 37.8 °, oznoblennya. There was a one-time blyuvannya. First of such pain patient is not celebrated. Language to put round o whitish налітом, suhovaty. Sduty not stomach, palpation, with soft, smooth in the right клубовій station. In the same location, there is a small muscle strain front abdominal wall. Nyrkov not palpuyutsya. Symptom-Щеткіна Blyumberga doubtful on the right side, on the left side - negative. Symptom Pasternatskogo weakly positive on the right side. Leykotsitoz 12000. In response, acidic urine analysis, protein 0033 g / l, leykotsitoz 8-10 in sight, fresh erythrocytes isolated. At the Review rentgenogramme uric system shadows on concretion suspicious, not identified, the shadow kidneys are not clearly visible through the layers of intestinal gases.

Your valid diagnosis. What studies in this case needed to differentsionnoy diagnosis?

2. In the typical patient is 32 years old picture of right renal colics. At the Review rentgenogramme uric system is determined by the size of the stone shadow 0.8 x0, 4sm. After injection баралгіну 5 ml / in and warm baths zatihla pain, but after 5 minutes appeared again. A blockade of the round ligament of the uterus method Lorin-Epshteyna. Zatihla pain for a short time and then appeared again.

Patient insecurity, takes different situation, stonet, requests for assistance. What should be done to lift the kidney from sprats?

3. Patient 44 years, which suffers from a rock bottom third of the left ureter. Six hours so there was an attack left renal colics, body temperature rose to 38.4 ° C, was strong chills. Stomach in the left podrebere painful, agonizing пальпується lower pole left kidney. At the Review rentgenogramme uric юкставезікального projection system in the department left ureter determined shadow concretion size 0.5 x0, 4sm.

What is a conservative method of treatment is hoped will allow the withdrawal of acute пієлонефриту?

4. In patient 50 years 3 years was therefore an attack of severe pain in the lumbar section of the law and the right half abdomen. The pain comfort himself, after applying heat. For medical not appealed, and not obstezhualas not cure.

Yesterday morning on fried mushrooms. In a rim faintness, was 3 - blyuvannya off. Notes the lack of urine and pozyvov to mochevydeleniyu in the past 20 hours. With the objective condition of the patient study of moderate severity. Leather cover dry, pale. Patient high-nutrition, calm behavior. Pulse 100 ud. per minute, rhythmic, SC - 160/90 gg.rt.st. Language dry, not taxation. Soft belly, slightly painful in podreberyah; nyrki palpirovat fails to obesity through the patient. Symptom Pasternatskogo weakly positive on both sides. Blood Sugar - 13.8 mmol / L, urea serum - 21.6 mmol / liter.

What kind of reception should conduct research to determine the nature anurii? What is the tactic of treatment will be determined depending on the type anurii?

5. Patient 48 years, delivered to the clinic with complaints of frequent, painful urination, blood in urine allocation. Sick for 4 months.

Soft belly, nyrki not palpuyutsya. Symptom Pasternatskogo negative on both sides. The external sexual organs developed properly. Передміхурова iron does not increase, smooth, elastic. Mid borozna expressed, mucous rectum over mobile prostate. At the review picture of uric shadows concretion in projection urinary tract not specified. Dysuria, mikrogematuriya, 2 times for the period of stay in the clinic there was total makrogematuriya besformennymi with blood clots.

What is the source of bleeding? What kind of reception should conduct research?

6. Priority urologist, who has just finished an emergency operation at 3 o'clock the night of the reported acceptance Office, which delivered the patient with total gematuriey. Hematuria



painless, by having the first time. Over the past 3 months, notes the decline in disability, lack of appetite, slimming by 4 kg.

When an objective study found satisfactory condition of the patient, the absence of any pathological changes. Urine microscopy помірно zakrashena blood clots are isolated vermiform. What kind of reception should conduct research?

What implementation?

10. Materials for self-learning, skills, habits, provided for this work

10.1. Tests of various levels (or tests that are part of the Bank for rektorskogo control).

1. With the acute need to be patient urine delay prizveti:

A. Cystoskopiya

B. Cateterization

D. blockade for Lorin-Epshteyn

E. Introduction spasmolytic

2. The patient prostate hyperplasia best oporozhnyuvati bladder catheter (once):

A. Nelatona

B. Pettsera

S. Malik

D. Pomirantseva-Фолі

It is listed with E.

3. In order to colic differential diagnosis of kidney diseases and acute abdominal organs should perform the emptiness:

A. Blood tests

B. Analysis of urine

S. Cateterization of urinary bladder

D. Excretorian urography

Nothing listed with E.

4. Methods of determining nyrok separate functions:

A. Hromocystoskopiya

B. RRG

S. Excretorian urography

D. All of the

5. Identifying separate kidney functions:

A. The sample Folgarda

B. Hromocystoskopiya

S. Hi then, nor the second

6. The catheter Pomirantseva-Foly:

A. Used to catheterization

B. Used for drainage through the fistula

S. Hi it nor the other

7. The catheter Pettsera:

A. Used to catheterization

B. Used for drainage through the fistula

D. Ekskretorna urografiya

Nothing listed with E.

Developers:

Head of Department of Urology and Nephrology, Professor F.I. Kostev,  
Professor of the Department of Urology and Nephrology Yu.M. Dekhtyar  
Professor of the Department of Urology and Nephrology M.I. Ukhal  
Associate Professor of the Department of Urology and Nephrology I.V. Rachok  
Associate Professor of the Department of Urology and Nephrology L.I. Krasiliuk  
Associate Professor of the Department of Urology and Nephrology M.V. Shostak  
Associate Professor of the Department of Urology and Nephrology R.V. Savchuk  
Assistant Professor of the Department of Urology and Nephrology S.V. Bogatskyi  
Assistant Professor of the Department of Urology and Nephrology O.M. Kvasha

**Recommended literature.**

**Basic:**

1. S.P. Pasechnikov; Urology: textbook/ Ed. S. P. Pasyechnikova, S. A. Voizianov, V. N. Lesovy [and others]. - View. 3rd – Vinnytsia: New Book, 2019.
2. Pasechnikov S.P. Modern problems of urology: [manual]: doctor's guide/ S.P. Pasechnikov, V.I. Zaitsev. - Kyiv: L-ry Health of Ukraine; 2017.
3. Stus V.P. Urology (practical skills for intern doctors) / V.P. Stus, S.P. Pasechnikov. Teaching and methodical manual. - Dnipropetrovsk: Akcent PP LLC, 2016.
4. Sarychev L.P. Symptoms of urological diseases: method. rec. For teachers / L. P. Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. – Poltava, 2019.
5. O.V., Lyulko, O.F. Voizianov Textbook "Urology" 3rd edition. Thresholds Dnipropetrovsk. - 2012 p.
6. "Urology (Methodical development of practical classes for students)" edited by Professor V.P. Stus, second edition, supplemented. / A.P. Stus, Moiseenko M.M., Fridberg A.M., Pollion M.Yu., Barannik K.S., Suvaryan A.L., Krasnov V.M., Kryzhanivskyi O.Yu. - Dnipro: Accent LLC. - 2018. - 336c.
7. Urology: textbook for students. higher med. academic established: translation from Ukrainian publications / S.P. Pasechnikov, S.A. Voizianov, V.N. Lesovoy, F.I. Kostev, V.P. Stus, et al./ Ed. S.P. Pasechnikov - Edition 2. - Vinnytsia: Novaya Knyga, 2015. - 456 p.: illustr.
8. Urology: textbook for students of higher medical education Institutions /S.P. Pasechnikov, S.O. Voizianov, V.M. Lesovoy (et at.); ed. by Pasechnikov. / S.P. Pasechnikov, S.O. Voizianov, V.M. Lesovoy (et at.) - Vinnytsia: Nova Knyha, 2016. - 400 p.
9. EAU Guidelines, edition presented at the 28th EAU Annual Congress, Milan 2021. ISBN 978-90-79754-71-7. EAU Guidelines Office, Arnhem, The Netherlands.
10. Alan W. Partin, Alan J. Wein, et. all - Campbell Walsh Wein Urology, E-Book (12th ed.) – 2020.
11. Omar M. Aboumarzouk - Blandy's Urology, 3rd Edition – 2019.
12. David Thurtle, Suzanne Biers, Michal Sut, James Armitage. - Emergencies in Urology – 2017. 4. Philipp Dahm, Roger Dmochowski - Evidence-based Urology, 2nd Edition – 2018.

Additional:

1. Boyko M.I., Pasechnikov S.P., Stus V.P. and others Clinical andrology // Doctor's guide "Androlog". - K.: LLC "Library "Health of Ukraine", 2013. - 222 p.
2. Sarychev L.P. Clinical anatomy and physiology of organs of the urinary and male reproductive system: method. rec. for teachers / comp. L. P. Sarychev, S. A. Sukhomlyn, S. M. Suprunenko. – Poltava, 2019. – 11 p.
3. Sarychev L.P. Symptoms of urological diseases: method. rec. for teachers / L. P.

- Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. – Poltava, 2019. – 14 p.
4. Medical student's library. Urology. Edited by F.I. Kosteva. - Odesa, 2004. – 296p.
  5. Atlas-guide to urology. Ed. A.F. Vozianova, A.V. Lulko Dnipropetrovsk, 2002.-T. 1,2,3
  6. Urology / Ed. Prof. O.S. Fedoruk - Chernivtsi: Bukovyna State Medical University, 2011. - 344p.

### **Information resources:**

University website <https://onmedu.edu.ua>

Library [library.odmu.edu.ua](http://library.odmu.edu.ua)

1. <https://uoweb.org/>

2. <https://www.nccn.org/>

3. <https://www.auanet.org>

4. <https://www.inurol.kiev.ua/>

5. <https://www.souu.org.ua/>