

Application to the work program

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS

UROLOGY

Speciality: **31.05.01 GENERAL MEDICINE**

Department: **FACULTY OF SURGERY AND TRANSPLANTOLOGY**

Form of study: **FULL-TIME**

Nizhny Novgorod
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1. Fund of assessment tools for current monitoring of progress, intermediate certification of students in the discipline

This Fund of Evaluation Funds (FOS) for the discipline "Urology" is an integral part of the work program of the discipline "Urology". This FOS is subject to all the details of the approval presented in the RPD for this discipline.

2. List of evaluation tools

To determine the quality of mastering the educational material by students in the discipline "Urology", the following assessment tools are used:

№	Estimator	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
1	Essay	The product of the student's independent work, which is a summary in writing of the results of the theoretical analysis of a certain scientific (educational and research) topic, where the author reveals the essence of the problem under study, gives different points of view, as well as his own views on it.	List of essay topics
2	Report	The product of the student's independent work, which is a public performance on the presentation of the results of solving a specific educational, practical, educational, research or scientific topic	Topics of reports, messages
3	Case report	Clinical examination of a surgical patient and registration of the results of the examination in the form of a medical educational history of the disease	List of the main surgical nosologies for writing a medical history
4	Test	A system of standardized tasks that allows you to automate the procedure measuring the level of knowledge and skills of the student	Test fund assignments
5	Business/role play	Joint activity of a group of students and a teacher under the control of a teacher in order to solve educational and professionally oriented tasks through game simulation of a real problem situation. Allows you to evaluate the ability to analyze and solve typical professional problems.	Theme (problem), concept, roles and expected outcome for each game
6	Control work	A tool for testing skills to apply the acquired knowledge to solve problems of a certain type on a topic or section	A set of control tasks by options
7	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of assimilation of the material, the ability to apply theoretical knowledge in practice.	Task List
5	Interview	A means of control, organized as a special conversation between a teacher and a student on topics related to the discipline being studied, and designed to clarify the amount of knowledge of the student in a particular section, topic, problem, etc.	Questions on topics / sections of the discipline

3. List of competencies indicating the stages of their formation in the process of mastering the educational program and types of assessment tools

Code and wording of competence	Stage of formation of competence	Controlled sections of the discipline	Evaluation tools
GPC-4,5 PC-5,6,7	Current	Section 1. History of urology. Semiotics and methods of diagnosis of urological diseases. Medical ethics and deontology in the work of a urologist.	Essay Report Case report Test Business/role play
GPC-4,5 PC-5,6,7		Section 2. Nonspecific and specific inflammatory diseases of the urinary system and male genital organs.	Control work Case report Test Situational tasks Business/role play
GPC-4,5 PC-5,6,7		Section 3. Urolithiasis disease.	Case report Situational tasks
GPC-4,5 PC-5,6,7		Section 4. Oncourology. Tumors of the kidney, bladder. Prostate cancer. Hyperplasia of the prostate.	Test Situational tasks
GPC-4,5 PC-5,6,7		Section 5. Injuries of the urinary system.	Interview
GPC-4,5 PC-5,6,7	Intermediate	Section 1. History of urology. Semiotics and methods of diagnosis of urological diseases. Medical ethics and deontology in the work of a urologist. Section 2. Nonspecific and specific inflammatory diseases of the urinary system and male genital organs. Section 3. Urolithiasis disease. Section 4. Oncourology. Tumors of the kidney, bladder. Prostate cancer. Hyperplasia of the prostate. Section 5. Injuries of the urinary system.	Test Interview

4. The content of the evaluation means of current control

Current control is carried out by the teacher of the discipline when conducting classes in the form of: essay, report, case report, test, business/role play, control work, situational tasks, interview.

4.1. Test questions for assessing competencies: GPC-4, GPC-5, PC-5, PC-6, PC-7

1. The right ureter crosses at the border line of the pelvis
 1. with common iliac artery
 2. with external iliac artery
 3. with internal iliac artery
 4. with hypogastric artery
 5. with obturator artery

2. The urethra perforates the urogenital diaphragm
 1. prostatic part
 2. membranous part
 3. cavernous part
 4. none of the above
 5. prostatic and membranous parts

3. Testicle cover
 1. four shells
 2. five shells
 3. six shells
 4. seven shells
 5. eight shells

4. Rapid metastasis of testicular tumor cells is possible
 1. in superficial and deep inguinal lymph nodes
 2. to internal iliac lymph nodes
 3. in retroperitoneal lumbar lymph nodes
 4. to the common iliac lymph nodes
 5. to the obturator lymph nodes

5. The glomerular filtration rate in an adult is on average
 1. 60 ml/min
 2. 120 ml/min
 3. 180 ml/min
 4. 240 ml/min
 5. 300 ml/min

6. With a stone in the intramural ureter that disrupts urodynamics, the pains are
 1. aching
 2. stupid
 3. acute
 4. paroxysmal acute
 5. constant aching

7. In acute parenchymal prostatitis, pain is localized
 1. over the bosom
 2. in the lumbar region
 3. in the lumbosacral spine
 4. in the perineum and sacrum
 5. in the crotch

8. Dysuria occurs in all of the following disorders except

1. tuberculosis
2. prostate adenomas
3. kidney tumors
4. cystitis

9. Pollakiuria is

1. increased diuresis
2. increased urination day and night
3. increased nighttime urination
4. increased daytime urination
5. increased nocturnal diuresis

10. Acute urinary retention is

1. lack of excretion of urine by the kidneys
2. inability to empty the bladder on its own
3. absence of urine in the bladder during its catheterization
4. lack of independent urination in a horizontal position
5. paradoxical ischuria

11. It is customary to talk about leukocyturia when the content of leukocytes in the field of view of the microscope

1. over 2
2. over 4
3. over 6
4. over 8
5. over 10

12. All of the following are indications for uroflowmetry except

1. urethral stricture, urethral valve
2. prostate adenomas
3. prostate cancer
4. acute prostatitis
5. neurogenic bladder dysfunction

13. The first diagnostic method that is indicated for suspected bladder cancer:

1. descending cystography
2. sedimentary pneumocystography
3. polycystography
4. ultrasound
5. cystoscopy

14. In the clinic of extraperitoneal rupture of the bladder, it is necessary to perform

1. retrograde cystography in direct, lateral projections and after urination
2. retrograde cystography in direct projection
3. retrograde cystography in lateral projection
4. Ultrasound
5. cystoscopy

15. Ultrasound findings of a simple kidney cyst

1. round shaped mass
2. volumetric formation of a rounded shape of a hypoechoic structure
3. solid (tissue) formation of a rounded shape

4. solid formation of a rounded shape with even contours
 5. volumetric formation of a rounded shape, hypoechoic structure with the phenomenon of distal amplification of the echo signal
16. Ultrasound signs of kidney cancer
1. round shaped mass
 2. ovoid shaped mass
 3. thin-walled volumetric formation of hypoechoic structure
 4. volumetric formation of a rounded shape of a solid echostructure
 5. hypoechoic mass formation with a capsule of 2-3 mm
17. Therapeutic exercise is suitable for
1. acute pyelonephritis, acute prostatitis
 2. polycystic, multicystic kidney
 3. staghorn stone, multiple kidney stones
 4. nephroptosis, chronic prostatitis
 5. chronic epididymitis
18. Among the complications of a horseshoe kidney, the first place is occupied by
1. urolithiasis disease
 2. hydronephrosis
 3. pyelonephritis
 4. arterial hypertension
 5. hematuria
19. Spongy kidney is characterized by the presence of a large number of small cysts
1. in the renal cortex
 2. in the cortex and medulla of the kidney
 3. in the renal pyramids
 4. at the gate of the kidney
 5. in one of the poles of the kidney
20. Megacalycosis is the result
1. focal absence of fusion of mesonephrogenic and metanephrogenic blastema rudiments
 2. medullary dysplasia
 3. lack of bookmark of the excretory apparatus
 4. splitting of the ureteric bud before its entry into the metanephrotic blastema
 5. underdevelopment of the ureter
21. A characteristic clinical symptom of ectopic ureteral orifice is
1. urinary incontinence
 2. urinary incontinence
 3. combination of normal urination with urinary incontinence
 4. urinary retention
 5. combination of normal urination with urinary incontinence
22. The most common complication of hydronephrosis is
1. arterial hypertension
 2. venous hypertension
 3. pyelonephritis
 4. nephrolithiasis
 5. hematuria

23. In case of hydronephrotic transformation caused by an additional lower polar vessel, complicated by acute serous pyelonephritis, at the first stage it is expediently expedient
1. Culp de Weerd operation
 2. resection of the ureteropelvic segment with pyeloureteroanastomosis
 3. percutaneous puncture nephrostomy
 4. Foley operation
 5. antevasal pyeloureteroanastomosis
24. Bladder exstrophy is the most common complication
1. micro- and macrohematuria
 2. urinary (salt) diathesis
 3. pyelonephritis and kidney stones
 4. arterial hypertension
 5. chyluria
25. The optimal age to start treatment for cryptorchidism is
1. 8-10 months
 2. 1 year
 3. 2 years
 4. 3-4 years
 5. 6 years
26. In chronic pyelonephritis primarily affected
1. vascular loops of the glomerulus of the kidney
 2. Shumlyansky-Bowman capsule
 3. kidney tubules
 4. descending limb of the loop of Henle
 5. ascending limb of the loop of Henle
27. Pain in acute paranephritis
1. located in the lumbar region
 2. radiate to the scapula
 3. radiate anteriorly and downward to the thigh area
 4. radiate to the back
 5. radiate to the navel
28. The most effective method for diagnosing a perirenal abscess is
1. plain radiography of the urinary tract
 2. excretory urography
 3. isotope renography
 4. ultrasonography
 5. pararenal puncture
29. The main role in the occurrence of cystitis is given
1. local circulatory disorders
 2. physical factors
 3. infections
 4. chemical factors
 5. common factors
30. The cause of bladder leukoplakia is

1. exposure to chemical agents
 2. radiation damage to the bladder
 3. bladder tuberculosis
 4. chronic cystitis
 5. amoebic cystitis
31. Interstitial cystitis is characterized by the following cystoscopic picture
1. bladder ulcers
 2. pseudopolyposis of the bladder mucosa
 3. the presence of whitish and yellow plaques on the mucous membrane
 4. rounded ulcer on the background of unchanged bladder mucosa
 5. bullous edema of separate sections of the mucous membrane of the bladder
32. Symptoms of acute urethritis include all of the following except
1. pain when urinating
 2. hematuria and swelling of the skin of the scrotum
 3. purulent discharge from the urethra
 4. swelling of the lips of the external opening of the urethra
 5. frequent urination
33. When stabilizing the fibroplastic induration of the penis, it is most effective
1. use of steroids, vitamin E, ultrasound
 2. plastic surgery
 3. spongy-cavernous anastomosis
 4. use of extracorporeal lithotripsy
 5. all of the above are correct
34. Chronic infectious epididymitis and orchitis should be differentiated from all of the following except
1. tuberculosis of the testis and epididymis
 2. neoplasms of the testis and epididymis
 3. funiculitis and deferentitis
 4. spermatocele
 5. varicocele
35. All of the following are indicated for prostate abscess except
1. intensive antibiotic therapy
 2. placement of an indwelling catheter
 3. cystostomy for urinary retention
 4. drainage of the abscess cavity by transurethral or perineal access
 5. detoxification therapy
36. The most informative for the diagnosis of vesiculitis is
1. semen analysis
 2. prostate secretion analysis
 3. vesiculography
 4. ultrasound examination of the seminal vesicles
 5. urethrocytography
37. The etiological factors of urolithiasis include
1. violation of phosphorus-calcium metabolism
 2. metabolic disorders of oxalic acid

3. purine metabolism disorder
 4. urinary infection (pyelonephritis)
 5. all of the above
38. The following anatomical and morphological changes in the kidneys contribute to the formation of kidney stones
1. chronic glomerulonephritis
 2. intrarenal pelvis and impaired lymphatic drainage from the kidney
 3. venous plethora
 4. extrarenal pelvis
 5. renal arterial hypertension
39. With an oxalate stone of the renal pelvis 20 x 25 mm without disturbing urodynamics, it is most rationally shown
1. remote shock wave lithotripsy with stent placement
 2. litholysis
 3. pyelolithotomy
 4. puncture nephrolithotomy
 5. no intervention shown.
40. With urate stone of the pelvis-ureteral segment, acute serous pyelonephritis,
1. antibiotics, conservative treatment
 2. puncture nephrolithotomy
 3. pyelolithotomy, kidney revision (nephrostomy or pyelostomy)
 4. shock wave lithotripsy
 5. ureteral catheterization
41. There was significant bleeding during pyelolithotomy and nephrolithotomy. In this case, you should do
1. introduction into the pelvis and cups of a hemostatic sponge
 2. pyelostomy
 3. nephrostomy
 4. nephrectomy
 5. sew up the pelvis tightly
42. In acute (milliary) tuberculosis, the kidneys are affected
1. only kidneys
 2. only lymph nodes
 3. only lungs
 4. only the skeletal system
 5. many bodies
43. In tuberculosis, the kidneys primarily occur
1. damage to the renal papilla (specific papillitis)
 2. ulceration of the mucous membrane of the calyx and pelvis
 3. tuberculous tubercles in the parenchyma
 4. specific inflammatory infiltrate
 5. tuberculous cavity
44. Primarily in the urinary system, tuberculosis affects
1. bladder
 2. urethra

3. kidney
 4. ureter
 5. pelvis
45. Urgent surgical treatment for closed kidney injury is indicated
1. with a small stable pararenal hematoma
 2. at high temperature
 3. with gross hematuria
 4. with anemia, unstable hemodynamics, growing hematoma
 5. in shock
46. Ureter injury is more common
1. in the upper third
 2. in the middle third
 3. in the lower third
 4. in the intramural
 5. in the ureteropelvic segment
47. Of the listed research methods, the most informative in case of kidney damage
1. ultrasound
 2. plain radiography of the kidneys and urinary tract
 3. excretory urography
 4. retrograde ureteropyelography
 5. Computed tomography
48. Nephrectomy for kidney injury
1. in young people with normal function of the contralateral kidney
 2. when the kidney is separated from the renal pedicle and crushed
 3. in people with severe shock
 4. with a large retroperitoneal hematoma
49. A characteristic sign of a penile injury is
1. rupture of the albuginea
 2. subcutaneous hematoma
 3. damage to the cavernous bodies
 4. pain in the absence of a hematoma
 5. swelling of the foreskin
50. When a malignant tumor is localized in one of the poles of a single kidney, one should take
1. nephrectomy
 2. kidney resection
 3. observation of the patient
 4. tumor excision
 5. segmental artery embolization

№ test task	№ response standard	№ test task	№ response standard	№ test task	№ response standard
1	2	21	3	41	3
2	2	22	3	42	5
3	4	23	3	43	3
4	3	24	3	44	3

5	2	25	2	45	4
6	4	26	3	46	3
7	4	27	1	47	5
8	3	28	4	48	2
9	4	29	3	49	2
10	2	30	4	50	2
11	3	31	1		
12	4	32	2		
13	4	33	2		
14	1	34	5		
15	5	35	2		
16	4	36	4		
17	4	37	5		
18	3	38	2		
19	3	39	1		
20	2	40	3		

4.2. Topics of essays for assessing competencies: GPC-4, GPC-5, PC-5, PC-6, PC-7

1. Renal colic. Causes, pathogenesis, diagnosis and principles of relief of renal colic.
2. Syndrome of acute and chronic urinary retention. Causes, classification, clinic, diagnosis and principles of treatment
3. Anuria syndrome. Causes, pathogenesis, classification, diagnosis and treatment.
4. Closed and open kidney damage. Classification, clinic, diagnosis and treatment
5. Open and closed injuries of the ureters. Injuries to the ureters during obstetric and gynecological and surgical operations.
6. Instrumental methods of diagnostics in urology.
7. Planning of urological service in polyclinic and hospital.
8. Clinical and topographic anatomy of the urinary organs.
9. Physiology of the urinary system.
10. Diagnostic value of total hematuria, methods for determining and interpretation of the syndrome, diagnostic features.
11. Brief essay on the history of domestic urology.
12. Place of X-ray computed and magnetic resonance imaging in diagnosis of urological diseases. Prospects for their development.
13. Perspectives of methods of endoscopic surgery in urology.
14. Laboratory, instrumental, radiological methods for determining the functional ability of the kidneys.
15. The main directions of the use of new types of energy in clinical urology (high frequency currents, the use of lasers, the energy of "shock waves", radio waves, focused ultrasound).

4.3. Situational tasks for assessing competencies: UC-1, UC-3, UC-4, UC-5, GPC-1, GPC-4, GPC-5, GPC-6, GPC-7, GPC-8, GPC-11, PC-1, PC-2, PC-4, PC-5, PC-6, PC-7, PC-8, PC-9, PC-10, PC-11, PC-17, PC-22

Situational task number 1.

A 35-year-old woman was admitted to the urological department with complaints of paroxysmal pain in the right lumbar region, accompanied by nausea, vomiting, and frequent urge to urinate. On the overview picture of the urinary tract, at the level of the transverse process of

the 4th lumbar vertebra on the right, a shadow suspicious for a calculus is determined, oval in shape, 0.5 * 0.5 cm in size.

Question: what additional x-ray studies need to be done to establish the nature of the detected shadow?

Situational task number 2.

A 60-year-old patient has painless macrohematuria with worm-like blood clots. During cystoscopy, the bladder mucosa was normal, blood was detected from the mouth of the left ureter. On a survey radiograph of the urinary tract, the contours of the kidneys are not determined, there are no shadows suspicious of stones in the projection of the urinary tract. Excretory urograms revealed no pathological changes in the projection of the pelvicalyceal system. The passage of the contrast agent through the ureters is not disturbed.

Question: what disease should be thought of in the first place, and what x-ray studies should be performed to establish a diagnosis?

Situational task number 3.

A 55-year-old patient was admitted to a urological clinic with complaints of frequent painful urination, excretion of blood in the urine. Sick for 4 months. The abdomen is soft and painless. The kidneys are not palpable. Pasternatsky's symptom is negative on both sides. The prostate gland is not enlarged with a smooth surface, painless. In the overview picture of the urinary system, there are no shadows suspicious for calculi. During his stay in the clinic, the patient developed total painless macrohematuria with shapeless blood clots, in connection with which an urgent cystoscopy was performed. On the left side wall of the bladder, a coarse-villous tumor was found in three fields of view of the cystoscope, on a wide base, not casting a shadow. The right mouth of the ureter is located in a typical place, slit-like. The left mouth of the ureter is not defined.

Question: what X-ray methods of research should be performed to select the nature and extent of surgical treatment?

Situational task number 4.

A 32-year-old patient has a typical picture of right-sided renal colic. On the survey radiograph of the urinary system in the projection of the lower third of the right ureter, a stone shadow measuring 0.8 * 0.4 cm is determined. After the injection of baralgin 5 ml IV and a warm bath, the pain subsided, but after 30 minutes resumed again. Produced blockade of the round ligament of the uterus according to Lorin-Epstein. The pain subsided for a short time, and then resumed again. The patient is restless, takes various positions, groans, asks for help.

Question: what should be done to stop renal colic?

Situational task number 5.

A 44-year-old patient, suffering from a stone in the lower third of the left ureter, had an attack of left-sided renal colic 6 hours ago, her body temperature rose to 38.4°C, she had a tremendous chill. The abdomen is painful in the left hypochondrium, the painful lower pole of the left kidney is palpated. On the survey radiograph of the urinary system in the projection of the juxtavesical section of the left ureter, the shadow of the calculus is determined with dimensions of 0.5 * 0.4 cm.

Question: what conservative method of treatment will hope for relief of acute pyelonephritis?

Situational task number 6.

A 34-year-old patient was brought to the clinic because of pain in the left lumbar region, which arose after a fall and a bruise in the left lumbar region. From the anamnesis it is known that after the injury there was macrohematuria twice.

The patient's condition is satisfactory. Pulse and blood pressure are normal. There are no pathological changes in the organs of the chest and abdominal cavity. There is a slight swelling in the left lumbar region.

Question: what is your preliminary diagnosis?

Situational task number 7.

A 25-year-old patient was brought to the clinic because of pain in the right lumbar region, gross hematuria with clots. From the anamnesis it is known that an hour ago he was struck in the right lumbar region. The position of the patient is forced: there is a pronounced left-sided scoliosis, swelling is determined in the right lumbar region. Pulse 105 bpm. Blood pressure 85/50 mm Hg. Art. There are no signs of peritoneal irritation. Free fluid in the abdominal cavity is not determined. On excretory urograms, the left kidney is of normal size, the pyelocaliceal system is not changed. The passage of the radiopaque substance through the ureter is not disturbed. On the right, the contrast agent in the projection of the kidney and urinary tract is not determined.

Question: What is your diagnosis?

- treatment strategy?

Situational task number 8.

A 35-year-old patient was admitted to the clinic because of pain in the suprapubic region, ischuria. From the anamnesis it is known that 3 hours ago, being in a state of intoxication, he received a blow to the suprapubic region. An attempt to carry out self-urination was unsuccessful. The position of the patient is forced. Sits bent over, holding hands on the lower abdomen. There is a symptom of "vanka-vstanki". On rectal examination, there is an overhang of the anterior wall of the rectum. There is free fluid in the abdomen.

Question: What is your preliminary diagnosis?

— diagnostic and therapeutic tactics?

Situational task number 9.

The patient was diagnosed with extraperitoneal rupture of the bladder.

Question: treatment tactics?

Situational task number 10.

A 40-year-old patient was admitted to the clinic for urethrorrhagia. From the anamnesis it is known that an hour ago at a construction site he fell, hit his crotch on a board.

Question: What is your preliminary diagnosis?

— diagnostic tactics?

Situational task number 11.

A 42-year-old patient is in the trauma department, where he was hospitalized 2 hours ago for fractures of the pelvic bones. Pulled out of shock. An enlarged bladder is palpated, urethrorrhagia occurs.

Question: What is your diagnostic tactic?

Situational task number 12.

The patient has high body temperature, chills, throbbing pain in the perineum, dysuria. On rectal examination, a sharply enlarged, painful prostate gland is felt.

Question: - What is your diagnosis?

Situational task number 13.

The mother brought her child to the doctor with complaints of pain in the penis. The head of the penis is edematous, cyanotic due to infringement by the foreskin.

- Question: What happened to the child?
 - What remedial measures are needed?

Situational task number 14.

A 35-year-old patient consulted a urologist with complaints of dull pain in the sacral region, pain in the inguinal region radiating to the scrotum, and sometimes pain during urination. On examination, the abdomen is soft and painless. The kidneys are not palpable. Pasternatsky's symptom is negative on both sides. The prostate is not enlarged, smooth, painful, somewhat edematous in the area of the right lobe. Stranguria, pollaki-uria. leukocyturia in the third portion, a large number of leukocytes in the secret of the prostate.

- Question: disease of which organ can explain the indicated symptomatology?

Situational task number 15.

A 65-year-old patient complained of strong urges, inability to urinate independently, pain in the lower abdomen. These symptoms increase within 14 hours.

- Question: What is a presumptive diagnosis?
 - diagnostic and therapeutic recommendations?

Situational task number 16.

A 70-year-old patient complains of weakness, headache, nausea, vomiting, involuntary excretion of urine from the urethra drop by drop. The skin is pale, the tongue is dry coated with a brown coating. The abdomen is soft, the kidneys are not palpable, Pasternatsky's symptom is negative on both sides. Percussion bladder is determined 6 cm above the womb. The prostate gland is evenly enlarged, densely elastic in consistency, its surface is smooth, the interlobar groove is smoothed. Serum urea 180 mg%.

- Question: What is a presumptive diagnosis?
 - treatment recommendations?

Situational task number 17.

A 62-year-old patient has been complaining of difficult urination for the last 3 years, sluggish and thin stream of urine. The skin is of normal color, the tongue is moist, not coated. The abdomen is soft and painless. The kidneys are not palpable, Pasternatsky's symptom is negative on both sides. The bladder percussion is not determined. External genital organs are not changed. On rectal examination, the prostate is moderately enlarged, its right lobe is lumpy, stony, painless. The rectal mucosa over the right lobe is motionless. PSA - 21.4 ng / ml.

- Question: What is a presumptive diagnosis?
 - What research should be done to clarify the diagnosis?

Situational task number 18.

A 59-year-old patient came to the clinic of nervous diseases in connection with lumbosacral sciatica. Sick for a year, periodic exacerbations. Treatment, including sinusoidal currents, is not effective. When examining organ systems without features. There is no dysuria. The external genitalia are unchanged. On rectal examination, the prostate is not enlarged, lobulated, soft-elastic consistency, smooth. PSA 25 ng/ml.

- Question: What is a presumptive diagnosis?
 - what investigations should be done to clarify the diagnosis?

Situational task number 19.

A 70-year-old patient complains of weakness, dizziness, poor appetite, thirst. With increasing symptoms, he has been ill for 1-1.5 years. Not treated. Tongue dry, coated. The kidneys are not palpable, however, their area is painful. Percussion the bladder is defined above the pubis by three transverse fingers. On rectal examination, the prostate was enlarged, of a stony consistency,

the paraprostatic tissue was infiltrated. Ultrasound showed hydronephrotic transformation on both sides. The content of urea in blood serum is 120 mg%, glucose is 100 mg%, PSA is 120ng/ml.

- Question: - what disease should I think about?
 - what investigations should be carried out to establish the diagnosis?
 - Decide on a treatment plan.

Situational task number 20.

A 65-year-old patient complains of an urge to urinate while walking and shaking. Sometimes there is an interruption of the stream of urine during urination.

- Question: What is your presumptive diagnosis?
 What research do you suggest to conduct to clarify the diagnosis?
 What kind of therapy do you offer?

Situational task number 21.

A 37-year-old patient suddenly developed acute pain in the right lumbar region, radiating to the thigh; restless behavior, frequent urination. In the analysis of urine fresh erythrocytes.

- Question: What is your presumptive diagnosis?
 What research do you suggest to conduct to clarify the diagnosis?
 What kind of therapy do you offer?

Situational task number 22.

A 40-year-old patient for 3 days has pain in the lower back on the left, accompanied by an increase in body temperature up to 39-40 ° C, with chills, pyuria. From the anamnesis it is known that a stone of the upper third of the left ureter measuring 3.0 * 1.0 cm was found a year ago; surgical treatment was offered, which the patient refused.

- Question: What is your presumptive diagnosis?
 What research do you suggest to conduct to clarify the diagnosis?
 What kind of therapy do you offer?

Situational task number 23.

A 35-year-old patient was admitted to the clinic with complaints of pain in the lumbar region, fever up to 39°C, chills. Sick 2nd day. Correct physique. Body temperature 39 ° C. Pulse 100 beats / min, rhythmic, satisfactory filling. Vesicular breathing in the lungs. The tongue is dry, not furred. The abdomen is soft. Pasternatsky's symptom is positive on the left. Positive bimanual symptom of acute pyelonephritis. There is no dysuria. Microhematuria, leukocyturia. Ultrasound showed dilatation of the pelvicalyceal system on the left. The mobility of the left kidney is limited. Ultrasound picture of the right kidney is not changed. On a survey picture of the urinary system, at the level of the transverse process L3 on the left, there is a shadow suspicious of a calculus, 9 * 4 mm in size. There are no pathological formations in the pyelocaliceal system of the right kidney on excretory urograms. The passage of the contrast medium through the ureter is not disturbed. On the left, moderate pyelectasis. Expansion of the ureter proximal to the above-described shadow of the calculus. Positive symptom of Lichtenberg. With polypositional urography, the shadow of the calculus coincides with the shadow of the ureter, made with a contrast agent.

- Question: 1. What is your diagnosis?
 2. What therapeutic measures are indicated?

Situational task number 24.

A 40-year-old patient was admitted to the clinic with complaints of dull pain in the lumbar region on the right, sometimes an increase in body temperature up to 37.4 ° C, turbid urine, an increase in blood pressure up to 180/115 mm Hg. Art. She was repeatedly examined and treated

in urological hospitals for chronic pyelonephritis. Correct physique. Pulse 96 bpm rhythmic, intense. BP 180/110 mmHg Art. The heart sounds are muffled, the accent of the second tone is on the aorta. The abdomen is soft. Pasternatsky's symptom is positive on the right. At times, dysuria, leukocyturia. Ultrasound reveals a decrease in the size of the right kidney (8.0 * 4.0 cm), its contours are uneven. The left kidney measures 11.0 * 5.0 cm with a smooth contour. On the survey picture of the urinary system in the projection of the urinary tract, no shadows of calculi were detected. The contours of the kidneys are not clearly defined. Excretory urograms showed no pathological changes in the pelvicalyceal system and ureter on the left. On the right, the kidney is 8 * 4 cm. Bean-shaped with an uneven contour. The cups are deformed in places, bell-shaped. On the aortograms, the arterial vessels of the right kidney are narrowed, in some places there are avascular areas, a positive symptom of "burnt tree".

- Question: 1. What is your diagnosis?
2. What is the treatment strategy?

Situational task number 25.

A 30-year-old patient was admitted to the hospital with a diagnosis of acute pyelonephritis. Sick for 2 days. He notes pain in the lumbar region on the right, an increase in body temperature up to 38.7 ° C, there was a chill. Didn't go to the doctor. On examination, the state of moderate severity, the skin is hyperemic. Pulse 108 bpm. The tongue is dry, coated with a whitish coating. The abdomen is soft. The kidneys are not palpable. Pasternatsky's symptom is positive on the right. Positive bimanual symptom of acute pyelonephritis. Leukocytosis. Leukocyturia. On the survey picture of the urinary system, no calculus shadows were detected. The contour of the lumbar muscle (m. psoas) on the right and the shadow of the right kidney are not defined.

Question: — what diagnostic measures will confirm the diagnosis of acute pyelonephritis?

Situational task number 26.

A 30-year-old patient was admitted to the clinic with complaints of increased blood pressure up to 190/120 mm Hg. Art., sick after bruising of the lumbar region. During the year he was unsuccessfully treated in a therapeutic hospital. Pulse 80 bpm, rhythmic, intense. Heart sounds are muffled. Emphasis of the second tone on the aorta. The kidneys are not palpable. Pasternatsky's symptom is negative on both sides. Auscultation of the projection of the renal vessels on the anterior wall of the abdomen reveals a coarse systolic murmur. There is no dysuria.

- Question: What is your preliminary diagnosis?
- what researches it is necessary to carry out for specification of the diagnosis?

Situational task number 27.

A 32-year-old patient complains of pain in the lumbar region, increased blood pressure up to 180/120 mm Hg. Art. Sick for 3 years. Pulse 80 bpm /min, rhythmic, satisfactory filling. The abdomen is soft, the kidneys are not palpable. Pasternatsky's symptom is weakly positive on the right. In the vertical position of the body, the lower segment of the right kidney is palpated. There is no dysuria. At times, macrohema-turia.

- Question: What is your presumptive diagnosis?
- survey plan?

Situational task number 28.

The patient is 40 years old. For 5 years, he has been experiencing dull pain in the lumbar region on the right, headache, increased blood pressure up to 180/110 mm Hg. Art. Repeatedly was in urological hospitals for chronic pyelonephritis. A shriveled kidney was diagnosed a year ago. During the year notes an increase in arterial pressure. about which he entered the clinic. Pulse 84 bpm. Heart sounds are muffled. The abdomen is soft. The kidneys are not palpable.

Pasternatsky's symptom is negative. Sometimes microhematuria. On a survey picture of the urinary system, the shadows of the kidneys are not determined. There are no shadows of stones. On urograms, a decrease in the size of the right kidney. Deformation of the pelvicalyceal system (roughness of the contours, flask-shaped expansion of the calyces of the right kidney).

Question: What is your diagnosis?
— further research methods?

Situational task number 29.

The urologist on duty, who had just completed an emergency operation, was informed from the emergency room at 2:30. that a patient was admitted with painless total hematuria.

Question: - what should be the tactics of a urologist, the urgency of diagnostic and treatment procedures?

Situational task number 30.

A 52-year-old patient has a balloting mass 10*8 cm in size with a dense, bumpy surface that is palpated in the right hypochondrium. With percussion over the formation of tympanitis. Excretory urography data do not allow sovereignty to exclude disease of the right kidney.

Question: — what methods of examination will allow to confirm or exclude urological diseases?

4.4. Writing a case history for competency assessment: GPC-4, GPC-5, PC-5, PC-6, PC-7

Work at the bedside of the patient: collection of complaints, anamnesis, examination of the objective status. Work with medical records. Registration of the results of the examination of a surgical patient in the form of a medical educational history of the disease.

4.5. Topics of reports for assessing competencies: GPC-4, GPC-5, PC-5, PC-6, PC-7

1. Instrumental methods for diagnosing urological diseases. The main modern scientific directions and achievements in this field.
2. Rectal-urethral fistulas. Rectovesical fistulas. Urethrovaginal fistulas. Main modern scientific directions and achievements in this field.
3. Balanitis. Balanoposthitis. Phimosis. Paraphimosis. Clinical manifestations. Diagnostics. Methods of conservative and surgical treatment. Main modern scientific directions and achievements in this field.
4. Nonspecific urethritis. Classification. Clinical manifestations. Diagnostics. Pharmacotherapy. Complications. The main modern scientific directions and achievements in this field.
5. Coral nephrolithiasis. Classification of coral stones. Treatment of coral-like kidney stones. Main modern scientific trends and achievements in this field.
6. Prevention and metaphylaxis of urolithiasis. The role of sanatorium-and-spa treatment in ICD. The main modern scientific directions and achievements in this field.
7. Testicular tumors. TNM classification. Clinic and diagnostics. Features of surgical treatment. The main modern scientific directions and achievements in this field.
8. Tumors of the penis. Classification. precancerous diseases. Treatment. The main modern scientific directions and achievements in this field.
9. Injuries of the urethra. Classification. Diagnostics. Treatment. The main modern scientific directions and achievements in this field.
10. Injuries of the penis. Classification. Diagnostics. Treatment. The main modern scientific directions and achievements in this field.
11. The main regulatory documents necessary for the introduction of new methods for the prevention and treatment of urological diseases and for scientific research.
12. Promising directions of scientific research on urological problems at the present stage.

13. Basic principles and criteria for the selection of patients with MPS diseases for participation in a scientific study.
14. Modern methods of diagnosing urological diseases and the possibility of their application in scientific research.
15. Fundamentals of ethics and deontology of medical practice, norms and moral principles of scientific ethics in conducting scientific research with the participation of urological patients.

4.6. Themes of business/role games for assessing competencies: GPC-4, GPC-5, PC-5, PC-6, PC-7

1. Role/business game «History of urology. Semiotics and methods for diagnosing urological diseases».

During the business game, which is organized during a practical lesson, the student demonstrates knowledge of the history of urology, the skills of interpreting the data of questioning, examination, physical research methods, instrumental and laboratory data in order to verify the most common urological pathology and determine treatment tactics.

2. Role/business game "Non-specific and specific inflammatory diseases of the urinary system and male genital organs."

During the business game, which is organized during a practical lesson, the student demonstrates the skills of interpreting the data of questioning, examination, physical research methods, instrumental and laboratory data in order to verify non-specific and specific inflammatory diseases of the urinary system and male genital organs in a patient and determine treatment tactics .

4.7. Topics of control work for assessing competencies: GPC-4, GPC-5, PC-5, PC-6, PC-7

1. Fundamentals of ethics and deontology of medical practice, norms and moral principles of scientific ethics in conducting scientific research with the participation of urological patients.

2. Symptoms of diseases of the kidneys and urinary tract, general and local manifestations of urological diseases.

3. Anatomy and physiology of the organs of the genitourinary system.

4. Localization and nature of pain in diseases of the kidneys, bladder, prostate, scrotum organs. Clinical symptoms of renal colic.

5. Urinary disorders. Change in the size and deformation of the prostate gland, surface, consistency, state of the interlobar sulcus, state of the seminal vesicles.

6. Possibilities of ultrasound in detecting morphological and functional changes in the kidneys and upper urinary tract.

7. X-ray studies. Panoramic image, intravenous urography, tomography.

8. Kidney anomalies. Classification of anomalies of the kidneys and ureters.

9. Bladder anomalies.

10. Epispadias. Hypospadias: anatomical features of the urethra and penis. Diagnostics. Duration of surgical treatment. Features of surgical treatment and its stages. Valves of the urethra. Operative treatment.

11. Anomalies of the male genital organs.

12. Acute and chronic cystitis. Etiology. Pathogenesis. Classification. Modern attitude to the diagnosis of "chronic cystitis". Symptomatology. clinical course. Diagnostics.

13. Acute pyelonephritis, clinic, diagnosis, treatment.

14. Chronic pyelonephritis, clinic, diagnosis, treatment.

15. Paranephritis. Etiology, pathogenesis. Symptoms and clinical course. Ways of spread of abscesses. Diagnostics. Treatment: conservative, surgical. Features of the operation.

16. Prostatitis: acute and chronic. Diagnosis, clinic, treatment. Symptoms, differential diagnosis. Complications. Treatment of complications. Balanitis and balanoposthitis. Treatment. Complications.
17. Epididymitis. Acute and chronic. Differential diagnosis with tuberculosis. Epididymoorchitis. Association with sexually transmitted diseases.
18. Clinical picture of nephrolithiasis.
19. Treatment of KSD (conservative, litholysis, shock wave and contact lithotripsy, surgical treatment).
20. Kidney cancer, clinic, diagnosis, treatment.
21. Tumors of the pyelocaliceal system and ureter. Clinical picture, features of diagnosis and treatment, clinical examination of patients.
22. Bladder tumor. Causes, classification, diagnosis and treatment.
23. Benign prostatic hyperplasia, clinic, diagnosis, treatment.
24. Prostate cancer, clinic, diagnosis, treatment.
25. Kidney damage, clinic, diagnosis, treatment.
26. Injuries of the pelvicalyceal system and ureter, clinic, diagnosis, treatment.
27. Bladder injury, clinic, diagnosis, treatment.
28. Damage to the external genitalia in men. Causes, diagnosis and treatment.
29. Diagnosis and treatment of urethral stricture, endoscopic and traditional surgical interventions, indications, contraindications, technical features of operations and their results.
30. Features of surgical treatment of damaged kidney.

4.8. Interview questions for assessing competencies: GPC-4,GPC-5,PC-5, PC-6, PC-

7

1. Fundamentals of ethics and deontology of medical practice, norms and moral principles of scientific ethics in conducting scientific research with the participation of urological patients
2. Techniques and technologies of goal-setting and goal-realization when conducting a scientific study of the urological profile.
3. Describe the state system for informing urologists about federal standards for the treatment and diagnosis of urological diseases.
4. Describe the modern approaches to the study of problems of clinical medicine, taking into account the specifics of economic aspects on the example of urological diseases.
5. Describe the possibilities of using modern methods for diagnosing urological diseases in scientific research
6. Define the main principles and criteria for selecting patients with MPS for participation in a research study.
7. Suggest several possible promising directions of scientific research on urological problems.
8. List the regulatory documentation necessary for the introduction of new methods for the prevention and treatment of urological diseases.
9. Describe the rules for preparing and filing an application for a patent for an invention.
10. Symptoms of diseases of the kidneys and urinary tract, general and local manifestations of urological diseases.
11. Laboratory diagnostics, blood tests, urine, prostate secretion, semen.
12. Anatomy and physiology of the organs of the genitourinary system;
13. Urosemiotics. Symptoms of urological diseases.
14. Symptoms of diseases of the kidneys and urinary tract, general and local manifestations of urological diseases. Pathogenetic substantiation of symptoms of diseases of the kidneys, urinary tract and male genital organs. Concepts "symptom", "sympotocomplex", "syndrome".

15. Localization and nature of pain in diseases of the kidneys, bladder, prostate, scrotum organs. Clinical symptoms of renal colic.

16. Urinary disorders. Changes in the size and deformation of the prostate gland, surface, consistency, condition of the interlobar sulcus, condition of the seminal vesicles.

17. Dimensions, texture, shape, surface of the testicles, appendages and spermatic cords. Symptom of diaphanoscopy.

18. Laboratory diagnostics, blood tests, urine, prostate secretion, semen. The value of laboratory research in the diagnosis, choice of treatment tactics and evaluation of the effectiveness of treatment.

19. Possibilities of ultrasound in detecting morphological and functional changes in the kidneys and upper urinary tract. Pharmaco-ultrasound study. Diagnostic and therapeutic manipulations under ultrasound control.

20. X-ray studies. Panoramic image, intravenous urography, tomography, sonography. Radionuclide research. Ability to interpret results.

21. Embryogenesis of the urinary organs.

22. Kidney anomalies. Classification of anomalies of the kidneys and ureters.

23. Aplasia and hypoplasia of the kidney. Diseases of the hypoplastic kidney and their treatment. Difference of a hypoplastic kidney from a wrinkled kidney (diagnosis methods).

24. Double kidney. Features of diagnostics. Complete and incomplete doubling of the kidneys.

25. Third accessory kidney. Diagnosis of quantity anomalies.

26. Location anomalies. Frequency. Features of the blood supply. Types of kidney dystopia. clinical picture. Features of the blood supply. Differential diagnosis of kidney dystopia and nephroptosis. Cross dystopia.

27. Relationship anomalies. Galetiform kidney. Horseshoe kidney and its forms. Features of the diagnosis of her diseases and operations on her.

28. Structural anomalies. Polycystic kidney disease. Embryogenesis. Diagnostics. Treatment. Solitary cyst of the kidney. Etiology. Pathogenesis. Contents of the cyst. Clinic. Diagnostics. Treatment: cyst puncture. Operative treatment. Indications. Dermoid cyst of the kidney. Retention changes in the renal calyx (hydrocalyx, diverticulum), causes, diagnosis, differential diagnosis (urate stone, papillary tumor of the calyx neck, tuberculosis, intrarenal vessel compression).

29. Anomalies of the ureter: number, location (ectopia), wall structure (achalasia, megaloureter, diverticulum).

30. Bladder anomalies.

31. Bladder exstrophy. Signs, clinical course. Complications. Treatment and its features: terms and types of operations.

32. Bladder diverticulum: congenital and acquired. Etiology. Pathogenesis. Clinic. Diagnostics. Treatment. Indications for surgery and its technique.

33. Urachus failure. Embryogenesis. Diagnostics. Treatment. Features of the operation.

34. Anomalies of the urethra: stricture, diverticulum. Clinic. Diagnostics. Treatment.

35. Epispadias. Hypospadias: anatomical features of the urethra and penis. Diagnostics. Duration of surgical treatment. Features of surgical treatment and its stages. Valves of the urethra. Operative treatment.

36. Paraurethral course. Anatomical features. Clinic. Treatment.

37. Duplication of the urethra. Diagnostics. Treatment.

38. Anomalies of the male genital organs. The need for prompt correction, interaction with pediatric urologists.

39. Clinical significance of developmental anomalies, their role in the development of diseases and complications, diagnosis, the need for observation, surgical correction, the nature and technical features of operations, the timing of operations.

40. The consequence of untimely surgical correction of anomalies of the genitourinary system.
41. Acute and chronic cystitis. Etiology. Pathogenesis. Classification. Modern attitude to the diagnosis of "chronic cystitis". Symptomatology. clinical course. Diagnostics.
42. Simple bladder ulcer. Leukoplakia of the bladder. cystalgia. Treatment.
43. Acute pyelonephritis. Routes of infection. Types of pathogens. The role of refluxes (vesicoureteral, pelvic-ureteral) in the pathogenesis of pyelonephritis. Modern attitude to the lymphogenous pathway of infection in pyelonephritis. Pathoanatomy. Genesis of bacteriuria and pyuria. their clinical significance.
44. Clinic of acute pyelonephritis (primary and secondary). General and local symptoms of the disease.
45. Diagnosis of acute pyelonephritis. Diagnostic value of ultrasound, chromocystoscopy, urography. The role of ultrasound in the differential diagnosis of acute primary and acute secondary pyelonephritis. Symptoms of "white kidney". Possibilities of excretory urography.
46. Apostematous pyelonephritis, carbuncle, kidney abscess, necrosis of renal papillae (clinic, diagnosis, treatment). The role of computed tomography in the choice of treatment method.
47. Pyelonephritis of pregnant women and the postpartum period. Features of the course of pyelonephritis in pregnant women, treatment, prevention. The role of internal drainage of the upper urinary tract with a catheter-stent in pyelonephritis of pregnant women.
48. Treatment of acute pyelonephritis: conservative, surgical. Indications. Types of operations, the technique of their implementation, tactical features depending on the state of the passage of urine and the severity of the inflammatory process in the kidney. The role of puncture nephrostomy in the treatment of acute secondary pyelonephritis. Express diagnostics of the sensitivity of the urine flora to antibacterial drugs.
49. Bacteriemic shock: causes, clinic, features of the course and its results, prevention.
50. Chronic pyelonephritis. Etiology. Pathogenesis: factors of transition of acute pyelonephritis to chronic. Classification according to the activity of inflammation. Pathoanatomy. Symptomatology. Diagnosis: quantitative methods for determining leukocyturia, test of active leukocytes, Sternheimer-Malbin cells, methods for determining the degree of bacteriuria, chromocystoscopy data.
51. X-ray signs of chronic pyelonephritis according to excretory urography. The value of isotope renography and scanning in the determination of chronic pyelonephritis, its stage, pharmacocenography, the value of isotope renography with bacterial allergens for the detection of latent chronic pyelonephritis.
52. Treatment of chronic pyelonephritis: antibacterial, immunostimulating, spa, surgical.
53. Pyonephrosis is the final stage of a chronic inflammatory process. Clinic, diagnosis, treatment. Peculiarities of pyonephrosis in tuberculosis and staghorn nephrolithiasis. Features of the operation. Indications for simultaneous nephrectomy and puncture nephrostomy in order to prepare for a radical operation.
54. Paranephritis. Etiology, pathogenesis. Symptoms and clinical course. Ways of spread of abscesses. Diagnostics. Treatment: conservative, surgical. Features of the operation.
55. Prostatitis: acute and chronic. Diagnosis, clinic, treatment. Symptoms, differential diagnosis. Complications. Treatment of complications. Balanitis and balanoposthitis. Treatment. Complications.
56. Epididymitis. Acute and chronic. Differential diagnosis with tuberculosis. Epididymoorchitis. Association with sexually transmitted diseases.
57. The main clinical manifestations of ICD. Symptoms and syndromes.
58. Renal colic. The pathogenesis of renal colic. Treatment.
59. Laboratory methods for diagnosing urolithiasis and their interpretation.
60. Instrumental methods for diagnosing urolithiasis and their interpretation.
61. The role of ultrasound in the diagnosis of urolithiasis.

62. Radiodiagnosis of urinary stones. The study of calculi to assess the prognosis of shock wave lithotripsy.
63. Clinical picture of nephrolithiasis.
64. Treatment of KSD (conservative, litholysis, shock wave and contact lithotripsy, surgical treatment).
65. Complications of nephrolithiasis, causes, diagnosis, treatment, prevention.
66. Metaphylaxis of nephrolithiasis. Secondary stone formation, causes, diagnosis, treatment, prevention.
67. Tumor of the renal parenchyma. Prevalence and incidence, features of detection. Morphological features, benign and malignant tumors, the degree of differentiation of cancer cells.
68. Classification, stages of the cancer process and the TNM system. Diagnosis of the nature of the neoplasm, its localization, prevalence, stage, metastasis. Evaluation of operability, choice of method of surgical treatment.
69. Surgical treatment of tumors of the renal parenchyma (extended and organ-preserving operations, palliative interventions), features of surgical access, nephrectomy technique, kidney resection, enucleation of the tumor node, thrombectomy, lymphadenectomy in kidney cancer.
70. Therapeutic tactics for bilateral kidney cancer, cancer of a single kidney. Results of surgical treatment, immunotherapy of patients with kidney cancer. Clinical examination of patients.
71. Tumors of the pyelocaliceal system and ureter. Clinical picture, features of diagnosis and treatment, clinical examination of patients.
72. Bladder tumor. Causes, classification, diagnosis and treatment.
73. Endoscopic and traditional surgical methods for the treatment of bladder cancer.
74. Cystectomy and urinary diversion. Radiation, chemotherapy and immunotherapy for bladder tumors. Clinical examination of patients.
75. Hyperplasia of the prostate. Morbidity, prevalence, etiology, pathogenesis.
76. Hormonal theory (the historical role of F.I. Sinitsyn), testosterone and dihydrotestosterone metabolism disorders, the role of growth factors, isoenzymes (acid and alkaline 5-alpha reductase) in the pathogenesis of prostate hyperplasia.
77. Mechanical and dynamic components of infravesical obstruction in prostate hyperplasia.
78. Clinical picture of BPH, diagnosis (physical, ultrasound, x-ray, endoscopic, urodynamic and morphological studies), stages of the clinical course, complications and their prevention.
79. Indications for conservative therapy and surgical treatment of prostate adenoma. Complications, their prevention and therapy. Medicinal products of conservative therapy (5-alpha-reductase inhibitors, alpha-blockers, herbal preparations), their effectiveness, indications for use, methods of application, side effects, evaluation of treatment results.
80. Transurethral, transcystic and retropubic adenomectomy, technical conditions and performance features, complications and their prevention, postoperative management, results.
81. Indications and technical features of bladder drainage in patients with prostate hyperplasia.
82. Clinical examination of patients with prostate hyperplasia.
83. Prostate cancer. Morbidity, prevalence, etiology, pathogenesis. Pathological anatomy, the degree of differentiation of cancer cells.
84. Intraductal intraepithelial invasion (PIN) as a precancerous condition.
85. Clinical course of prostate cancer, stages of the cancer process, prevalence, TNM classification.
86. Diagnosis of prostate cancer (clinical, laboratory, ultrasound, X-ray, radionuclide, magnetic resonance, morphological).

87. The role of PSA as a specific tumor marker, the importance of transrectal ultrasound and polyfocal prostate biopsy.
88. Kidney damage, causes, classification.
89. Features of surgical treatment of damaged kidney.
90. Injuries of the pelvicalyceal system and ureter, combined injuries, iatrogenic trauma, causes, clinical manifestations, complications, diagnosis, treatment and prevention.
91. Bladder injuries, intra- and extraperitoneal injuries, combinations with pelvic fractures. Pathogenesis, clinical picture, complications, diagnosis, treatment and prevention.
92. Urethral trauma. Causes, diagnosis, treatment and prevention.
93. Sequelae of trauma to the urethra.
94. Diagnosis and treatment of urethral stricture, endoscopic and traditional surgical interventions, indications, contraindications, technical features of operations and their results.
95. Damage to the external genitalia in men. Causes, diagnosis and treatment.
96. Penile injury. Mechanism and types of damage to the penis. Clinical picture of open, closed and combined injuries.
97. Methods of plastic restoration of the penis after its traumatic amputation.
98. Testicular injury. Mechanism and types of testicular injuries.
99. Clinical picture and diagnostic methods for various types of open and closed testicular injuries.
100. Therapeutic tactics in testicular injury.

5. The content of the evaluation means of intermediate certification: test, situational task, interview

Intermediate certification in the 7th semester of the 4th is carried out in the form of a test

Intermediate certification in the 7th semester of the 4th is carried out in the form of the credit

5.1 The list of control tasks and other materials necessary for assessing knowledge, skills and experience: tests in sections test tasks and interview questions.

5.1.1. Test questions with answer options for the test in the discipline "Urology" are presented in paragraph 4.1

5.1.2. The list of questions for the interview at the intermediate certification in the discipline "Urology" are presented in paragraph 4.8

5.1.3. The list of questions for the interview at the credit in the discipline "Urology" are presented in paragraph 4.8

6. Criteria for evaluating learning outcomes

For testing:

Rating "5" (Excellent) - points (100-90%)

Rating "4" (Good) - points (89-80%)

Grade "3" (Satisfactory) - points (79-70%)

Less than 70% - (Unsatisfactory) - Grade "2"

For credit:

Learning Outcomes	Evaluation criteria	
	Not credited	Passed
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were gross errors.	The level of knowledge in the amount corresponding to the training program. Minor errors may be made

Availability of skills	When solving standard problems, the basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills. Typical tasks are solved, all tasks are completed. Minor errors may be made.
Availability of skills (possession of experience)	When solving standard problems, basic skills were not demonstrated. There were gross errors.	Demonstrated basic skills in solving standard problems. Minor errors may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no qualitative readiness to solve the assigned tasks	Learning activity and motivation are manifested, readiness to perform the assigned tasks is demonstrated.
Characteristics of the formation of competence	Competence is not fully formed. The available knowledge, skills and abilities are not enough to solve practical (professional) problems. Re-learning required	The formation of competence meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) problems.
Competence level	Low	Medium/High

A complete set of assessment tools for the discipline "Urology" is presented on the portal of the LMS of the Volga Research Medical University <https://sdo.pimunn.net/course/view.php?id=1291>

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