

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of urology and Nephrology

Methodical development of practical training for students

Discipline : Urology

Lesson № 9. Topic: Inflammatory diseases of the lower urinary tract and male genital organs. Prevalence of urinary disorders in the Southern region.

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

Odesa 2023

**THEME PRACTICE SESSION:** Inflammatory diseases of the lower urinary tract and male genital organs. Prevalence of urinary disorders in the Southern region.-2 hours.

**RELEVANCE of the theme:** urinary tract and male reproductive organs are the most common diseases in both outpatient and hospital practice and tend to be redistributed is primarily due to the socio-economic and ethical aspects of contemporary society., data diseases predominantly men and women active young and middle-aged, adversely affecting both the economic and demographic indicators.

## **2. the objectives of the session:**

### *2. Training objectives: 1.*

- to acquaint the students with up-to-date data on the epidemiology of inflammatory diseases of the urinary bladder diseases male sexual organs (UTI), cystalgiya.

*The student must know:*

- 1.clinical manifestations of inflammatory diseases of the urinary bladder and male sexual organs, cystalgiya;
- 2.current data on the pathogenesis of cystitis, cystalgiya, (UTI);
- 3.standard diagnostic algorithm for examining the patients withcystitis, cystalgiya, (UTI) and differential diagnosis of this group of diseases;
4. modern methods and principles of conservative treatment of cystitis, cystalgiya, (UTI) and indications for prompt treatment;
- 5.principles and methods of granting urgent medical care to patients with cystitis, cystalgiya, (UTI)

*Give students the opportunity to learn:*

*Give students the opportunity to master the techniques (to):*

1. carry out inspection and palpation of male sexual organs;
2. perform material from urethra, male genitals for further clinical trials;
3. perform the digital rectal examination of the prostate;
4. perform catheterization of the urinary bladder;
5. master techniques cystoskopy;
- 6.interpret data clinical, laboratory and instrumental studies patients to diagnose and difdiagnostiks of cystitis, cystalgiya, IDMSO.

*Develop students ability to explore, in theory, clinically justified:*

1. differential-diagnostic signs of cystitis and cystalgiya;
2. bacterial prostatitis and "abakterial";
3. specific and non-specific urethritis, kavernitis.

2Educational objectives:

To acquaint the students with the contribution of native scientists develop methods of diagnosis and treatment, cystitis, cystalgiya, IDMSO.

To acquaint the students with the deontological aspects of behaviour of doctors when communicating with patients suffering from (IDMSO), cystitis, cystalgiya, cavernitis.

Based on the theme a sense of responsibility of physician for timeliness and correctness of professional action on patients with cystitis, cystalgiya, cavernitis, IDMSO.

### 3. **INTERDISCIPLINARY INTEGRATION**

№ p/p	Discipline	Know	To Be Able To
1	2	3	4
1	<p>PREVIOUS DISCIPLINE</p> <p>anatomy</p> <p>histology</p> <p>histological anatomy</p> <p>physiology</p>	<p>-Anatomy of the prostate gland and external sexual organs, bladder.</p> <p>-The histological structure of the prostate, scrotum external genital organs, bladder.</p> <p>morphological characteristics of inflammatory processes that occur in the male sexual organs and urinary bladder.</p> <p>physiological role of prostate, testicular, external genital organs of the urinary bladder.</p> <p>classification and pathogenetic mechanisms of inflammation.</p>	

2.	<p>physiology of</p> <p>armacology</p> <p>2. microbiology</p> <p>erative surgery and topographic Anatomy</p> <p>FOLLOWING DISCIPLINES</p> <p>Nevropatologists</p> <p>Gynaecologists</p> <p>expected *</p>	<p>concepts and classification main antimicrobial treatments IDMSO, inflammatory diseases of the urinary system, mechanisms of their action, as well as the principles of choice of the drug. Possible side effects of antimicrobial therapy. characterization, classification and principal of IDMSO inflammatory disease of the urinary system.</p> <p>topographic Anatomy of pelvic in men and women.</p> <p>about spinal painful syndrome in the spine as a possible indicator of prostatitis and vesiculitis;</p> <p>on possible vegetative-vascular Dystonia as indicator of Chronic prostatitis</p> <p>compulsory surveys of men, women who suffer from inflammatory diseases of genitals. Compulsory gynecological survey of women who suffer from cystitis and cystalgiya.</p> <p>A similar picture of cancer and sclerosis of the prostate during the transrektal study. The similarity of the clinical picture of cystitis and cystalgiya with tumors of the urinary bladder.</p> <p>compulsory gynecological survey of women, men suffered at inflammatory diseases of genitals;</p>	<p>Assign appropriate antibakterial therapy in acute inflammation of the bladder, male genitals, without waiting for the results of antibiotikogramm.</p> <p>to obtain biological material for study, to be able to evaluate the data antibiotikogramm.</p> <p>Exclude prostatitis as the cause of pain in the spine.</p> <p>Delete the pathology of spine, as a possible cause cystalgiya.</p> <p>A differential diagnosis between multiple sclerosis and prostate cancer, as well as between cystitis,</p>
----	---	--	--

	<p>with urologists</p>	<p>the need for differential diagnosis between cystitis, cystalgiya and tumors of the urinary bladder.</p> <p>The possible development of pyelonephritis amid chronic inflammation of the bladder, IDMSO.</p> <p>the possibility of development infravesikal obstruction as a complication of inflammatory diseases of genitals. And that infravesikal obstruction is one of the risk factors for development of inflammatory diseases of genitals.</p>	<p>cystalgiya and tumor of the urinary bladder.</p> <p>Perform an external examination, palpation, percussion urinary.</p> <p>Perform cystoskopy, evaluation of ultrasonic, radiological and clinical research.</p> <p>Delete the associated IDMSO, cystitis, cystalgiya.</p> <p>deleted infravesikal obstruction in patients suffering from inflammatory diseases of genitals.</p>
<p>3. Pyelonephritis</p>	<p>VNUTRIPREDMETNAA INTEGRATION</p>		
	<p>2. Infravesikal obstruction</p>		

**4. content of lessons (structurally-logical schema)**

<b>nozoform</b>	prostatitis	urethritis	Kavernitis	cystitis	cystalgia
<b>Diagnosics</b>	<i>Clinical:</i> complaints medical history primary inspection (palpation, percussion)		<i>Laboratory:</i> Agg. an. Blood An. Urine: overall; three glass sample; sample Nechyporenko; bacterial urinalysis study of juice of the prostate. Swabs from the urethra. PB, Identification of the Activator (Cultural, serologic, DNA, REEF)		<i>Instrumental:</i> ULTRASOUND; Urethroscopy; diafanoskopiâ; radiography; cistoskopiâ
<b>Treatment</b>	Operational (generalization of the prostate gland and abscedirovanii)		Conservative		
			And Aetiotropic  -antibacterials different groups with parasite	Pathogenetic - improvement of Microcirculation anti-phlogistic therapy; ssasyvaûsaâ therapy; mulation of immunity  - removal infravezikalobstruction	Symptomatic gesics;
<b>Prevention</b>	Rehabilitation èkstagenital'nyh pockets of infection Normalization and streamlining of sexuality, correction of hormonal disorders.				

**5. PLAN and ORGANIZATIONAL STRUCTURE of CLASSES**

# p/p	Main stages of studies, their function and content	Training objectives in the level of mastering	Learning tools and controls	Material providing methodical monitoring those studying	Duration (in minutes or%.) of the total time classes
1	Preparatory				6 minutes
2	Organizational				

	<p>arrangements Setting training objectives</p> <p>Monitoring entry-level knowledge IDMSO epidemiology, cystitis, cystalgiya</p> <p>clinical IDMSO; characterization of the main agents of IDMSO, cystitis. current data on the pathogenesis of cystitis, IDMSO, cystalgiya</p> <p>diagnostic algorithm for examining the patients with IDMSO, cystitis, cystalgiya; modern methods and principles of treatment of cystitis, IDMSO, cystalgiya. principles and methods for delivering emergency care to patients with IDMSO and cystitis.</p>	<p><math>\alpha = 1</math></p> <p><math>\alpha = 2</math></p> <p><math>\alpha = 2</math></p> <p><math>\alpha = 2</math></p> <p><math>\alpha = 2</math></p> <p><math>\alpha = 2</math></p> <p><math>\alpha = 2</math></p>	<p>Front Desk Express procurators personally meet</p> <p>Individual oral procurators personally meet</p> <p>Solution of typical tasks.</p> <p>Written theoretical procurators personally meet.</p> <p>test control level 2</p>	<p>Tables, figures, maps, slides, tools, structurally-logical schema, videos.</p> <p>Questions for poll, written theoretical tasks, test control level 2.</p>	34 min.
2.	Main				90 min
	<p>1.to palpation of external genital organs, bladder;</p> <p>2.perform the digital rectal examination of the prostate;</p> <p>3.perform catheterization of the urinary bladder;</p> <p>4.interpret data clinical, laboratory and instrumental</p>	<p><math>\alpha = 3</math></p> <p><math>\alpha = 3</math></p> <p><math>\alpha = 3</math></p> <p><math>\alpha = 3</math></p>	<p>Method of forming skills.</p> <p>Practical training at bedside.</p> <p>Use of replicas and sets of tools.</p> <p>Method of forming skills</p> <p>Professional training in dealing with untypical situational tasks.</p>	<p>Training equipment (history of the disease, clinical tests, x-rays, ultrasound, etc.). orientirnye card (diagnostic algorithms and difdiagnostiks IDMSO, cystitis, cystalgiya), algorithms and guidance notes the consistent implementation of medical manipulation</p> <p>Atypical written educational tasks, history of diseases of real patients, patients with</p>	

	studies patients to diagnose and difdiagnostics IDMSO, cystitis, cystalgiya.		Test control 3rd level.	IDMSO, cystitis, cystalgiya, 3rd level. Set of catheters to perform catheterization of the urinary bladder, models of different diseases of the prostate, male and female pelvis plaster cast for practicing catheterization of the urinary bladder.	
3.	Final				30 min.
	3. Control and correction level 1 skills and habits.	□□□ = 3	Individual control skills, palpation of the bladder, prostate, percussion and bladder catheterisation.	Real patient. Set of catheters to perform catheterization of the urinary bladder, models of diseases of the prostate, male pelvis plaster cast	14 min.
	3. Summary 2 Summary of lessons (theoretical, practical, institutional)		Individual control skills The atypical situation, test control level 3	Text situational tasks and test 3rd level.	4 min.
	3.3. homework: learning literature on the subject (primary and secondary)			List of primary and secondary literature	2minutes.

## **6. METHODOLOGICAL PROVIDING of TRAINING MATERIALS.**

### **7.1 Materials control preparatory phase activities.**

1. which of the following symptoms are characteristic of acute urethritis:

And hematuria);

B) dysuria;

Purulent secretions in) free from urethra;



G) fever;

2. What are the main symptoms of acute kataral'nogo prostatitis.

A) moderate, however severe perineal pain;

B) initial hematuria;

C) diarrhea;

(D)) pollakiuriâ;

E) – pain.

3. which of the following drugs are infiltrating the prostate?

And Penicillins);

B) • fluoroquinolones;

Macrolides in);

G) cephalosporins;

D) aminoglycoside.

4. When urethroprostatite based on trehstakannoj samples pyuria noted in the following portions:

A) 1st;

B) 3rd;

In) at all;

Mr) grade 2 and grade 3;

D) 1st and 3rd

E) 1st and 2nd

5. the therapist asked woman complaining of the frequent urination. For cystitis characteristic symptom:

A) dysuria

B) fever

C) increased blood pressure

D) vomiting

E) neither

5. activators of Chronic prostatitis can be:

Kokowa microflora and)

In) Chlamydia

C) trihomonas

D) ureoplazms

(E)) all listed

6. quantitative research urine sediment samples are used to diagnose latent lejkociturii.

Determination of the number of leucocytes, èritrocitiv and cylinders available with urine per day achieved breakout:

- A) Ambûrže
- B) Nechyporenko
- (C) Kakovs'kogo-Addisa
- D) Renal Function-Reberg
- E) Zimnickogo

7. Woman complains about the frequent and painful urination. For cystalgiya is characterized by all except:

- A) frequent urination
- B) pyuria
- C) normal bladder mucous membrane
- D) urea blood 5.0 mmol/l
- E) dysuria

8. see a doctor has a patient who long treated about prostatitis. Note the unusual for Chronic prostatitis symptoms:

- A decline in kidney function)
- B) decrease the disappearance of lipoids grains (lecitin grains)
- C) long, recurring period.
- D) absence of defect filling at cistogramm
- E) sclerotic modified, densely elastic moderately sensitive prostate when rectal study.

9. Increase the number of leucocytes amid provocation pirogenalom characteristic:

- A) chronic cystitis
- In latent pyelonephritis)
- With Chronic prostatitis)
- D) for any
- (E) for all those

## Tasks

1. Patient 27 years after hypothermia complains about heart painful urination, increased body temperature. at survey of external genitalia without features during rectal research prostate increased in size, primarily through the right proportion where there is a floating in the overall analysis of blood l-18 g/l, p-8, FW-40 mm/pm, in the analysis of urine-l. cover all fields of your preliminary diagnosis? What diagnostic activities should be asked to confirm the diagnosis? What healing tactic in this case?
2. Patient of 35 years two weeks ago suffered acute anginu day ago noticed increased right half mošny in size and pain for the last time noticed. and increased body temperature during inspection of scrotum increased in size, skin taut, differentiation of scrotum impossible, its palpation painful in the overall analysis of urine-no pathology in common blood l-16 g/l, w-9, FW-25 mm/hours your preliminary diagnosis? What tactics further investigation and patient treatment?
3. Patient of 25 years complains about continuous perineal pain, difficulty urinating, accelerated ejaculation and periodic pain during orgasm. Sometimes notes blood in sperm. your preliminary diagnosis. what investigation showing the patient? What tactics further treatment?
4. Female of 28 years old, married, two years ago, a young sal'pingooforitis. Notes periodically (in spring and autumn) heart, sometimes painful urination, mostly happy, pain in suprapubic region. Night strong urination urge Vex. before visiting the urologist gynecologist, was inspected and did not find any diseases of the genital organs. Repeated urine-without pathological changes of disease should think? what disease should be differential diagnosis?
5. Woman 25 years makes a complaint to the accelerated, painful urination with blood at the end. Got sick after bathing in cold water. In the analysis of urine leukocytes, RBC-completely-30-40. A tentative diagnosis?

### Reference answer test tasks

- 1 b.
- 2 a..
- 3. b
- 4 d..
- and 5.
- e 6.
- , 7.
- in 8.
- and 9.
- 10 e..

### Reference answers to task

1. Preliminary diagnosis-prostate abscess. for verification of diagnosis demonstrates a transrectal ultrasonography. to confirm diagnosis shows opening abscess transperineal or transrectal.
2. diagnosis of the patient-acute epididymitis. investigation displaying ultrasound mošny. treatment-early intervention "(èpididimotomy, or èpididimèctomiy if the abscesses occurs).
3. Preliminary diagnosis-kolikulitis. to verify which show how to execute uretroskopy. treatment-burning with silver nitrate solutions seed colliculum (2%-3%) and treatment of major diseases (prostatitis).
4. first of all, consider cystalgiya and a differential diagnosis with cystitis and tumor of the urinary bladder.
5. a preliminary diagnosis of acute cystitis.

### 7. milestone 2 Materials for classes.

Challenge	Execution sequence	Comments
Master the skill,	1 Situation. patient-knee-loktevoe.	ATTENTION!

<p>palpation of the prostate</p>	<ol style="list-style-type: none"> <li>2. Previously oiled (FAT basis) finger in rubber gloves is entered into the rectum.</li> <li>3.4-5 cm from the anus palpate prostate in shape, similar to the chestnut.</li> <li>4. Palpate right and then left the share cancer between which clearly defines the meždolevaâ Groove.</li> <li>5. Surface glands in norm elastics, clear contours, iron is painless when palpation.</li> <li>6. after examination, the patient should be asked to release of urine bladder.</li> </ol>	<p>Prior studies to exclude acute diseases of rectum (hemorrhoids, proctitis) in which the study is contraindicated).</p> <p>Patients IDMSO prostate increased, round shape, Groove, will clear, painful glands at palpation. Its consistency- elastics.</p> <p>Patients FPW-in one or both of an is palpate plots Rocky density, painless. Outlines of cancer often unclear. With involvements of capsules-mucous membrane of the rectum-fixed.</p> <p>ATTENTION! In patients with multiple sclerosis also prostate gland may be rocky density. In the absence of clinical signs of FPW final diagnosis can be made only after puncture biopsy.</p>
<p>2. master the technique catheterisation rubber catheter bladder in men</p>	<ol style="list-style-type: none"> <li>1. penis Head is located between 3rd and 4th fingers of the left hand.</li> <li>2. External opening of the urethra and head of the penis are processed with an antiseptic means.</li> <li>3. Previously oiled (sterile Vaseline) catheter (appropriate size) right hand into the urethra before appearance of urine.</li> <li>production line 4. urine catheter is removed.</li> </ol> <p>1 Situation of the patient. "-while</p>	<p>ATTENTION!</p> <p>Acute inflammation of the urethra (urethritis), as well as the prostate (prostatitis) are a contraindication to catheterisation. In such cases for withdrawal of urine is èpicystostomy.</p> <p>In case of impossibility of rubber catheter, you should perform catheterization metal catheter (only specialist!) or to epicystostomy.</p>

<p>3. master a skill examination and palpation of organs of scrotum</p>	<p>standing. 2. Pal'pabrate bodies scrotum, ranging from seed to hem cord over the top.</p>	<p>Attention! Normally, the left testicle is in most cases below right! If you have a fluid between wrappers should run diaphanoskopy to remove hemorrhagic ecsudatis.</p>
---	---	--

### 7.3 Material methodical providing of the final phase of studies

#### Test tasks

1. at what prostate disease are observed the following clinical signs?

Disease	Prostatitis	Benign prostatic hyperplasia
<p>Terminator 1.pain in perineum Dysuria 2. 3 Night pollakiuriya. 4. Feeling of incomplete bladder emptying 5. Pyuria in 3rd servings</p>		

### Situational tasks.

1. Patient 23 years complains about the periodical blunt pain in the suprapubic area, incomplete erection, accelerated ejaculation. During the examination of the prostate normal size soft texture, moderately painful at palpation. Visual changes of external genital organs. In the analysis of juice prostate 1-5-8, lecithinovy granules in small quantities.

A tentative diagnosis? Does the absence of increased amounts of leucocytes in secret prostate Chronic prostatitis? What additional studies should be performed for verification of diagnosis?

2. patient 26 years complaints about the free allocation of the urethra, which noted in 2 weeks after casual sexual relationship. When microscopic study of allocations-1 80-100. Trichomonads, diplokokki and other flora are not identified. A preliminary diagnosis? Which studies should be performed for verification of diagnosis?

3. 23 years complains of Sore itch in urethra, dysuria, throughout the week. When researching the prostate is the last normal shape, dimensions, painless. Was extracted juice prostate which leucocytes cover all fields of view. Can I talk about in a patient of inflammation of the prostate gland? What was bug doctor?

### Reference answer test tasks

Disease	Prostatitis	Benign prostatic hyperplasia
Terminator		
1. pain promižnosti	+	-
2. Dysuria	+	+
3 Night pollakiuriâ.	-	+
4. Feeling of incomplete bladder	-	+

emptying 5. Pyuria in 3rd servings	+	-
---------------------------------------	---	---

### **Benchmarks respond to the challenges**

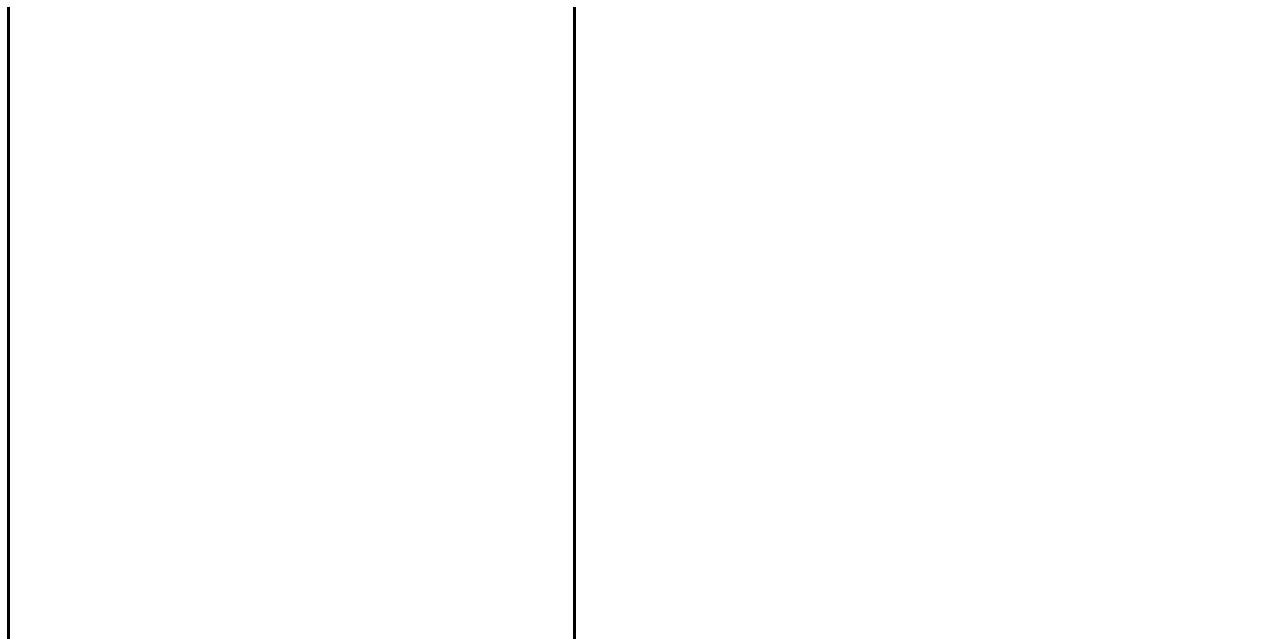
1. Preliminary diagnosis-Chronic prostatitis. lack of increased number of WBCs in the juice of the prostate does not exclude prostatitis, a possible "obstruction" discharge duct cancer. to confirm diagnosis should ultrasound study of prostate and monitoring study of juice after several massages, which will eliminate obstruction.
  
- 2.a preliminary diagnosis of urethritis-pungent. lack of specific flora does not exclude the presence of an infectious agent, the prevalence of chlamydia, ureaplasmas, mycoplasmas and herpetic forms of the disease in order to search which should perform custom research methods, polymerase chain reaction (PCR), IFA titres blood antibody etc. then begin aetiological therapy.
  
3. Assert the existence of inflammation of the prostate is warranted because the background of clinical picture was taken for study urethritis juice prostate wrong. Juice should take after prostate research first chunk of urine, to liberate the urethra of leukocytes.

#### **7.4 Material methodical providing of self-study students during work with literature.**

Learning objectives	Guidance
---------------------	----------



<p>Learn</p> <p>1. Main etiological factors IDMSO and cystitis</p> <p>Basic 2. pathogenetic mechanisms of development IDMSO, cystitis, cystalgiya</p> <p>3. Advanced clinical classification IDMSO, cystitis.</p> <p>4. Diagnostic algorithms survey patients on IDMSO, cystitis, cystalgiya</p> <p>5. Differential diagnostics IDMSO.</p> <p>6. Differential signs of cystitis and cystalgiya</p> <p>7. complication of IDMSO and their diagnosis.</p> <p>8 .modern principles and methods of treating IDMSO depending on the stage of the disease.</p> <p>9. modern principles and methods of treatment of cystitis and cystalgiya.</p> <p>10 .Complications of cystitis and cystalgiya and their diagnosis.</p>	<p>Give the profile a major infectious agents that cause IDMSO and cystitis.</p> <p>List the current data on the pathogenesis of cystitis, IDMSO, cystalgiya.</p> <p>What are the main principles and criteria on which categorization occurred IDMSO, cystitis</p> <p>Draw a diagnostic algorithm for examining the patients with IDMSO, cystitis, cystalgiya.</p> <p>List the main criteria for differential diagnosis of IDMSO. Create and populate a table characteristics of differential diagnostics IDMSO.</p> <p>List major signs of cystitis and cystalgiya. Create and populate a table sign of cystitis and cystalgiya.</p> <p>Make a table of complications that arise in patients with IDMSO. Calculate how to diagnose complications.</p> <p>Make a diagram of modern treatments (conservative, operative) IDMSO depending on the clinical stage. List the criteria for choosing one over the other kind of conservative, prompt treatment IDMSO. Let feature modern pharmacological drugs used to treat IDMSO.</p> <p>Make a diagram of modern treatments for cystitis and cystalgiya depending on the clinical stage. List the criteria for choosing one over the other kind of conservative, prompt treatment. Let feature modern pharmacological drugs used to treat cystitis and cystalgiya.</p> <p>Make a table of complications that arise in patients with cystitis and cystalgiya. Calculate how to diagnose complications.</p>
--	--



**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. Vozianov, V.M. Lesovoy (et at.); ed. by Pasechnikov. / S.P. Pasechnikov, S.O. Vozianov, 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://uroweb.org/>

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

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

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

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