

	<p>Федеральное государственное бюджетное образовательное учреждение высшего образования  "Волгоградский государственный медицинский университет"  Министерства здравоохранения Российской Федерации  Образовательная программа  Специальность 31.05.01 "Лечебное дело"  (уровень специалитета)</p>	<p>УЧЕБНО-МЕТОДИЧЕСКИЙ КОМПЛЕКС  ДИСЦИПЛИНЫ  "УРОЛОГИЯ"</p>
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**Evaluation tools for certification  
in the discipline "Urology"  
for students in the educational program  
of the specialty 31.05.01 General Medicine,  
University entrance years 2021- 2022,  
orientation (profile) General Medicine,  
full-time form of study  
for the 2024-2025 academic year**

1.1. Evaluation tools for conducting current certification in the discipline

The current certification includes the following types of tasks: testing, solving situational tasks, assessing the development of practical skills (abilities), control work, writing and defending an abstract, interviewing on control issues, preparing a report.

1.1.1. Examples of test tasks

Verifiable indicators of competence achievement: GPC-4.1.2; GPC -7.1.1, GPC -7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8; PC-3.1.1.

1. Anticholinergic drugs in the treatment of detrusor hyperactivity are used for:

- 1) reducing the degree of symptoms of the lower urinary tract
- 2) to reduce the severity of detrusor hyperactivity and to increase the storage capacity of the bladder
- 3) increasing the storage capacity of the bladder
- 4) increase the volume of the bladder

2. How long do I need to fill out the urination diary?

- 1) no more than 12 hours
- 2) at least 24 hours
- 3) no more than 36 hours
- 4) at least 72 hours

3. During which of the procedures is botulinum toxin type A injected into detrusor?

- 1) Pyeloscopy
- 2) Colposcopy
- 3) Urethroscopy
- 4) cystoscopy

4. Dysuria occurs in all of these diseases, except

- 1) Tuberculosis

- 2) prostate adenomas
- 3) kidney tumors
- 4) cystitis

5. Oliguria occurs in all of these diseases, except

- 1) Mixededems
- 2) Glomerulonephritis
- 3) heart failure
- 4) kidney tumors
- 5) copious vomiting

6. When cystalgia is indicated

- 1) antibacterial drugs orally, intravenously or intravenously;
- 2) instillation into the bladder of 0.25% solution of nitric acid silver
- 3) both
- 4) neither one nor the other

7. The following symptom is not characteristic of the ureter stone:

- 1) dysuria
- 2) lower back pain radiating to the lower abdomen
- 3) nausea, vomiting
- 4) Kocher's symptom

8. Acute obstructive pyelonephritis caused by a ureter stone primarily requires:

- 1) appointment of fluoroquinolones
- 2) appointment of cephalosporins
- 3) appointment of infusion therapy
- 4) warm baths

1.1.2. Examples of situational tasks

Verifiable indicators of competence achievement: GPC-4.2.1, GPC-4.2.2; PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC- 2.3.3.

Task 1. A 28-year-old man is concerned about acute pain in the right lumbar region, the intensity of which is decreasing, then increasing. Soon after the onset of pain, chills, nausea and vomiting appeared. There are no violations of urination and hematuria. Physical examination. Body temperature 38.4 ° C; pulse 88 beats / min; BH 16 / min, BP 154/70 mm Hg. The abdomen is soft, moderately painful on the right; soreness in the right rib-vertebral corner; there are no symptoms of irritation of the peritoneum. Genitals: without pathology. Rectal examination: without pathology.

Additional research. The level of electrolytes, urea, and creatinine in the blood is normal. The number of leukocytes is  $16 \times 10^9 / l$ , the shift of the leukocyte formula to the left. General urinalysis: pH 5.0, positive test for leukocyte esterase, negative test for nitrites, 5-10 leukocytes in the field of vision, > 25 erythrocytes in the field of vision. Overview urography: without pathology. CT of the abdominal and pelvic organs without contrast: signs of a stone in the lower third of the right ureter, with a density of 300 HU.

1. Diagnosis
2. Treatment tactics

Task 2. A 52-year-old patient complained about the presence of blood impurities in the urine. Blood is secreted in the form of worm-shaped clots. He became acutely ill, against the back-

ground of full health. On examination, the enlarged left kidney is determined, painless, dense consistency.

1. What is macrohematuria related to?
2. What additional examinations does he need?

#### 1.1.3. Examples of tasks for assessing the development of practical skills

Verifiable indicators of competence achievement: GPC-4.2.1, GPC-4.2.2; PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC-2.3.3.

1. Indications for catheterization of the bladder, technique of execution.
2. Paraphimosis. First aid. The technique of paraphimosis treatment.

#### 1.1.4. Example of a variant of the control work

Verifiable indicators of competence achievement: GPC-4.1.2; GPC-7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8; PC-3.1.1.

A 52-year-old man had acute pain in the lumbar region on the right a day ago, which was initially accompanied by macrohematuria. The pain radiates to the right groin area. There is no fever, chills and joint pain. The patient notes frequent urination, while there is no pain during urination or a decrease in the amount of urine. He suffers from gout, during exacerbations of which he takes hydroxychloroquine and NSAIDs, and Allopurinol as planned. The last exacerbation of gout was about 9 months ago. Currently, there are no symptoms of gout. He has a history of hypercholesterolemia, for which he takes simvastatin. Allergic anamnesis is not burdened. The family history of kidney and bladder diseases is not burdened. Before that, there was no pain in the lower back or hematuria.

Physical examination. Temperature 37.5°C, pulse 88 beats/min, blood pressure 141/72 mmHg. art. BH 16/min. Appearance: healthy, mild discomfort due to pain. Auscultation of the lungs: without pathology. Auscultation of the heart: the rhythm is sinus, there are no pathological noises. The abdomen is slightly enlarged due to subcutaneous fat, slight soreness in the right lumbar region with deep palpation, there is no soreness in the costal-vertebral angles. Genitals: no damage, bulky formations or soreness. Rectal examination: normal size and consistency, painless prostate gland.

Additional research. The number of leukocytes is  $11,5 \times 10^9/l$ . Blood urea is 7.7 mmol/l, serum creatinine is 128 $\mu$ mol/l. The electrolyte level is normal. Serum calcium 10.7 mg%, uric acid 521  $\mu$ mol/l. General urinalysis: pH 5, nitrites detected, erythrocytes > 100 in the field of vision, leukocytes 6-10 in the field of vision, bacteriuria 1+. Urine culture: absence of microflora growth. Overview radiography of abdominal organs: without pathology. Excretory urography and CT without contrast: signs of a stone of the lower third of the right ureter, without urodynamic disorders.

Formulate a diagnosis. What is the treatment tactics?

#### 1.1.5. Examples of abstract topics

Verifiable indicators of competence achievement: GPC-4.1.2; GPC-7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8; PC-3.1.1.

1. Stress urinary incontinence. Etiology. Pathogenesis. Epidemiology. Innovative approaches to conservative and surgical treatment.
2. Post-traumatic urethral strictures. Instrumental diagnostic methods. Comparative characteristics of surgical correction options.

3. Hyperactive bladder. Modern ideas about etiopathogenesis. Innovative methods of conservative therapy and surgical correction.

#### 1.1.6. Examples of control questions for the interview

Verifiable indicators of competence achievement: GPC-4.1.2; GPC-7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8; PC-3.1.1.

1. Clinical aspects of renal colic
2. Pathogenetic aspects of excretory anuria
3. Indications for surgery in the treatment of urolithiasis.
4. The presence of bacteriuria in the etiology of pyelonephritis.

#### 1.1.7. Examples of topics of reports

Verifiable indicators of competence achievement: GPC-4.1.2; GPC-7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8; PC-3.1.1.

1. Peyronie's disease. Definition. Modern concepts of etiology, pathogenesis. Differential diagnosis. Approaches to conservative treatment and surgical correction.
2. Priapism. Modern concepts of etiology, pathogenesis. Differential diagnosis of forms of priapism. Approaches to conservative treatment and surgical correction.
3. Minimally invasive operations for nephrolithiasis. Differentiated approach to the choice of surgical access.

### 1.2. Evaluation tools for conducting intermediate certification in the discipline

Intermediate certification is carried out in the form of a credit.

Intermediate certification includes the following types of tasks: interview.

#### 1.2.1. List of interview questions

№	Questions for intermediate attestation	Verifiable indicators of competence achievement
1	Kidney abscess, kidney carbuncle (differential diagnosis, diagnostic methods, approaches to surgical treatment, prognosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
2	Anomalies of kidney development (symptoms, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
3	Anuria (classification, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
4	Apostematous nephritis, kidney carbuncle (differential diagnosis, diagnostic methods, approaches to surgical treatment, prognosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
5	Peyronie's disease (etiology, clinic, diagnosis, ap-	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1,

	proaches to conservative and surgical treatment).	GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
6	Varicocele (classification, symptoms, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
7	Hematuria (causes, tactics of the doctor for pain-free total hematuria, first aid).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
8	Gestational pyelonephritis (etiology, pathogenesis, clinic, diagnosis, approaches to conservative and surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
9	Hydronephrosis (etiology, pathogenesis, clinic, diagnosis, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
10	Hydrocele (classification, symptoms, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
11	Benign hyperplasia and prostate cancer (etiology, pathogenesis, clinic, diagnosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
12	Malignant neoplasms of the kidney (classification, symptoms, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
13	Bladder catheterization: indications, technique, types of catheters, complications.	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
14	Incontinence, incontinence of urine. Acute and chronic urinary retention. Paradoxical ischuria.	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
15	Nephroptosis (etiology, pathogenesis, clinic, diagnosis, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
16	Bladder tumors (clinic, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
17	Acute urinary retention (causes, diagnostic methods, first aid, depending on the causes).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-

		2.3.2,PC-2.3.3; PC-3.1.1
18	Acute and chronic prostatitis (etiology, symptomatology, clinic, differential diagnosis, treatment, prognosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
19	Acute orchoepididymitis (symptoms, differential diagnosis, diagnostic methods, approaches to conservative and surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
20	Acute pyelonephritis (etiology, pathogenesis, clinic, diagnosis, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
21	Paranephritis (etiology, symptomatology, clinical course, differential diagnosis, diagnostic methods, approaches to surgical treatment, prognosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
22	Bladder injuries (classification, symptoms, differential diagnosis, diagnostic methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
23	Kidney damage (classification, symptomatology, differential diagnosis, treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
24	Polycystic kidney disease (symptoms, differential diagnosis, research methods, approaches to surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
25	Renal colic (causes, differential diagnosis, diagnostic methods, first aid).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
26	Stress urinary incontinence (etiology, clinic, diagnosis, approaches to conservative and surgical treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
27	Urolithiasis (conservative and operative treatment, types of operations, prognosis).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
28	Urolithiasis (etiology, pathogenesis, composition of stones, pathological anatomy).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1
29	Cystitis (etiology, clinic, differential diagnosis, research methods, treatment).	GPC-4.1.2,GPC-4.2.1,GPC-4.2.2;GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8,PC-2.2.1, PC-2.2.2;PC-2.3.1, PC-2.3.2,PC-2.3.3; PC-3.1.1

30	Strictural disease of the urethra (etiology, differential diagnosis, research methods)	GPC-4.1.2, GPC-4.2.1, GPC-4.2.2; GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8, PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC-2.3.3; PC-3.1.1
31	Strictural disease of the urethra (approaches to surgical treatment, prognosis)	GPC-4.1.2, GPC-4.2.1, GPC-4.2.2; GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8, PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC-2.3.3; PC-3.1.1
32	Hyperactive bladder (etiology, differential diagnosis, research methods)	GPC-4.1.2, GPC-4.2.1, GPC-4.2.2; GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8, PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC-2.3.3; PC-3.1.1
33	Hyperactive bladder (approaches to conservative and surgical treatment, prognosis)	GPC-4.1.2, GPC-4.2.1, GPC-4.2.2; GPC 7.1.1, GPC-7.1.3; PC-1.1.3, PC-1.1.4; PC-2.1.2, PC-2.1.8, PC-2.2.1, PC-2.2.2; PC-2.3.1, PC-2.3.2, PC-2.3.3; PC-3.1.1

Approved upon urology department conference, protocol 11 upon 18.06.2024.

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