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ASSESSMENT TOOLS

**UROLOGY** 

Уникальный еза68f3eaa1 e62674b54f4998099d3d6bfdcf836SpecialistSpecialty31.05.01 General MedicineForm of educationFull-timeDesigner DepartmentSurgical DiseasesGraduate DepartmentInternal Diseases

### Sample tasks and tests

## Topic 1.3. Semiotics and symptomatology of urologic diseases. Instrumental methods of examination.

Task 1. Points for oral quiz

- 1. General principles of diagnostics in urologic pathology.
- 2. Typical clinical manifestations of urologic diseases.
- 3. Modern methods of instrumental diagnostics in urological pathology.

Task 2. Test.

- 1. HEMATURIA IS NOT CHARACTERISTIC OF
- A. Urolithiasis
- Б. Urinary tract tuberculosis
- B. Testicular tumors
- $\Gamma$ . Tumors of the urinary tract
- \*Д. Goodpasture's syndrome
- 2. A 54-year-old man who came to the clinic after another attack of renal colic began experiencing general weakness, chills, and an increase in body temperature to 39.9°C. He has been suffering from urolithiasis for 10 years with recurrent stone formation. For 10 years, he has been suffering from urolithiasis with periodic passage of stones. On examination: pale skin, acrocyanosis, blood pressure 75/40 mm Hg, pulse 130 beats per minute, weak volume. Which of the following conditions is most likely with these symptoms?
- \*A. Bacteriotoxic shock
- Б. Acute serous pyelonephritis.
- B. Acute purulent pyelonephritis
- Γ. Acute prostatitis
- Д. Prostate abscess
- 3. An 18-year-old young man presented to the emergency department with complaints of pain in the right side of the abdomen radiating to the scrotum, nausea, and vomiting. The onset was acute, occurring for the first time. Palpation revealed muscle tension in the right side of the abdomen. Blumberg's sign (rebound tenderness) is questionable. Costovertebral angle tenderness (Pasternacki's sign) is weakly positive on the right side. Temperature is 37.6°C. The white blood cell count in the complete blood count is 8×10^9. Urinalysis shows 30-50 red blood cells per high power field. Which of the following diagnoses is most likely?
- \*A. Renal colic
- Б. Acute appendicitis
- B. Acute cholecystitis
- $\Gamma$ . Intestinal obstruction
- Д. Perforated 12-perforated ulcer of the 12-peritoneum.
- 4. WHAT DISEASE IS CHARACTERIZED BY DYSURIA?
- A. Hydronephrosis
- Б. Nephroptosis
- \*B. IBC (urolithiasis)
- Γ. Polycystic disease
- Д. Renal artery thrombosis

### 5. PATIENT BEHAVIOR IN RENAL COLIC

- A. Immobile on the back
- \*B. Continuously changing body position
- B. Lying on his side
- $\Gamma$ . Forced sitting position on a chair
- Д. Vertical position

Task 3. Situational task.

A 23-year-old man was referred to a urology clinic by a general practitioner. He complains of periodic headaches and decreased visual acuity. Four years ago, during his military service, a medical commission first identified elevated blood pressure. He underwent treatment in a military hospital. Blood pressure occasionally rose to 220/230 mm Hg. Hypotensive medications were ineffective. His condition is satisfactory. BP is 200/100 mm Hg. A diastolic murmur is audible in the epigastric region. The kidneys are not palpable. Urinalysis shows no pathology. Renal angiography revealed narrowing in the middle and distal third of the right renal artery in the form of a "string of beads." Diagnosis. Pathogenesis. Treatment.

Response: Symptomatic nephrogenic (angiogenic) arterial hypertension. The cause of hypertension is hyperproduction of renin and angiotensin in response to renal ischemia. Endovascular angioplasty with stenting of the affected renal arteries is indicated along with antihypertensive therapy.

# Topic 1.4. Radiologic, radioisotope, ultrasound methods of examination, computer and magnetic resonance tomography.

Task 1. Points for oral quiz:

- 1. Urography. Types, indications for use.
- 2. Renal scintigraphy. Indications for use.
- 3. Ultrasound examination in renal pathology, interpretation of results.
- 4. CT and MRI scanning in urologic pathology. Indications and interpretation of results.

Task 2. Test.

- THE SAFEST, NON-INVASIVE METHOD OF DIAGNOSTICS IN NEPHROLITHIASIS
- \*A. Ultrasound of the kidneys
- Б. Excretory urography
- B. Infusion urography
- Γ. Computed tomography
- Д. Chromocystoscopy
- 2. WHICH SYMPTOM IS DETERMINED DURING EXCRETORY UROGRAPHY OF A RADIOPAQUE RENAL STONE?
- \*A. The "filling defect" symptom
- Б. The "sickle shadow" symptom.
- B. The "slumping" symptom.
- Γ. The "beak" symptom
- Д. Hourglass symptom
- 3. IN CASE OF INTOLERANCE TO IODINE PREPARATIONS FOR DIAGNOSING THE LEVEL OF URETERAL OBSTRUCTION IS INDICATED
- \*A. Retrograde pneumopieloureterography
- Б. Radioisotope renography
- B. Renal ultrasound
- Γ. Dynamic scintigraphy
- Д. Computed tomography
- 4. FOR DIFFERENTIAL DIAGNOSIS OF BLADDER STONE IS THE MOST INFORMATIVE METHOD OF
- A. Descending cystography
- Б. Review image
- B. Pneumocystography
- \*Γ. Cystoscopy
- Д. Urofluorometry
- 5. IN THE PRESENCE OF BILATERAL CORALLOID KIDNEY STONES AND SUSPECTED

### HYPERPARATHYROIDISM. THE DIAGNOSTIC PLAN SHOULD INCLUDE

- A. Study of blood renin, aldosterone
- B. Determination of calcium, phosphorus of blood serum and daily urine

- B. Determination of blood parathormone, calcitonin
- $\Gamma$ . Parat hormone test, skeletal scans
- \*Д. All except a)

Task 3. Situational task.

A 56-year-old female patient was admitted to the urology department with complaints of blood in urine, worm-like clots, general weakness, elevated body temperature, and severe pain in the lumbar region on the left side. The pain disappeared after a necrotic area of renal tissue, which upon examination resembled a renal papilla, was eliminated with urine. Fever and hematuria persisted.

Diagnosis. Necessary investigations. Management strategy.

Answer: There is a disintegrating tumor of the left kidney, macrohematuria. CT scan, retrograde pyelography, and renal scintigraphy are indicated. Nephrectomy with lymph node dissection is required.

## Topic 1.6-1.7 Nephrolithiasis.

Task 1. Points for oral quiz:

- 1. Nephrolithiasis, etiopathogenesis, types of concretions.
- 2. Classification of nephrolithiasis.
- 3. Modern diagnostic methods in nephrolithiasis. Indications and sensitivity of methods.
- 4. Clinical manifestations of various forms of nephrolithiasis.
- 5. Tactics in uncomplicated nephrolithiasis.
- 6. Modern methods of treatment of nephrolithiasis. Types of operations.

Task 2. Test.

# 1. WHEN IS THE PROBABILITY OF COMPLETE CHANNEL CLOSURE GREATEST BASED ON NODULE PLACEMENT?

A. Upper calyx stone

Б. Coralloid stone of the pelvis

\*B. Ureteral stone

Γ. Bladder stone

- 2. THE SAFEST, NON-INVASIVE METHOD OF DIAGNOSIS FOR NEPHROLITHIASIS
- \*A. Renal ultrasound
- Б. Excretory urography
- B. Infusion urography
- Γ. Computed tomography
- Д. Chromocystoscopy
- 3. THE SUGGESTION OF NEPHROLITHIASIS DOES NOT ARISE IN:

A. MacrohematuriaB. MicrohematuriaB. Dull pain in the lumbar region\*G. Daily protein loss of more than 2 D. Renal colic

### 4. URETEROLITHOEXTRACTION IS APPROPRIATE FOR

\*A. In women with stones of the lower third of the ureter up to 6 mm in size, with uncomplicated course B.

In men in the same situation C. With stones of the middle third of the ureter 5-6 mm in men and women men and women D. In bilateral stones of the upper third of the ureter

Д. In bladder stones

## 5. A 50-YEAR-OLD PATIENT WITH PYONEPHROSIS ON THE RIGHT SIDE AND A CORAL STONE ON THE LEFT SIDE SHOULD BE RECOMMENDED FOR

- A. Pyelolithotomy and nephrostomy on the left side
- \*B. Nephrectomy on the right
- B. Right nephrectomy, pyelolithotomy and nephrostomy on the left side at the same time.
- $\Gamma$ . Shock-wave lithotripsy on the left side
- Д. Intervention is not indicated

Task 3. Situational task.

In a 28-year-old patient, a plain film of the urinary system revealed a shadow suspicious for a nodular formation in the projection of the middle third of the right ureter. Several days ago, he had an attack of acute pain in the right lumbar region. What is your presumptive diagnosis? What investigations are necessary to determine the nature of the shadow? What treatment would be appropriate if a stone is detected?

Answer. IBC. A stone of the cp/3 of the right ureter. Excretory urography, retrograde pyelography, chromocystoscopy, CT scan are indicated. Endoscopic lithoextraction, remote lithotripsy with water loading, ureterolithotomy is indicated.

## Topic 1.9-1.10. Tumor of the kidney and bladder. BPH and prostate cancer.

Task 1. Points for oral quiz:

- 1. kidney tumor. Etiology, pathogenesis, classification. Modern principles of diagnosis and treatment of renal tumors. Types of operations.
- 2. bladder tumor. Etiology, pathogenesis, classification. Modern principles of diagnosis and treatment in bladder tumors. Types of operations. The role of non-operative methods of treatment.
- 3. BPH. Etiology, pathogenesis, classification. Clinical manifestations, modern principles of diagnostics and treatment in BPH. Types of operations.
- 4. Prostate cancer. Etiology, pathogenesis, classification. Clinic, modern methods of diagnosis and treatment. Types of operations. Screening of prostate cancer.

Task 2. Test.

1. SCREENING OF PROSTATE CANCER IS CARRIED OUT ACCORDING TO THE FOLLOWING INDICATORS

A. General urinalysis

\*Б. PSA

B. CA19-9

Γ. REA

Д. Alpha fetoprotein

- 2. MORPHOLOGY OF CHANGES IN PROSTATE PATHOLOGY IS INVESTIGATED BY THE METHOD OF
- A. Excretory urography
- Б. Cystoscopy
- B. Dopplerometry
- \*Γ. Transrectal ultrasound with biopsy
- 3. IN RENAL TUMOR HEMATURIAA. InitialB. Terminal\*B. TotalG. Microhematuria
- 4. THE RADICAL TREATMENT FOR KIDNEY CANCER IS\*A. Radical nephrectomyB. Hormone therapyB. ImmunotherapyG. Radiation therapyD. Renal artery embolization
- 5. METHOD OF DETECTING BLADDER CANCER METASTASIS TO PELVIC LYMPH NODES A. Palpation of the abdomenB. Excretory urography\*B. Magnetic resonance imaging of the pelvis D. Pelvic lymphadenectomyD. Cystostomy

Task 3. Situational task.

The patient complains of blood in the urine. There is no pain. During the three-glass test, blood evenly colors all portions of urine. On bimanual palpation, no tumor in the small pelvis is detected. Atypical cells were found in the urine. The cystogram shows a filling defect of 2.5x3.5 cm. During cystoscopy, a pear-shaped formation on a wide base with areas of necrosis and hemorrhages was found on the right lateral wall of the bladder. The mucous membrane of the bladder around the formation was hyperemic. Excretory urography showed good function of both kidneys with unobstructed passage of urine into the ureter. Chest X-ray and liver ultrasound revealed no pathology.

Diagnosis. Treatment. Scope of surgical intervention and technique of operation.

Answer: Bladder cancer. Surgical treatment — cystectomy with bilateral ureterostomy or ureteroenteroureteroneocystostomy. The technique of the latter operation involves the formation of an intestinal reservoir and transplantation of the proximal parts of the ureters into it.

### Topic 1.12. Hydronephrosis and developmental anomalies of the genitourinary organs.

Task 1. Points for oral quiz:

- 1. Hydronephrosis. Etiology, pathogenesis, classification. Clinic, diagnosis, treatment. Types of operations.
- 2. Anomalies of development of urogenital organs. Etiology, pathogenesis, classification. Clinic, diagnosis, treatment. Indications for surgical treatment. Types of operations.

Task 2. Test.

- 1. TESTICULAR HYDROCELE IS
- \*A. Accumulation of serous fluid between the layers of the peritoneal lining of the testis
- Б. Accumulation of fluid in the scrotum
- B. Accumulation of urine near the testicle
- D. accumulation of seminal fluid in the testicular appendage
- 2. SURGERY FOR TESTICULAR HYDROCELE
- A. Bassini.
- \*Б. Winkelman
- B. Ivanesiewicz
- Γ. Whipple
- 3. IF CRYPTORCHIDISM IS DIAGNOSED IN AN ADULT, SURGERY IS INDICATED
- A. Testicular Descent
- \*Б. Orchiectomy

- B. Surgical treatment is not indicated
- 4. IF CRYPTORCHIDISM IS DIAGNOSED IN EARLY CHILDHOOD, SURGERY IS INDICATED FOR
- \*A. Testicular descending
- Б. Orchiectomy
- B. Surgical treatment is not indicated
- 5. SURGICAL TREATMENT FOR TRUNCAL HYPOSPADIAS
- A. Not indicated
- Б. Recommended
- \*B. Absolutely shown
- Task 3. Situational task.

A two-year-old boy is missing a testicle in the scrotum, and the right half of the scrotum is underdeveloped. The testicle cannot be detected by palpation in the inguinal canal. Where else should the testicle be sought and what diagnostic methods should be applied? At what age should orchiopexy be performed and why? What is its methodology? Answer: In the abdominal cavity (small pelvis). It is optimal to perform orchiopexy at the earliest possible age to prevent the formation of malignant seminoma. The operation involves mobilizing and moving the testicle from the

Topic 1.14-1.15. Tuberculosis of the genitourinary system. Acute and chronic renal failure.

Task 1. Points for oral quiz:

- 1. renal tuberculosis. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 2. acute renal failure. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for substitution therapy. Types of dialysis.
- 3. chronic renal failure. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for replacement therapy. Types of dialysis.

Task 2. Test.

1. RENAL TUBERCULOSIS MORE OFTEN AFFECTS

abdominal cavity to the inguinal region or scrotum.

- \*A. Kidney
- Б. Ureter
- B. Bladder
- Γ. Urethra
- Д. Penis
- 2. IN RENAL TUBERCULOSIS, THE LESIONS ARE MORE LIKELY TO BE
- \*A. Unilateral
- Б. Bilateral
- B. The kidneys are not affected by tuberculosis
- 3. MECHANISM OF INFECTION OF THE KIDNEY IN TUBERCULOSIS
- A. Ascending
- Б. Contact
- \*B. Hematogenous
- Γ. Lymphogenic
- 4. THE MOST COMMON PROCEDURE FOR TUBERCULOUS KIDNEY DISEASE IS THE FOLLOWING
- A. Decapsulation of the kidney
- Б. Autopsy of the kidney abscess
- B. Kidney stenting
- \*Γ. Nephrectomy
- Д. Transplantation
- 5. KIDNEY TRANSPLANTATION IN RUSSIA AT THE PRESENT STAGE IS MORE OFTEN PERFORMED USING
- A. Cadaver kidney
- Б. Donor kidney from an unrelated donor
- \*B. Donor kidney from a related donor
- ask 3. Situational task.
- A 25-year-old woman was admitted to the clinic in serious condition. Three days ago, she performed a self-induced abortion at home. After the abortion, her body temperature rose to 38°C, she experienced chills, and had vaginal discharge with an unpleasant odor. For 1.5 days, the patient had no urine output. Her condition is severe. Skin and visible mucous membranes are pale. The tongue is dry. Blood pressure is 95 mm Hg. Pulse is 101 beats per minute,

rhythmic, with weak volume. The bladder is not palpable. A catheter was inserted into the bladder — no urine was obtained. Serum urea is 26 mmol/L, creatinine is 0.65 mmol/L. What is the diagnosis? What is the treatment? Answer. Criminal abortion. Acute postabortal endometritis. Severe sepsis. Multiple organ dysfunction syndrome (MODS) with predominant acute renal failure. Treatment in the Intensive Care Unit (ICU). Preoperative preparation followed by emergency hysterectomy due to vital indications. Intensive therapy, massive antibacterial therapy, renal replacement therapy — hemodialysis.

## Topic 1.17-1.18. Pyelonephritis (acute and chronic) and nephrogenic hypertension.

Task 1. Points for oral quiz:

- 1. acute pyelonephritis. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 2. Principles of antibacterial therapy of acute pyelonephritis. 2.
- 3. Chronic pyelonephritis. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 4. Nephrogenic hypertension. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.

  Task 2. Test.
- 1. THE MOST INFORMATIVE METHOD OF DIAGNOSTICS OF RENAL CARBUNCLE
- \*A. Ultrasound examination of the kidneys
- Б. Excretory urography
- B. The study of glomerular filtration
- Γ. Retrograde pyelography
- Д. Kidney biopsy
- 2. IN CHRONIC PYELONEPHRITIS, ANTIBIOTIC THERAPY IS BASED ON THE FOLLOWING FACTORS
- A. Age
- Б. Gender
- B. Physician's personal preference
- \*Γ. Results of urine microbiologic examination and microflora sensitivity testing
- 3. INFECTION OF THE RENAL PARENCHYMA IN PYELONEPHRITIS IN WOMEN IS MORE LIKELY TO OCCUR
- A. Hematogenously
- Б. Lymphogenously
- Γ. Contact
- \*Д. Ascending
- 4. IN RENAL CARBUNCLE WITH SIGNS OF UROGENIC SEPSIS, IT IS NECESSARY TO
- A. Administer intravenous and endolymphatic antibiotics, detoxification
- \*Б. Perform urgent nephrectomy
- B. Perform urgent pyelolithotomy, excision of carbuncle, nephrostomy
- $\Gamma$ . Perform ureteral catheterization, conservative therapy
- Д. Perform puncture nephrostomy
- 5. A PATIENT HAS BEEN DIAGNOSED WITH ACUTE SEROUS PYELONEPHRITIS ON THE BACKGROUND OF URETERAL STONE OBTURATION. TACTICS.

A. continue antibacterial, antispasmodic therapy at home \*B. emergency hospitalization in urological hospital C. ureteral catheterization in outpatient clinic D. antishock therapy prophylactically E. equivalent options a), c) and d) Task 3. Situational task.

A 75-year-old female patient was admitted to the urology department with complaints of chills, dry mouth, thirst, and pain in the right lumbar region. Her condition is severe. Body temperature is 38.7°C, tongue is dry. Palpation reveals an enlarged and painful right kidney. Positive costovertebral angle tenderness (Pasternacki's sign) on the right side. Blood glucose is 12.7 mmol/L. Leukocytosis — 10,000, neutrophils — 12%. Urinalysis shows up to 10 leukocytes per high power field. According to excretory urography, there is no evidence of urolithiasis, the function of the right kidney is reduced, the left kidney is in satisfactory condition. Retrograde pyelogram shows amputation of the lower calyx of the right kidney, the ureter is patent throughout its length. Ultrasound reveals a purulent-necrotic nodule on the external contour of the lower pole of the kidney.

Diagnosis. Treatment.

Answer: Acute abscess of the lower pole of the right kidney. Urgent surgical intervention is indicated — drainage of the renal abscess by open method or by ultrasound-guided puncture. Infusion therapy, detoxification, and massive antibacterial therapy are required.

# Topic 1.20-1.22. Emergency urology (renal colic, bleeding, acute urinary retention, anuria). Injuries of the urogenital system.

Task 1. Points for oral quiz:

- 1. Renal colic. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 2. Algorithm of diagnostics and treatment of renal colic.
- 3. Hematuria. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Differential diagnosis. Indications for surgical treatment. Types of operations.
- 4. acute urinary retention. Etiology, pathogenesis, classification, clinic, modern methods of diagnosis and treatment. Differential diagnosis. Indications for surgical treatment. Types of operations.
- 5. Technique of puncture and traditional epicystostomy.
- 6. Differential diagnosis of anuria. Algorithm of diagnosis and treatment.

Assignment 2: Test.

- 1. IN RENAL COLIC, THE PATIENT'S BEHAVIOR IS AS FOLLOWS
- A. Immobile on the back
- \*B. Continuously changes body position
- B. Lying on his side
- $\Gamma$ . Forced sitting position on a chair
- Д. Vertical position
- 2. TYPICAL IRRADIATION OF PAIN IN RENAL COLIC
- A. To the shoulder, scapula
- Б. To the sternum medulla
- B. Epigastric region
- $*\Gamma$ . In the inguinal region, thigh, genitals
- Д. In the neck
- 3 A patient was admitted the day after the onset of illness with complaints of pain in the right iliac and lumbar regions of the abdomen. General condition is satisfactory, body temperature up to 37.4°C, pulse 92 beats per minute. The patient's forced position is notable (right leg bent at the knee and brought to the abdomen, lying on the right side). On palpation, the abdomen is soft, painful in the right iliac region, as well as in the projection of Petit's triangle. Positive signs: Rovsing's, Obraztsov's, and Pasternacki's. Urine without pathological changes, leukocytosis 10.2 thousand. Your diagnosis and treatment strategy?
- A. Renal colic, antispasmodic therapy
- Б. Acute pyelonephritis, antibacterial therapy
- B. Acute adnexitis, antibiotic therapy
- \*Γ. Acute retrocecal appendicitis, surgical treatment
- Д. Purulent paranephritis, surgical treatment
- 4. IN POSTRENAL ANURIA WITH URETERAL STONES, EMERGENCY TREATMENT IS INDICATED
- A. intravenous large doses of lasix, infusion therapy \*B. ureteral catheterization C. simultaneous bilateral nephrostomy D. shock wave lithotripsy E. equally c) and d)
- 5. IN ACUTE URETHRAL TRAUMA URETEROGRAPHY\*A. It is mandatory in the first hoursB. Not mandatoryB. Not indicated

Task 3. Situational task.

A 40-year-old man was kicked in the abdomen. He was admitted to the clinic 2 hours after the injury. He complains of pain in the lower abdomen, difficult urination in drops. Urine with an admixture of blood. The condition is satisfactory. In the suprapubic region is determined by soreness, muscle tension, percussion is determined dull sound. Positive symptom of Shchetkin-Blumberg. Presumptive diagnosis. What methods of research are necessary? Treatment. Answer. Extraperitoneal rupture of the bladder is possible. Cystoscopy or cystography is indicated. If the diagnosis is confirmed, emergency surgery is indicated - suturing the bladder rupture with 2-row sutures with unloading epicystostomy or management with a permanent urinary catheter. Uroantiseptics, antibacterial therapy.

### Sample tests for Credit with a mark:

Midterm assessment is carried out in the form of Credit with a mark. Tasks for the Credit with a mark include one theoretical point and a case study.

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- 1. Urolithiasis. Etiology, pathogenesis, the clinical picture. Diagnostic methods. Treatment, types of operations. Emergency care for renal colic
- 2. Pathology of the prostate. Classification. Etiology, pathogenesis, the clinical picture. Methods of screening for cancer of the pancreas. Methods of diagnosis and treatment, types of operations. Emergency care for acute urinary retention.
- 3. Kidney cancer. Methods of diagnosis and treatment, types of operations. Emergency care for haematuria.
- 4. A tumor of the bladder. Etiology, pathogenesis, classification. Current principles of diagnosis and treatment of bladder tumors. Types of operations. The role of nonsurgical treatments. Emergency care for haematuria.
- 5. Acute renal failure. Etiology, pathogenesis, principles of diagnosis, and treatment. Emergency care for acute urinary failure.
- 6. Chronic renal failure. Etiology, pathogenesis, principles of diagnosis, and treatment
- 7. Acute pyelonephritis. Etiology, pathogenesis, the clinical picture. Diagnostic methods. Treatment, types of operations
- 8. Chronic pyelonephritis. Etiology, pathogenesis, the clinical picture. Diagnostic methods. Treatment, types of operations
- 9. Nephrogenic hypertension. Etiology, pathogenesis, classification, clinical features, current methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 10. Renal tuberculosis. Etiology, pathogenesis, classification, clinical features, current methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 11. Kidney trauma. Etiology, pathogenesis, classification, clinical features, current methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.
- 12. Bladder trauma. Etiology, pathogenesis, classification, clinical features, current methods of diagnosis and treatment. Indications for surgical treatment. Types of operations.

## Sample Case – study, practical skills

A 40-year-old man was kicked in the abdomen. He was admitted to the clinic 2 hours after the injury. He complains of pain in the lower abdomen and difficult urination in drops. Urine contains blood. His condition is satisfactory. In the suprapubic region, tenderness and muscle tension are detected; percussion reveals a dull sound. Positive Blumberg's sign (rebound tenderness). Preliminary diagnosis. What examination methods are necessary? Treatment.

Answer: Extraperitoneal rupture of the bladder is possible. Cystoscopy or cystography is indicated. If the diagnosis is confirmed, emergency surgery is indicated — suturing the bladder rupture with a double-row suture, decompressing with an epicystostomy or installing a permanent urinary catheter. Uroantiseptics and antibacterial therapy are required.

- 2. 1. Collect complaints, take medical history, perform a physical examination of a patient with urological pathology, and interpret the results.
  - 2. Create a treatment plan for the specific patient and justify the indications for prescribed medications.