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**Collection of test tasks on urology to control the level of
knowledge of students of the fourth year of the medical faculty**

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The collection of tests discloses modern approaches to the organization of the educational process on the subject of urology, the provision of practical training, and the organization of independent training of students. The collection has a practical direction and is designed for students of higher medical institutions of Ukraine.

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Topic: Clinical anatomy, physiology of the urinary system and male reproductive system.

Tests for 1st level:

1. The correct location of the elements of the renal pedicle from front to back:
 - A. Vein, artery, pelvis.**
 - B. Artery, vein, ureter.
 - C. Artery, ureter, vein.
 - D. Ureter, vein, artery.
 - E. Vein, ureter, artery.

2. What is attached to the left kidney anteriorly and exteriorly:
 - A. Spleen and colon**
 - B. Spleen
 - C. Descending colon.
 - D. Small intestine loops.
 - E. Pancreas.

3. The renal pelvis is normally located within the range:
 - A. L₁ - L₂.**
 - B. Th₁₁ - L₁.
 - C. Th₁₁ - Th₁₂.
 - D. L₂ - L₄.
 - E. L₁ - L₃.

4. Normally, the kidneys may move:
 - A. To the height of one vertebra.**
 - B. The left kidney is slightly rotated.
 - C. Do not move during breath.
 - D. Lower while exhalation.
 - E. Angulation 160°.

5. Abdominal kidney system consists of:
 - A. pelvis, major and minor calyces.**
 - B. pelvis, major, middle and minor calyces.
 - C. pelvis, calyces and vaults.
 - D. major, middle and minor calyces.
 - E. pelvis, major and minor calyces and the beginning of the ureter.

6. The kidney forniceal apparatus includes:
 - A. Part of the minor calyx, its vaults and papilla.**
 - B. Renal pyramid and papilla.
 - C. Major calyx and minor calyces.

- D. Collector tubules and papilla.
 - E. Minor calyx and pelvis.
7. What is typical for the kidney anatomical structure (find the false variant):
- A. The right kidney is located higher than the left one on one vertebra.**
 - B. The kidney has a fibrous capsule.
 - C. Renal pelvis is located at the level of L₁ -L₂.
 - D. Each major calyx is formed from 2-3 minor calyces.
 - E. The physiological mobility of the kidney can be within 1 vertebra.
8. The ureter has a physiological narrowing at the level of (find the false variant):
- A. crossing with the testicular vein.**
 - B. intramural segment.
 - C. juxtavesical segment.
 - D. intersection with the iliac vessels.
 - E. ureteropelvic junction.
9. Where is an X-ray projection of the ureters located?
- A. on the periphery of transverse processes of the vertebrae.**
 - B. on the posterior part of axillary furrow.
 - C. on the periphery of vertebrae.
 - D. on the periphery of rectum muscles.
 - E. on the periphery of internal oblique muscle.
10. The right ureter is met with _____ at the terminal line of the pelvis.
- A. The external iliac artery.**
 - B. The internal iliac artery.
 - C. The hypogastric artery.
 - D. The common iliac artery.
 - E. The testicular artery.
11. The left ureter is met with _____ at the terminal line of the pelvis.
- A. the common iliac artery.**
 - B. the internal iliac artery.
 - C. the hypogastric artery.
 - D. the external iliac artery.
 - E. the obturator artery.
12. Where is the urinary duct (urachus) with reference to the prostate fascia located?
- A. Behind the prostate fascia.**
 - B. In front of the prostate fascia.
 - C. In the mass of the prostate fascia.

- D. To the side of the prostate fascia.
E. c) and d) are true
13. When can Lieutaud triangle be identified?
A. **While cystoscopy.**
B. During excretory urography.
C. Under urethroscopy.
D. While cystography.
E. During chromocystoscopy.
14. Lieutaud triangle is formed by..
A. **The openings of the ureters and the internal opening of the urethra.**
B. The ureteral openings and the fundus of bladder.
C. The kidneys and bladder.
D. The kidneys.
E. The vertebral column and ureters.
15. What numbers of the clock dial does the location of ureteral orifices correspond:
A. **7 right and 5 left.**
B. 5 right and 7 left.
C. 9 right and 3 left.
D. 1 right and 11 left.
E. 8 right and 4 left.
16. Where is the external sphincter of the bladder located:
A. **In the urogenital diaphragm.**
B. In the muscle that elevates the anus of the rectum.
C. At the base of the bladder.
D. In the tendon center of the perineum.
E. B) and D) are true.
17. The basis of the prostate gland is composed of:
A. **everything said here below.**
B. fundus of urinary bladder.
C. seminal vesicles.
D. ampulla of the deferent duct.
E. c) and d) are true.
18. The urethra perforates the urogenital diaphragm with:
A. **The membraniform part.**
B. The pars cavernosa.
C. The prostatic and membranous parts.
D. The prostatic part.
E. None of the above-mentioned.

19. The caliber of the male urethra is the shortest and the narrowest:
- A. In the area of the membranous part of the urethra.**
 - B. In place of the transfer of the bladder into the urethra.
 - C. In the area of the external opening of the urethra.
 - D. In all these places of the urethra narrowing.
 - E. b) and c) are true.
20. Testicle is covered with:
- A. Seven layers of scrotum.**
 - B. Five layers of scrotum.
 - C. Six layers of scrotum.
 - D. Four layers of scrotum.
 - E. Eight layers of scrotum.
21. Serous fluid (hydrocele) can be accumulated under pathological conditions between _____.
- A. Parietal and visceral layers of the funicular process of the testicle.**
 - B. External and internal spermatic fascia.
 - C. External spermatic fascia and dartos.
 - D. Perididymis and visceral layer of the funicular process of the testicle.
 - E. Internal spermatic fascia and funicular process of the testicle.
22. The testicles are the main elements of the male reproductive system and they are destined to:
- A. all answers are correct.**
 - B. the hormone production.
 - C. the formation of sperm.
 - D. the function as separate organs.
 - E. the procreation.
23. Normally, daily diuresis is up....
- A. to 2000 ml.**
 - B. about 500 ml.
 - C. to 1000 ml.
 - D. to 3000 ml.
 - E. to 1200 ml.
24. Oliguria is the medical term for a decreased output of urine that is less than ____.
- A. 500 ml.**
 - B. 100 ml.
 - C. 1000 ml.

- D. 300 ml.
E. 50 ml.
25. Anuria is characterized by:
A. Deep deficiency of urine excretion by the kidneys.
B. Sharp lumbar pain.
C. Lack of protein in the urine.
D. Sudden hypotension.
E. Lack of urine excretion from the bladder.
26. Determine, which of the following causes cannot stain urine red?
A. Kidney tumor.
B. Lead poisoning.
C. Intake of rifampicin.
D. Intake of higher doses of sulfonamides.
E. Consumption of large amounts of beets.
27. Normally, the urine specific gravity is:
A. 1010- 1025.
B. 1002- 1020.
C. 1002- 1012.
D. 1015- 1035.
E. 1010-1045.
28. Isosthenuria is:
A. The range of specific gravity of urine per day is less than 7-8 units.
B. The high of specific gravity of urine during the day.
C. The range of specific gravity of urine per day is less than 20 units.
D. The range of specific gravity of urine is less than 1003.
E. The low of specific gravity of urine during the day.
29. Hyposthenuria is characterized by?
A. Chronic renal failure.
B. Urolithiasis.
C. Acute glomerulonephritis.
D. Acute cystitis.
E. Interstitial nephritis.
30. Hypostenuria is a decrease in urine specific gravity less than
A. 1005.
B. 1020.
C. 1030.
D. 1015.
E. 1010.

31. What is a normal urine reaction?
- A. faintly acid.**
 - B. weakly alkaline.
 - C. acidulous.
 - D. neutral.
 - E. alkaline.
32. The concentration of protein in the urine should not outrange _____ in a healthy person.
- A. 0,030 g / l.**
 - B. 0,150 g / l.
 - C. 0,100 g / l.
 - D. 0,400 g / l.
 - E. 0,010 g / l.
33. When does extrarenal proteinuria occur?
- A. The breakdown of white blood cells and red blood cells..**
 - B. Chronic interstitial urethritis.
 - C. Disturbance of reabsorption in the glomeruli.
 - D. Increased secretion in the ureter.
 - E. Ormond's disease.
34. What is not found in the urine of a healthy person?
- A. glucose.**
 - B. protein.
 - C. creatinine.
 - D. red blood cells.
 - E. bacteria.
35. Aspermia is characterized by
- A. Absence of ejaculate.**
 - B. Lack of live sperm.
 - C. Lack of sperm.
 - D. Lack of spermatogenesis cells.
 - E. Decreased sperm amount.
36. The normal sperm count (in 1 ml of ejaculate) ranges:
- A. 60 -120 mln.**
 - B. 20-25 mln.
 - C. 80 -100 mln.
 - D. 10- 60 mln.
 - E. 90 -180 mln.
37. What is a normal renal blood flow in an adult?

- A. 1100 mL/min.**
 - B. 1600 mL/min.
 - C. 800 mL/min.
 - D. 600 mL/min.
 - E. 400 mL/min.
38. The renal blood flow stanches when systolic blood pressure decreases at
- A. 60-70 mmHg**
 - B. 100 mmHg
 - C. 80-90 mmHg
 - D. 40-50 mmHg
 - E. 30-20 mmHg
39. What is the nitrogen balance in the body?
- A. The ratio of nitrogen intake and its loss per day.**
 - B. Daily urinary nitrogen loss.
 - C. Content of total protein in the blood.
 - D. Urea is found in the blood.
 - E. Daily intake of nitrogen in the body with food.
40. Nitrogen balance is a _____ in a healthy person:
- A. Neutral.**
 - B. Negative.
 - C. a) and b) are true.
 - D. Positive.
 - E. a) and d) are true.
41. What is the level of potassium in the blood serum, normally?
- A. 3.5 mmol/L.**
 - B. 2.25 mmol/L.
 - C. 3.9 mmol/L.
 - D. 7.6 mmol/L.
 - E. 4.5 mmol/L.
42. Serum potassium concentration
- A. It is increased in acidosis and decreased in alkalosis.**
 - B. It is not changed.
 - C. It is decreased in acidosis.
 - D. It is increased in alkalosis.
 - E. It is decreased in acidosis and increased in alkalosis.
43. The main clinical manifestations of hypokalemia are:
- A. Weakness, muscular weakness, tachypnoea tachypnoea, ECG changes.**

- B. Muscle weakness.
 - C. Respiratory disorders.
 - D. Asthenization.
 - E. The flattening of the T wave, lengthening of the interval PQ
44. The main clinical manifestations of hyperkalemia are:
- A. Arrhythmia, ventricular fibrillation, vomiting and diarrhea.**
 - B. Arrhythmia, gastric rhythm.
 - C. Cardiac arrest in diastole.
 - D. Mentricular fibrillation.
 - E. Vomiting, diarrhea.
45. The subcutaneous (superficial) fascia of the anterolateral abdominal wall consists of:
- A. 3 layers.**
 - B. 2 layers.
 - C. 1.layers.
 - D. 4 layers.
 - E. 5 layers.
46. The upper edge of the prevesical fascia reaches to the level of _____ on the anterior abdominal wall
- A. Umbilicus.**
 - B. Douglas fold.
 - C. The upper edge of the pubic symphysis.
 - D. Mid-height of the pubic symphysis.
 - E. Behind the pubic joint.
47. Where is the urinary duct (urachus) in relation to the pre-biliary fascia located:
- A. Behind the prevesical fascia.**
 - B. In the masses of the prevesical fascia.
 - C. To the anterior prevesical fascia.
 - D. Next to the prevesical fascia
 - E. a) and b) are true
48. What is the function of urinary duct (urachus):
- A. to discharge the primary urine into the amniotic fluid in the embryonic period**
 - B. to fix the embryo to the uterus.
 - C. to intake of nutrients into the embryo.
 - D. to produce hormone.
 - E. to exchange gas of the embryo and uterus.
49. The cisterna chili of the retroperitoneal space is located at a rate of:

- A. 12-th thoracic and 1-st lumbar vertebra**
 - B. 10-th thoracic
 - C. 11-th thoracic vertebra
 - D. 3-rd lumbar vertebra
 - E. 4-th lumbar vertebra
50. What muscle passes through the large sciatic foramen?
- A. piriform muscle**
 - B. iliac-lumbar muscle
 - C. obturator internus muscle
 - D. elevator muscle of anus
 - E. a) and b) are correct
51. What is involved in the formation of the urogenital diaphragm:
- A. deep transverse muscle of perineum**
 - B. elevator muscle of anus
 - C. obturator internus muscle and external obturator muscle
 - D. piriform muscle
 - E. b) and d) are correct
52. What cellular space of the pelvis does the pus spread from to the thigh and abdominal cavity:
- A. Prevesical.**
 - B. Behind rectal.
 - C. Lateral cellular spaces of the pelvis
 - D. All given above
 - E. a) and b) are correct
53. Drainage of prevesical cellular tissue space according to the method of Buiallsky-McWarter is performed:
- A. From the inner and outer obturator muscles through the obturator membrane.**
 - B. From deep transverse muscle of perineum.
 - C. From the urogenital diaphragm.
 - D. From the front of the pelvic and urogenital diaphragm.
 - E. a) and b) are correct
54. The external sphincter of the bladder is located:
- A. In the urogenital diaphragm.**
 - B. In the base of the urinary bladder.
 - C. In the central tendon of perineum.
 - D. In the elevator muscle of anus.
 - E. b) and d) are true.
55. Genital region and neurovascular fascicle in the pelvic cavity is located:
- A. In the lower area.**
 - B. In the middle area.

- C. In the upper area.
- D. In all areas.
- E. b) and c) are true/

Tests for 2nd level:

1. 14 liters of urine were excreted after taking furosemide during 2 days in a 56-year-old patient. He drank 500 ml of water during the day. Hypokalemia (K- 3.2 mmol/L) was observed during examination. What are the main signs of hypoglycemia?
 - A. Constant tiredness, weakness, apathy.**
 - B. Tachypnoe, ECG has changes. Muscle tremors.**
 - C. Asthenization.
 - D. Alibidemia.
 - E. Nasal hemorrhage.

2. A 28-year-old patient S. He has been married for 2 years. Sex life has been continued with his wife for 3 years. Pregnancy did not occur. The wife has no gynecological problems. He is asthenic, subcutaneous fatty tissue was developed normally, male-pattern of hair growth was determined during examination. The tightly elastic consistency of testicles (5.0×3.0cm) were detected on palpation of the scrotum, the epididymis is not enlarged. The veins dilation of the spermatic cord to the left was at the 1st degree. Testosterone level was 14 nmol/L. What are the causes of male infertility:
 - A. Prostatitis, urogenital infections.**
 - B. Grade III Varicocele, decrease in the production of testosterone.**
 - C. Monarchism.
 - D. Scrotal hydrocele.
 - E. Epididymis cyst.

3. Hematuria – is:
 - A. Appearance of blood in the urine**
 - B. Erythrocyturia.**
 - C. The presence of blood pigment of hemoglobin in the urine.
 - D. The presence of porphyrins in the urine.
 - E. The presence of melanin in the urine.

4. The main function of the testicles are except:
 - A. Production of erythropoietin.**
 - B. Maintenance of homeostasis.**
 - C. Production of gonadoliberin.
 - D. Production of sperm.
 - E. Production of testosterone

5. Prerenal anuria occurs:
- A. In heart failure.**
 - B. In shock.**
 - C. In poisoning by toxics and drugs.
 - D. In blood loss up to 400 ml
 - E. In obstruction with ureteral stone.

Tests of the 3rd level:

1. Hydrocele of the right testicle was diagnosed in a 34-year-old patient B. The right half of the scrotum was 18×30cm during examination. Positive effect on diaphanoscopy was detected. Where is the fluid accumulated in the scrotum:
- A. Parietal and visceral layers of the proper funicular process of the testicle.**
 - B. The outer and inner spermatic fascia.
 - C. Internal spermatic fascia and the proper funicular process of the testicle.
 - D. External spermatic fascia and dartos.
 - E. Perididymis and visceral layer of the proper funicular process of the testicle.
2. A 33-year-old patient appealed to the urologist with complaints of pain in the umbilicus, periodic discharge of mucous nature. His temperature increased to 38C. In childhood he had observed by a surgeon about the nonclosure of the urachus. Specify which disease may be in this patient:
- A. Umbilical fistula.**
 - B. Bladder ears.
 - C. Vesicoumbilical fistula.
 - D. Urachal cyst.
 - E. Dermatitis of the anterior abdominal wall.
3. A 20-year-old patient presented with complaints of a small amount of sperm during orgasm. There are two children in the patient's family. He developed normally. In the childhood patient had suffered from measles, chicken pox, frequent sore throats. Sex life is during 2 years. The patient constantly changes sexual partners. How much sperm is discharged during orgasm:
- A. 1,5- 3 ml**
 - B. 8 ml
 - C. 12 ml
 - D. 15ml
 - E. 30 ml
4. A 45-year-old patient applied to the family doctor with complaints of lumbar pain, cloudy urine, presence of edema on the lower limbs, weakness. He

suffered from swelling under the eyes in the morning. In past medical history: kidney disease was about 7 years, folk methods were used to treat. Frequent pathology of ENT organs of the tonsillitis, the outpatient and inpatient treatments were used. Myocarditis was observed by a rheumatologist in the childhood. The kidneys are not palpable on examination. Pasternatsky symptom is weakly positive on both sides. Decreased size of both kidneys 7.0×4.0cm is observed while ultrasound of the kidneys. Parenchyma is 1.1cm. There is no clear differentiation of the cortical and medulla of the kidneys. Blood biochemical indicators: creatinine is 250 μc / liter, uric acid is 80 μmol / liter, protein is 56 g / liter. The urine test: the specific gravity is 1009, protein is 2g / l, leukocytes are 4-6 in FOV, and erythrocytes are 3-4. What is the amount of protein excreted by kidneys normally:

- A. **0,033 g/l**
- B. 4.0 g/l
- C. 6.0 g/l
- D. 1.5 g/l
- E. 0,9 g/l

5. A 34-year-old patient appealed to the urologist with complaints of lumbar pain on the right side, the rise of temperature to 37.4 ° C, weakness and red urine. The past medical history includes the sore throat 10 days ago, treatment with antibiotics for 3 days and the rinsing of throat with calendula. He constantly works in the supercooling and in the humid environment. The urine tests: the specific gravity is 1010, protein is 0,86 g / liter, changed e. Are on all FOV, leukocytes are 6-8 in FOV, 4-8 of hyaline casts are detected in FOV. of salts, and bacteria are not detected. Specify the normal number of red blood cells in the urine:

- A. **0-1 in FOV.**
- B. 10 in FOV.
- C. 10-20 in FOV.
- D. Dense on all FOV.
- E. On ¼ FOV.

Topic: Symptoms of urological diseases

Tests of the 1st level:

1. The mother complains on that her 5-year-old child begins to urinate while sleeping. The pathological changes are not detected during examination in the general analysis of urine. What is called this disease?
 - A. Enuresis**
 - B. Nocturia.
 - C. Nycturia.
 - D. Incontinence of urine.
 - E. Hyperactive bladder.
2. Acute urinary retention was diagnosed in the patient. What kind of urination disorder does this indicate?
 - A. The impossibility of natural urination when there is the urine presence in the bladder.**
 - B. The presence of urinary retention up to 24 hours.
 - C. The presence of residual urine in the bladder after urination.
 - D. The impossibility of natural urination when the urine is absent in the bladder.
 - E. Difficult urination is accompanied by a sharp pain.
3. What is the pain nature when the stone is into the intramural part of ureter:
 - A. Paroxysmal and acute pain.**
 - B. Dull pain.
 - C. Acute pain.
 - D. Tender pain.
 - E. Gnawing pain.
4. What is the localization and irradiation of pain when the stone of the intramural ureter can disturb urodynamics:
 - A. The lumbar region with radiation to the inguinal region, the inner surface of the thigh and the genitals.**
 - B. Subcostal space with irradiation under the scapula.
 - C. Lateral abdomen with radiation to the lumbar region.
 - D. Inguinal area with radiation to the thigh.
 - E. Lumbar region without irradiation.
5. What is the kind of pain in acute prostatitis:
 - A. Gnawing, occasionally pulsating pain.**

- B. Paroxysmally
 - C. Periodic
 - D. Dull
 - E. Acute
6. Where is the pain localized in acute parenchymal prostatitis:
- A. Over the pubic, perineum and sacrum.**
 - B. In the lumbar region.
 - C. In the lumbar sacral spine.
 - D. In the rectum.
 - E. In the perineum.
7. Dysuria – is:
- A. Frequent difficulty and painful urination.**
 - B. Frequent, painful urination.
 - C. Difficult urination.
 - D. Painful urination.
 - E. All answers are true.
8. Dysuria occurs in all of these diseases, except:
- A. Tuberculosis kidney tumors.**
 - B. BPH.
 - C. Tuberculosis.
 - D. Cystitis.
 - E. Acute prostatitis.
9. Dysuria occurs in all diseases given below, except:
- A. Orchitis.**
 - B. Bladder tumor.
 - C. Bladder stone.
 - D. Cystitis.
 - E. Ureteral stone.
10. Stranguria is:
- A. Difficult urination, which is accompanied by pain..**
 - B. Pain during urination.
 - C. Frequent urination.
 - D. The presence of clots in the urine.
 - E. B) and C).
11. Stranguria occurs in all diseases given below, except:
- A. Ureteral calculus.**
 - B. Bladder stone.
 - C. Foreign body of urethra.
 - D. Acute prostatitis.

E. Prostatic hyperplasia

12. Stranguria is found:

- A. In all of given below cases.**
- B. In interstitial cystitis.
- C. In severe phimosis.
- D. In partial damage of the urethra.
- E. In prostate cancer.

13. Nycturia is:

- A. Frequent urination.**
- B. Increased diuresis.
- C. Movement of the main diuresis from day to night
- D. Dayly oliguria.
- E. A) and D).

14. Nycturia occurs in all of the listed diseases, except for:

- A. Diabetes Mellitus.**
- B. Cardiac failure.
- C. Chronic renal failure.
- D. Chronic glomerulonephritis.
- E. Prostatic hyperplasia.

15. Pollakiuria is:

- A. Increased urination during day and night.**
- B. Increased diuresis.
- C. Frequent urination at night.
- D. Frequent daily urination.
- E. Increased night-time diuresis.

16. Pollakiuria does not occur:

- A. When the stones are located in the upper third of the ureter.**
- B. With cystocele.
- C. With neurasthenia.
- D. With hysteria.
- E. With phimosis.

17. Oliguria is:

- A. Low output of urine.**
- B. Rare urination.
- C. Slow urination.
- D. Large amount of urine.
- E. Low amount of urine to 600ml.

18. Oliguria does not occur:
- A. With Diabetes Mellitus.**
 - B. With the disturb of the vegetative centers of water-salt metabolism**
 - C. With acute pyelonephritis**
 - D. With chronic pyelonephritis**
 - E. With heart failure.**

Tests of the 2nd level:

1. The urinary retention is:
 - A. Lack of nature urination**
 - B. Urination drop by drop.**
 - C. The impossibility of urination in the presence of strangers.**
 - D. Lack of urine in the bladder.**
 - E. Discontinuation of urine filtration by the kidneys.**

2. What are the causes of urinary incontinence in male?
 - A. The result of prostate cancer surgical treatment.**
 - B. Neurological disorders, Parkinson's disease. Spinal cord injury.**
 - C. Intoxication, alcohol poisoning.**
 - D. Hypnosis. Intake of small doses of tranquilizers.**
 - E. Chronic prostatitis.**
 - F. Diseases of the rectum.**

3. All of the reactions given below are possible during the introduction of radiopaque substances, except:
 - A. Macrohaematuria.**
 - B. Severe dysuria.**
 - C. Dizziness and fever sensation.**
 - D. Drop in blood pressure below 60 MmHg.**
 - E. Skin rash.**

4. What should be applied for instant diagnosis of closed kidney injury:
 - A. Computed tomography of the kidneys.**
 - B. Excretory urography and ultrasound of the kidneys.**
 - C. Plan radiography of the kidneys and urinary tract.**
 - D. Radioisotope renography and abdominal aortography.**
 - E. Chromocystoscopy.**

5. Prerenal anuria does not occur:
 - A. In case of poisoning with toxins (chlorine, sublimate, phosphorus, aniline dyes).**

- B. Obstruction with ureteral calculus.**
- C. With blood loss up to 1000ml.
- D. With thromboembolism of the renal vessels.
- E. With heart failure.

Tests of the 3rd level:

1. A 74-year-old patient has been suffering from difficulties in urination with strain, interrupted weak urine stream for two years. The urinary incontinence, constant bursting pains over the pubis with pushing out, and the upper edge of which contours at the level of the navel are noted during hospitalization. The dullness is determined by percussion in this area. Urine constantly without control has been excreting drops for several days. What is the kind of the urination disorder in the patient?
 - A. Incontinence with overflow.**
 - B. Acute retention of urine.
 - C. Chronic retention of urine.
 - D. Stranguria.
 - E. Incontinence of urine.

2. A 69-year-old patient S. complains of frequent, difficult, painful urination, the presence of blood in the urine. The patient has the dullness of percussion sound above pubis after urination. Pasternatsky's symptom is negative. The urination is 4 times at night. What is the kind of the urination disorder in the patient?
 - A. Stranguria.**
 - B. Pollakiuria**
 - C. Hematuria
 - D. Nycturia.
 - E. Polyuria.

3. A 70-year-old patient complains of frequent, difficult, painful urination, 3-4 times at night. The patient has the dullness of percussion sound above pubis after urination. Pasternatsky's symptom is negative. What is the cause of the dullness of percussion sound above the pubis:
 - A. Chronic retention of urine.**
 - B. Acute retention of urine.
 - C. Anuria.
 - D. Nycturia.
 - E. Pollakiuria.

4. A 52-year-old female patient has admitted to the urology department with complaints of back pain on the left, lack of urine during two days. From the anamnesis: she has been suffering from urolithiasis for 12 years. Three years ago she underwent nephrectomy on the right. What is the preliminary diagnosis:
 - A. Postrenal anuria.**
 - B. Prerenal anuria.

- C. Arenal anuria.
 - D. Renal anuria.
 - E. Acute retention of urine.
5. A 48-year-old female patient complains of the loss of urine under any tension such as the coughing or lifting weights. She does not have other urination disorders. Determine the cause of this disorder.
- A. **Stress incontinence of urine.**
 - B. Pollakiuria.
 - C. Hyperactive bladder
 - D. Dysuria.
 - E. Stranguria.
6. A 36-year-old female patient was admitted to the hospital with complaints of pain in the right lumbar region, the appearance of blood in the urine after the attack of pain. The kidneys are not palpable. Pasternatsky's symptom on the right is positive. The red urine and uraturia are identified during examination. The function of the right kidney is absent on the excretory urogram. Determine the cause of this disorder.
- A. **Ureteral colic.**
 - B. Anuria.
 - C. Myoglobinuria.
 - D. Hematuria.
 - E. Uraturia.
7. An 18-year-old male patient had sudden pain in the left lumbar region. He is single. The body temperature is normal. The nausea and vomituration are detected. The urination is not disturbed. The pain on the left increases (the palpation of the kidney is painless on the right) during bimanual palpation. The kidneys are not palpable. Determine the disease.
- A. **Ureteral colic.**
 - B. Acute pyelonephritis.
 - C. Acute cholecystitis.
 - D. Radiculitis.
 - E. Pneumonia.
8. A 34-year-old male patient complains of acute pain in the perinum region, the pain shoots up the sacrum above the pubis. The body temperature is 38.3 C. He fell sick two days ago and he had difficulties with urination along with pain. Which of the following urination disorder does the patient have?
- A. **Stranguria.**

- B. Dysuria.
- C. Nocturia.
- D. Acute retention of urine
- E. Chronic retention of urine.

9. A 44-year-old male patient suffers from the sharp pain in the perineum above the pubis and uresiesthesia. The body temperature is 38.7 C. The patient felt sick two days ago: difficulty urination appeared at the same time as pain, fever. The impossibility of voiding is noticed this morning. Determine the urination disorder of the patient.

- A. Acute retention of urine**
- B. Anuria.
- C. Stranguria.
- D. Nocturia.
- E. Chronic retention of urine.

10. An 18-year-old young man was admitted to the emergency department with complaints of pain in the right half of the abdomen with irradiation to the scrotum, nausea and vomiting. This was the first acute attack. The muscle tension in the right half of the abdomen was revealed by palpation. Blumberg's sign is doubtful. The CVA Tenderness is weakly positive on the right. The temperature is 37, 7 C. The number of leukocytes is $8.0 \times 10^9 / l$. The red blood cells are 3-5 in FOV in urine analysis. Make the diagnosis.

- A. Ureteral colic.**
- B. Intestinal obstruction.
- C. Acute appendicitis.
- D. Acute cholecystitis.
- E. Ruptured ulcer of duodenum.

11. A 42-year-old patient was brought to the emergency department with a diagnosis of renal colic. Which of the following signs is most likely for the patient?

- A. Hematuria.**
- B. Leukocytosis
- C. The presence of sugar in the urine.
- D. Bilirubinemia.
- E. Decrease of red blood counts.

12. A 36-year-old female patient complains of severe pain in the left lumbar region, left hypochondrium, frequent urination, and bloody tap in the urine. She has been sick for the day. The complaints were noted after the harsh riding. The abdomen is soft and sensitive in the left hypochondrium. Pasternatsky's symptom is positive on the left. What is your preliminary diagnosis:

- A. Ureteral colic.**

- B. Acute pyelonephritis.
 - C. Hematuria.
 - D. Acute cholecystitis
 - E. Biliary colic.
13. A 56-year-old male patient was diagnosed with occlusion of the middle third of the right ureter with stone. What area of pain radiation should be in the patient?
- A. In pelvic area.**
 - B. In the hypochondrium.
 - C. In genital organs.
 - D. Under the scapula.
 - E. In the thoracic cage.
14. A 26-year-old patient was diagnosed with occlusion of the upper third of the left ureter with stone. What area of pain radiation should be in the patient?
- A. In subcostal area.**
 - B. In genital organs.
 - C. In pelvic area.
 - D. Under the scapula.
 - E. In the thoracic cage.
15. A 52-year-old patient was diagnosed with occlusion of the lower third of the ureter by stone. What area of pain radiation should be in the patient?
- A. In genitals.**
 - B. In the thoracic cage.
 - C. In pelvic area.
 - D. Under the scapula.
 - E. In subcostal area.
16. A 48-year-old male patient after hypothermia had bloody tap in the urine without urination disorders. Macrohaematuria disappeared after 12 hours. Which of the following recommendations is the most useful?
- A. Perform special studies focused on determination the source of hematuria.**
 - B. Prescribe hemostatic therapy for preventative measures.
 - C. Perform complex laboratory tests to determine further treatment.
 - D. Apply for examination during recurrent hematuria.
 - E. Consultation of the nephrologist.

17. A 30-year-old patient applied to the doctor with complaint of the presence of blood in the urine. This sign arose after the sharp pain in the right lumbar region. What is the possible cause of hematuria:
- A. **Stone of the right ureter.**
 - B. Appendicitis.
 - C. Tumor of kidney.
 - D. Acute cystitis.
 - E. Acute glomerulonephritis.
18. A 52-year-old patient complains of intense pain in the right lumbar and iliac regions, frequent urination, nausea and vomiting. The body temperature is 37,2⁰C. There is a pain along the right ureter. Pasternatsky's symptom is positive on the right. The suspicious shadows for calculus were found on the observational urogram. Your preliminary diagnosis is:
- A. **Right renal colic.**
 - B. Acute appendicitis.
 - C. Hepatic colic.
 - D. Acute pyelonephritis.
 - E. Intestinal obstruction.
19. A 34-year-old patient was hit by a car. The pelvic fracture was diagnosed at the emergency room. The blood is released from the urethra. How is this symptom called?
- A. **Urethremorrhagia**
 - B. Hemospermia
 - C. Hematuria
 - D. Stranguria.
 - E. Incontinence of urine
20. A 42-year-old female patient was admitted to the urology department with complaints of sharp paroxysmal pain in the left lumbar region; the pain does not depend on the change of body position, nausea, periodic vomiting, red urine, and frequent urination. She has been sick acutely a few hours ago, after the car driving. After taking bath the pain slightly diminished, but after a few hours it sharply increased again. The sharp pain is objectively determined by palpation in the left kidney, CVA Tenderness is positive on the left. Make the diagnosis.
- A. **Right renal colic.**
 - B. Addison's disease.
 - C. Ureterocele, hydroureteronephrosis.
 - D. Polycystic kidney disease, exacerbation of chronic pyelonephritis.
 - E. Acute pyelonephritis, renal abscess.

21. A 65-year-old patient has suffered from the difficulty, painless urination with weak urine stream, periodic sensation of incomplete bladder emptying for 6 months. The patient has 3-4 urination at night. 100 ml of urine is determined after urination in the bladder by the ultrasound. How is this condition called?
- A. **Chronic retention of urine.**
 - B. Nycturia
 - C. Oliguria
 - D. Opsiuria
 - E. Stranguria.
22. The episode of sharp, stabbing pain in the lumbar region on the left, radiating to the genitals and the inner surface of the thigh was suddenly developed in a 58-year-old patient a day ago. It was accompanied by nausea, vomiting and urination. He did not urinate from the beginning of the attack. The aplasia of the right kidney is in past medical history. Costovertebral angle tenderness is sharply positive on the left and it is negative on the right. The rounded clear shadow of 12x15 mm in the projection of the left pelvis is detected by the KUB X-ray. The left kidney function is absent.
What is your preliminary diagnosis?
- A. **Urolithiasis, single left kidney stone, post-renal anuria.**
 - B. Urolithiasis, single left kidney stone, acute urinary retention.
 - C. Echinococcal cyst of the left kidney, acute renal failure, anuria.
 - D. Urolithiasis, acute renal failure.
 - E. Acute interstitial nephritis, obstructive anuria.
23. A 34-year-old patient has brought to the emergency department with complaints of pain in the lumbar region on both sides, lack of natural urination for 8 hours. Urolithiasis and stones of both kidneys 0.5-0.6 cm were diagnosed a year ago. The urine is not received during the catheterization of the bladder. The bilateral expansion of the pelvicalyceal system is detected by ultrasound data. What is the preliminary diagnosis:
- A. **Postrenal anuria**
 - B. Acute urinary retention.
 - C. Chronic pyelonephritis.
 - D. Secretory anuria.
 - E. Chronic renal failure.
24. A 68-year-old male patient applied to the urology department with signs of acute urinary retention. Prescribe the priority of proper treatment:
- A. **Urinary catheterization**
 - B. Antimicrobial therapy.

- C. KUB X-ray.
- D. Introduction of spasmolytic.
- E. Prescription of alpha-blockers.

25. A 50-year-old female patient brought to the clinic with acute renal failure. This disorder has occurred in the postoperative period. It is known that the uterus with appendages in the result of malignant lesions was removed. The expansion of the pelvicalyceal system of both kidneys is observed by the ultrasound. Specify the kind of ARF in this case.
- A. **Postrenal.**
 - B. Prerenal
 - C. Renal.
 - D. Arenal.
 - E. Reflecting.
26. The urinary retention suddenly developed in 6-year-old boy with chronic kidney disease. Prescribe proper treatment to perform the differential diagnosis between anuria and acute urinary retention.
- A. **Urinary catheterization.**
 - B. Nephrosonography.
 - C. Intravenous ureography.
 - D. Cystoscopy.
 - E. Cystography.
27. A 35-year-old patient was delivered to the sanitary inspection room with complaints of acute lumbar pain on the right and right side of the abdomen. The irradiation of pain is in the right groin and testicle. The nausea, vomiting and frequent urination are observed. Hematuria is in the analysis of urine. The most accurate diagnosis:
- A. **Ureteral colic.**
 - B. Acute appendicitis.
 - C. Acute orchiepididymitis.
 - D. Right kidney tumor.
 - E. Acute pyelonephritis.
28. A 48-year-old K. patient came stroke day ago, the natural urination was absent. 500 ml of clear urine was introduced by the catheter. The blood test: leuk. are $7.4 \times 10^9 / l$, ESR are 15 mm /h., er. are $3.9 \times 10^9 / l$. The urine test: protein is 0.066 g / l, leuk. are $10-15 \times 10^9 / l$, er. are 3-4 in FOV. The blood glucose is 6.2 mmol /L. Make the diagnosis:
- A. **Neurogenic urinary bladder.**
 - B. Urethral stricture.
 - C. Prostate carcinoma.
 - D. Benign prostatic hyperplasia.
 - E. Oliguria.

29. A 23-year-old M. patient has the burning sensation along the urethra, frequent urination, significant turbidity of the first portion of urine due to the foreign matters of leukocytes and bacteria. What is the diagnosis?
- A. **Acute urethritis.**
 - B. Acute cystitis.
 - C. Acute pyelonephritis.
 - D. Abscess of prostate gland.
 - E. Acute prostatitis.
30. Paradoxical ischuria was diagnosed. What does this disturbance of urination involve?
- A. **The combination of urinary retention and urinary incontinence.**
 - B. Incontinence of urine
 - C. Urinary retention.
 - D. Impossibility of natural urination.
 - E. Chronical incontinence of urine
31. The patient complains of blood in the urine. The total hematuria is in urine tests. Where is the area of the pathological process localization?
- A. **Bladder, ureter, kidney.**
 - B. Bladder, urethra.
 - C. Urethra, bladder.
 - D. Bladder neck, prostatic urethra.
 - E. Bladder, ureter.
32. A 57-year-old patient has complaints of frequent, difficult, painful urination, weak urine flow. What disease can be the cause of this irregular urination?
- A. **All of given above.**
 - B. Prostate carcinoma.
 - C. Partial urethral damage.
 - D. Severe phimosis.
 - E. Chronic interstitial cystitis.
33. A 54-year-old K. patient suffers from polycystic kidney disease. The daily amount of urine is 2.7 liters. Ranges of the urine specific gravity according to the Zimnitskiy's test are 1005-1012. The blood urea is 12.8 mmol / l. What is the cause of this condition:
- F. **Chronic renal failure.**
 - G. Acute renal failure.
 - H. Diabetes Mellitus
 - I. Canal nephropathy.
 - J. Excessive fluid intake.

Topic: Methods of urological patients examination

Tests of the 1st level:

1. What combination of investigation methods will allow more accurate to differentiate nephroptosis from kidney dystopia?
1) excretory urography 2) retrograde pyeloureterography 3) radioisotope renography 4) aortography 5) chromocytoscopy. Choose the right combination of answers.
A. 1, 2, 4.
B. 1, 3, 5.
C. 2, 3, 4.
D. 2, 3, 5.
E. 3, 5.
2. The weight loss, appetite loss, thirst are observed while examination. The relative density is 1035 in the general urine analysis; the other indicators are without deviations. What medical test should be primarily performed for the patient?
A. Determination of blood glucose level.
B. Zimnitskiy's test.
C. Blood extraction ratio based on endogenous creatinine.
D. Determination of blood creatinine.
E. Test for rarefaction.
3. The patient was taken to the hospital with complaints of nausea, weight loss, lack of appetite and skin itching. The patient has been suffering from chronic pyelonephritis for 7 years. Which of the following medical studies is the most informative to determine the functional state of the kidneys?
A. Blood extraction ratio based on endogenous creatinine.
B. Determination of total nitrogen.
C. Determination of blood creatinine.
D. Determination of blood urea.
E. Zimnitskiy's test.
4. The patient has total hematuria. The worm-like blood clots are in the urine. What medical test can help to establish the diagnosis?
A. Excretory urography.
B. Pneumopyelography.
C. Radiorenography.
D. Urethroscopy.
E. Cystography.

5. The patient complains of the absence of urine during the day. What is performed with the purpose for differential diagnosis:
- Ultrasound examination of the kidneys and bladder.**
 - Retrograde pyelography.
 - Computer tomography.
 - Radiorenography
 - Excretory urography.
6. The contraindications to catheterization of the bladder are:
- Acute urethritis, prostatitis and epididymitis.**
 - Chronic prostatitis.
 - Intra-abdominal rupture of the urinary bladder.
 - Recent injury of urethra.
 - A) and D) are true.
7. The indications for ureteral catheterization are all of listed above, except for:
- Secretory anuria.**
 - Conduction retrograde pyelography and ureterography.
 - Obstructive anuria.
 - Differential diagnosis of secretory and obstructive anuria.
 - Separate receive of urine from each kidney.
8. The contraindications to ureteral catheterization are all listed, except for:
- Chronic pyelonephritis.**
 - Acute pyelonephritis.
 - Acute urethritis and prostatitis.
 - Acute epididymitis.
 - Bladder capacity is less than 75 ml.
9. The complications of ureteral catheterization are:
- Perforation of the ureter, perforation of the pelvis, bleeding, exacerbation of urinary infection.**
 - Perforation of the pelvis
 - Exacerbation of urinary infection.
 - Damage of the bladder.
 - Absent.
10. The complications of the urethral dilation are all of the above, except::
- Fornical bleeding.**
 - Acute prostatitis and epididymitis.
 - Urethrorrhagia.
 - Catheter fever.
 - The formation of a false path.

11. The contraindications to the dilation of the urethra are all listed, except for:
- A. Chronic prostatitis and cystitis.**
 - B. Acute epididymitis.
 - C. Acute cystitis and prostatitis.
 - D. Benign prostatic hyperplasia.
 - E. Acute urethritis.
12. What are required for cystoscopy:
- A. All of the following.**
 - B. Bladder capacity is more than 75 ml.
 - C. Transparent space in the cavity of the urinary bladder.
 - D. Urethral patency.
 - E. 2 and 3 are true.
13. The indications for urethroscopy are:
- A. All listed below.**
 - B. Chronic inflammatory diseases of the urethra.
 - C. Tumors of the urethra.
 - D. Colliculitis.
 - E. A) and B) are true.
14. The dry urethroscopy is used for inspection of:
- A. The anterior and posterior of the urethra, seminal crest**
 - B. The posterior of the urethra
 - C. Seminal crest
 - D. A) and B) are correct
 - E. Urinary bladder.
15. The irrigation of urethroscopy is used to examine.
- A. The posterior of the urethra
 - B. The anterior of the urethra.**
 - C. Seminal crest
 - D. a) and b) are correct.
 - E. Urinary bladder.
16. The contraindications to chromocystoscopy are:
- A. Acute cystitis, urethritis, shock, acute prostatitis, collapse.**
 - B. Collapse.
 - C. Shock.
 - D. Acute prostatitis.
 - E. Retention of urine.
17. The chromocystoscopy contraindications are:

- A. Bladder capacity is less than 50 ml..**
- B. Chronic prostatitis.
- C. CKD.
- D. Renal hepatic failure.
- E. High blood pressure.

Tests of the 2nd level:

1. What kind of contrast media x-ray is necessary to use for medical study of the urinary tract:
 - A. Triombrast.**
 - B. Iodamide**
 - C. Omnipaque
 - D. Barium.
 - E. Iopagnost

2. What are the complications of intravenous administration of contrast agents?
 - A. Hives.**
 - B. Anaphylactic shock.**
 - C. Bronchospasm.
 - D. Diarrhea
 - E. Acute coronary syndrome.

3. What can incorrectly detected during diagnosis of urine stones of the excretory system for their presence:
 - A. Stones of the gallbladder.**
 - B. Pancreatic stones.**
 - C. Dehydrated cysts, vessels.
 - D. Fecal stones.
 - E. Hydrocalix.

4. Specify the tools that are necessary for retrograde pyelography::
 - A. Catheter cystoscope.**
 - B. Set of ureteral catheters**
 - C. Syringe and contrast agent
 - D. Nephroscope.
 - E. Indigo carmine.

5. What is the purpose of retrograde pyelography, except for:
 - A. Arresting of renal colic.**
 - B. Taking urine separately from each kidney.**

- C. Identification of the destructive process in calyces with tuberculosis.
- D. Identification of pelvis tumor, ureter.

6. What does the ultrasound of the kidney allow us to identify.

Conditions of the pelvic-ureteric segment and nephrolithiasis:

- A. Sizes of the kidneys.**
- B. Thickness of the parenchyma.
- C. The presence of stones and tumors.
- D. Location.
- E. Kidney function.

Tests of the 3rd level:

1. A 23-year-old N. patient has markedly turbidity of urine due to the foreign matter of leukocytes and bacteria. However, the localization of the inflammatory process is unknown. Which medical method of examination should be used?

- A. Three-glass test.**
- B. Two-glass test.
- C. Zimnitsky test of urine.
- D. Nechiporenko test of urine.
- E. Urine culture.

2. A 52-year-old female patient was admitted to the urological department with complaints of severe lumbar pain to the left, without the urine for two days. From the anamnesis: she has suffered from urolithiasis for 12 years. The patient had a right-sided nephrectomy three years ago. What medical test should be performed to differentiate acute urinary retention from anuria?

- A. Ultrasound.**
- B. Computed tomography.
- C. To perform the catheterization of the bladder.
- D. Intravenous ureography.
- E. Cystography.

3. A 36-year-old B. patient was admitted to the clinic with complaints of pain in the right lumbar region, the appearance of blood in the urine after the pain attack. The kidneys are not palpable. Pasternatsky's symptom is positive to right. Microhematuria and uraturia were revealed in the urine test. What medical method of examination is most appropriate in this case?

- A. Ultrasound.**
- B. Intravenous ureography.
- C. Computed tomography.
- D. Urine test.
- E. Retrograde ureteropyelography.

4. A 25-year-old patient has severe pain in the left lumbar region, frequent urination and nausea. He felt sick 2 days ago after the long hard work. The abdomen is soft and painful in the left hypochondrium. Pasternatsky's symptom is positive on the left. What should be done to clarify the diagnosis?
- A. Ultrasound.**
 - B. KUB X-ray.
 - C. Computed tomography.
 - D. Chromocystoscopy.
 - E. Intravenous ureography.
5. A 68-year-old patient addressed to the urology department with acute urinary retention. Specify the priority medical test:
- A. Catheterization of the bladder.**
 - B. KUB X-ray.
 - C. Introduction of antispasmodics.
 - D. Antibacterial therapy.
 - E. Prescription of alpha-adrenoblocker.
6. The natural urination is absent for 3 days after drinking alcohol in 71-year-old patient. Significant desire to urinate is not noted. The patient has suffered from stranguria and nocturia for 3 years. The patient has hypertrophy. The bladder is not clearly defined by palpation. What medical method is most appropriate for determination of the existing pathology nature?
- A. Ultrasound.**
 - B. KUB X-ray.
 - C. Determination of the urea level and blood creatinine.
 - D. Intravenous ureography.
 - E. Catheterization of the bladder.
7. A 52-year-old patient complains of intense pain in the right lumbar and iliac regions and frequent urination. The pain is noted along the right ureter. Pasternatsky's symptom is positive to the right. The shadows for suspicious calculus are found on the KUB X-ray. What should be done to clarify the diagnosis?
- A. Ultrasound.**
 - B. Intravenous ureography.
 - C. Urine and blood tests.
 - D. Retrograde ureteropyelography.
 - E. Computed tomography.
8. A 34-year-old patient was hit by a car. The pelvic fracture was diagnosed in the emergency room. The blood is released from the urethra. What examination must be performed to clarify the diagnosis?

- A. Retrograde ureteropyelography.**
 - B. Voiding urethrography.
 - C. Ultrasound of the bladder.
 - D. Computed tomography.
 - E. Intravenous ureography with descending cystography.
9. A 60-year-old patient was admitted to the clinic with total painless macrohaematuria with clots on the background of subfebrile in the last two months. What medical methods must be performed urgently:
- A. Cystoscopy and excretory urography.**
 - B. Chromocytoscopy and Nechiporenko test of urine.
 - C. UFM and microscopic sediment examination.
 - D. Bladder catheterization and microscopic sediment examination.
 - E. Retrograde urethrocytography and blood urea concentration test.
10. Total painless hematuria was diagnosed in the patient of the emergency department. What the tactics should be performed?
- A. Ultrasound.**
 - B. Excretory urography.
 - C. Cystoscopy
 - D. Angiography.
 - E. Retrograde ureteropyelography.
11. A 23-year-old patient has dysuria and marked turbidity of the first portion of urine due to foreign substances of leukocytes and bacteria. What is the preliminary diagnosis?
- A. Acute prostatitis.**
 - B. Acute cystitis.
 - C. Acute urethritis.
 - D. Acute pyelonephritis.
 - E. Abscess of prostate gland.
12. A 21-year-old female patient complains of pain in the left half of the abdomen during the physical exertion. The smooth, nonmobile and painless mass is determined by the palpation at the level of the umbilicus. This formation is the kidney, the ureter according to the excretory urography. It is not clearly visualized. The right kidney is located normally, its function is satisfactory. What medical method will allow us to accurately establish the anomaly of the kidney in a patient?
- A. Renal angiography.**
 - B. Cystography.
 - C. Radioisotope renography.
 - D. Chromocystoscopy.

E. Ultrasound.

13. A 40-year-old patient was delivered to the emergency department. Acute pyelonephritis on the left and stone of the left ureter were diagnosed. Which of the following methods will confirm or exclude the disturbance of the passage of urine from the left kidney?
- A. **Chromocystoscopy.**
 - B. Bladder catheterization.
 - C. Plain urography.
 - D. UFM.
 - E. Radioisotopic .
14. A 29-year-old V. patient was hospitalized with complaints of dysuria and subfebrile body temperature. The leukocytes cover the entire field of view in the general urine test. What test will be appropriate for verification of the leukocyturia source?
- A. **Three-glass test.**
 - B. Nechiporenko's test.
 - C. Rehberg's test.
 - D. Amburzhe's test.
 - E. Zimnitskiy's test.
15. A 32-year-old patient was admitted to the hospital with complaints of fever to 39.6°C. The patient's condition is severe. The sharp pain during extension is noted in the position when the patient leads up to the abdomen by the hip. The bulging in the lumbar region and hyperemia on the right, pain in the lumbar region, especially in the right costovertebral angle, protective contraction of the lumbar muscle during mild palpation, scoliosis of the lumbar spine are observed. What emergency examination is necessary for the patient to establish the diagnosis?
- A. **Plain urography and intravenous ureography.**
 - B. Chromocystoscopy.
 - C. UFM.
 - D. Radioisotope renography.
 - E. Retrograde ureteropyelography.
16. A 45-year-old female patient suffered from the general weakness, fatigue, dry mouth and thirst. The skin is pale. AP is 170/105 mmHg. Then tuberculous kidneys are enlarged during palpation. The collective current of residual nitrogen is 100 mmol/l. Daily variation is 1010-1012 in relation to the specific gravity of urine. It is known that the grandmother of the patient died at the age of 43 from the unknown kidney disease. Which of the following method is the most informative to confirm the diagnosis?

- A. Sonography of the kidneys.**
 - B. Excretory urography.
 - C. Chromocytoscopy.
 - D. Dynamic scintigraphy.
 - E. Radioisotope renography.
17. A 55-year-old patient with total monosymptomatic macrohaematuria was delivered to the emergency department. It is appeared at first. The general condition of the patient is satisfactory. The pathological changes were not identified during examination. Which of the following methods must be urgently performed?
- A. Echo scan.**
 - B. Cystography.
 - C. Cystoscopy.
 - D. Catheterization of the bladder.
 - E. Bougienage.
18. Urgently woman applied with intense pain in the right hypochondrium and lumbar region, nausea, vomiting. Temperature is 37.5⁰ C. The urine analysis includes such indicators such as the amount of leukocytes is 10-12 FOV and the dose of erythrocytes is 15-20 in FOV. What method is the appropriate for the differential diagnosis of renal and hepatic colic?
- A. Chromocytoscopy.**
 - B. Identification of blood creatinine.
 - C. Nechiporenko's test.
 - D. Plain urography
 - E. Zimnitskiy's test.
19. A 62-year-old F. patient has acute disorder of cerebral circulation, the urination is absent for 28 hours. The bladder is on 2 cm below the umbilicus. Which of the following catheter should be used for prolonged urine release?
- A. Indwelling catheter.**
 - B. Metal bougie.
 - C. Metallic male catheter.
 - D. Thiemann's catheter.
 - E. Pezzer's catheter.
20. A 68-year-old L. patient has pain in the abdomen after frequent micturate urge to urinate. The urine retention is suddenly developed. Specify the emergency management.
- A. Catheterization of the bladder.**
 - B. Catheterization of the bladder.

- C. Paracentetic cystostomy.
 - D. Introduction of antispasmodics.
 - E. Introduction of alpha-adrenoblocker.
21. A 68-year-old patient has lower abdominal pain after frequent micturate urge to urinate. The urine retention is suddenly developed. What else should be done to clarify the diagnosis?
- A. Ultrasound of the urinary system.**
 - B. Cystoscopy.
 - C. Cystography.
 - D. Urethrography.
 - E. Excretory urography.
22. A 3-year-old boy was taken to the hospital with complaints of pain in the left lumbar region. The pain occurs during urination. What method will be appropriate in the diagnosis of this disease?
- A. Micturating cystography**
 - B. Excretory urography.
 - C. Cystoscopy.
 - D. Urethrography.
 - E. Renography.
23. The patient was brought to the hospital with urethral surgery that occurred after the perineal injury. Which of the following method is contraindicated in this case?
- A. Urethralcystoscopy.**
 - B. Cystoscopy.
 - C. Excretory urography.
 - D. Ultrasound of the kidneys and bladder.
 - E. Isotopic renography.
24. A 40-year-old woman has the typical picture of renal colic, paroxysmal pain during the week, temperature is 38.6⁰ C. The shadow suspicious for calculus (0.5 × 0.8 cm) near the bladder is noted on the observational urogram. Antispasmodic injections and novocaine blockades give the temporary effect. What kind of manipulation can help for the patient?
- A. Ureteral catheterization.**
 - B. Antibiotics.
 - C. Repeated blockade of the round ligament of uterus.
 - D. IV introduction of the mixture (with morphine).
 - E. Physiotherapy.
25. A 34-year-old man complained of frequent and painful urination. He had the operation about the trauma of urethra year ago. He has difficulty urination with weak stream during last 3-4 months. What tool can help in the diagnosis and treatment of the patient?

- A. Uroflow meter.**
 - B. Indwelling catheter.**
 - C. Cystoscopy.**
 - D. Echo scan.**
 - E. Bougienage.**
26. The man brought to the hospital with acute urinary retention, which developed on the background of benign prostatic hyperplasia. What catheter is most likely and atraumatic to release urine of the patient?
- A. Thiemann's plastic curved elastic catheter.**
 - B. Metallic male catheter.**
 - C. Nelaton's catheter.**
 - D. Pezzer's catheter.**
 - E. Three-way elastic catheter with balloon.**
27. A 29-year-old patient has complained of the body temperature to 38°C, pain in the right lumbar region and nausea. He has been sick for 12 hours. Leucocyturia is absent, but bacteriuria occurs in the number more than 100 thousand of the microbial bodies in the general urine test. Is it possible to exclude the presence of acute pyelonephritis?
- A. No.**
 - B. Yes, but only after ultrasound.**
 - C. Yes, but only after Amburge's test.**
 - D. Yes.**
 - E. Yes, but only after Nechiporenko's test.**
28. A 50-year-old female patient was hospitalized with complaints of the blood urine. She felt sick for the first time. The abdomen is soft and painless. Pasternatsky's symptom is negative on both sides. The kidneys are located in the typical places, calculi in the projection of the kidneys; ureters and bladder are not detected on the observational R_o-gram. 8'-15' PCS was filled from two sides; the kidney function is not impaired on the excretory urogram. The filling corporal with dimensions of 0.4 × 0.4 cm in the area of the pelvis is observed on the right side. What research is necessary to determine the source of bleeding?
- A. Computed tomography with intravenous enhancement.**
 - B. X-ray.**
 - C. Retrograde ureteropyelography.**
 - D. Nephroscopy.**
 - E. Ureteronephroscopy.**
29. The cloudy urine is excreted in 3-year-old child. Leukocyturia and bacteriuria are revealed by the laboratory test. The child holds his hand on the lumbar region on the right side during urination. What medical method is most appropriate to confirm the cholecystic -renal reflux?
- A. Excretory urography.**
 - B. Dynamic scintigraphy.**

- C. Radiorenography.
 - D. Ultrasound of the kidneys and abdominal organs.
 - E. Computed tomography.
30. A 32-year-old woman suffered from the intense pain in the right hypochondrium and lumbar region, nausea, vomiting and temperature was 37.6°C. She was brought to the hospital urgently. The urine analysis: leukocytes are 10-12 in the field of view and erythrocytes are 15-20. What investigation may be appropriate for the differential diagnosis of renal and hepatic colic?
- A. Excretory urography.**
 - B. Blood creatinine level.
 - C. Nechiporenko's test.
 - D. Zimnitskiy's test.
 - E. Investigation of blood bilirubin.
31. The removal of the uterus was performed for 40-year-old woman. She had severe lumbar pain on the left on the second day. The painful lower edge of the left kidney is determined by the palpation. Pasternatsky's symptom is positive. Which of the listed methods of examination can confirm the diagnosis provided by you?
- A. Ultrasound of the kidneys.**
 - B. Chromocytoscopy.
 - C. Excretory urography and catheterization of the left ureter.
 - D. Retrograde ureterography.
 - E. Radioisotope renography.
32. A 35-year-old man came to the clinic with complaints of headache; high blood pressure was 200 /115 MmHg. The antihypertensive therapy is ineffective. The contours and function of the right kidney are not determined on the excretory urogram. Which of the following method should confirm the diagnosis?
- A. Renal angiography.**
 - B. Computed tomography of the kidneys.
 - C. Ultrasound of the kidneys.
 - D. Radioisotope renography.
 - E. Radioisotope kidney scan.
33. A 45-year-old patient was urgently hospitalized with complaints of hyperthermia to 38.0 ° C, attacks of pain in the lumbar region on the left and frequent desire to urinate. The enlarged, painful left kidney is determined the palpation. Pasternatsky's symptom is positive on the left. The number of blood leukocytes is $9 \times 10^9 /l$, the rod of nuclear forms is 7%. The large "white kidney" is located on the left determined by the excretory urogram. Which of the following methods allows you to specify the location of ureteral obstruction?

- A. Retrograde ureteropyelography.**
 - B. Chromocytoscopy.
 - C. Radioisotope renography.
 - D. Renal X-ray.
 - E. Dynamic scintigraphy of the kidneys.
34. A 46-year-old V. patient was hospitalized with complaints of pronounced dull pain in the lower part of the right half of the chest and the presence of blood in the urine. These symptoms appeared immediately after the fall and bruise of the right half of the body in to the metal beam. Pulse is 90 beats /min., AP is 120/70 MmHg. The severe tenderness is observed by the palpation in the right hypochondrium. The urine test: red blood cells are $\frac{1}{2}$ in FOV . Which of the following methods is the most appropriate for making the diagnosis?
- A. Excretory urography.**
 - B. Renal X-ray.
 - C. Retrograde ureteropyelography.
 - D. Chromocytoscopy.
 - E. Radionuclide renography.
35. A 60-year-old A. patient was brought to the emergency room with clinical manifestations of anuria. Hemodynamic parameters are not impaired. What will be the first step in the further diagnostic examination of the patient?
- A. Ultrasound examination of the kidneys and urinary tract.**
 - B. Excretory urography.
 - C. Radioisotope renography.
 - D. Chromocytoscopy.
 - E. Catheterization of the ureters.
36. A 35-year-old N. patient had the development of hyperthermia, acute pain in the sacrum on the right and left and anuria after gynecological surgery. The presence of bilateral ureterohydronephrosis was revealed by the ultrasound. Which of the following is most suitable for identification of the ureters obstruction level?
- A. Retrograde ureterography.**
 - B. Dynamic scintigraphy.
 - C. Excretory urography.
 - D. Catheterization of the ureters.
 - E. Radioisotope renography.

Topic: Anomalies of the urinary and male reproductive system development.

Tests of the 1st level:

1. What method of examination allows you to perform the differential diagnosis of nephroptosis with kidney dystopia?
 - A. Radioisotope renography.**
 - B. Retrograde pyelography.**
 - C. Excretory pyelography.**
 - D. Chromocytoscopy.**
2. Which of the following symptoms is NOT typical for hydronephrosis:
 - A. Jaundice.**
 - B. Tumor-like abdominal cavity mass.**
 - C. Dysuric disorders.**
 - D. Radiographically - the expansion of pelvicalyceal system.**
 - E. Leukocyturia.**
3. A 25-year-old patient was examined by the excretory urogram. The kidney is at the level of L₂ - L₅ in both positions (lying and standing). What pathology is described?
 - A. Nephroptosis.**
 - B. Hydronephrosis.**
 - C. Polycystic kidney disease.**
 - D. Lumbar dystopia of the right kidney.**
 - E. Sponge kidney.**
4. The patient has polycystic kidney disease. The following indicators: blood creatinine is 250 μmol / l, glomerular filtration is 55 ml / min, Hb is 97 g / l; er. are 3.2 t / l, diuresis is 2200 ml revealed during the examination. The cyst sizes are up to 1.5 cm in diameter shown by the ultrasound. Choose the proper treatment for this case.
 - A. Conservative therapy.**
 - B. The operation includes the opening of cysts.**
 - C. Hemodialysis.**
 - D. Kidney transplantation.**
 - E. Hemosorption.**
5. Which of the following symptoms are most common for hydronephrosis: a) anuria b) aching pain in the lumbar region; c) hematuria d) tumor formation which is palpable in the hypochondrium; e) acute urinary retention? Choose the right combination of answers.
 - A. b, c, d.**

- B. a d, e.
- C. c, d, e.
- D. a, b, d.
- E. a, c, d.

6. Which of the following diseases may contribute to the development of hydronephrosis: a) orchiepididymitis; b) Ormond's disease; c) urolithiasis; d) tumors of the uterus and uterine adnexa; e) polycystic kidney disease? Choose the right combination of answers.
- A. **b, c, d.**
 - B. b, d, e.
 - C. a, c, e.
 - D. a, d, e.
 - E. b, c, e.
7. Prostatic aplasia was diagnosed in the patient. The physiology of sexual intercourse is changed accompanying this pathology.
- A. **Sexual intercourse is impossible.**
 - B. Ejaculation.
 - C. Sexual intercourse is accompanied by pain in the testicles.
 - D. Urination is disturbed after sexual intercourse.
 - E. Sexual intercourse practically is not changed.
8. Venous renal hypertension is revealed during the examination. What pathology is caused by the increased venous pressure in the kidney?
- A. **Varicocele.**
 - B. Testicular hypoplasia.
 - C. Orchiocele.
 - D. Hydrocele.
 - E. Spermatocele.
9. Congenital hydronephrosis is diagnosed in the child. Determine the cause of this pathological condition.
- A. **B, C, E are true.**
 - B. Pyeloureteral segment stricture.
 - C. Pyeloureteral segment valve.
 - D. Ureteral stone.
 - E. Additional vessel.
10. The kidneys abnormalities include:
- A. **Homolateral dystopia (thoracic, lumbar, iliac and pelvic) and heterolateral (crossed).**

- B. Nephroptosis.**
 - C. Homolateral dystopia (crossed).**
 - D. Only a) and b) are true.**
 - E. Only heterolateral (crossed).**
11. The kidney dystopia occurs with frequency:
- A. 1:800.**
 - B. 1:600.
 - C. 1:1000.
 - D. 1:1200.
 - E. 1:1500.
12. Dystopic kidney must be differentiated:
- A. With the intestinal tract tumor.**
 - B. With fixed nephroptosis.**
 - C. With the female genital organs tumor.**
 - D. With all of the above.**
 - E. a) and b).**
13. The characteristic radiological signs of pelvic and lumbar dystopia of the kidney are:
- A. Rotation of the kidney and low divergent, short vascular pedicle.**
 - B. Spiral.**
 - C. Low divergent, short vascular pedicle.**
 - D. a) and b).**
 - E. a) and c).**
14. The diagnosis of kidney dystopia is based on:
- A. Ultrasound and excretory urography.**
 - B. Angiography.**
 - C. X-ray.**
 - D. a) and b).**
 - E. All of the above is correct**
15. The anomalies of the relationship of the kidneys are composed of all renal anomalies:
- A. 13%.**
 - B. 10%.
 - C. 6-8%.
 - D. 18%.
 - E. 20%.
16. The symmetric forms of fusion include:
- A. U-shaped and caked kidney.**
 - B. S- shaped kidney.**

- C. L-shaped kidney.
D. Y-shaped kidney.
E. Caked kidney.
17. What are the possible options for fusion of poles in U-shaped kidney:
A. By the parenchymal passages of the kidney lower poles. By the passages of the kidney upper poles. The fusion of the poles behind the aorta and inferior vena cava.
B. By the passages of the kidney upper poles.
C. Fusion only by fibrous tissue.
D. Fusion of poles passages behind the aorta and the inferior vena cava.
E. C) and D).
18. What disease takes the first place among the complications of the U-shaped kidney?
A. Hypertension.
B. Hydronephrosis.
C. Pyelonephritis.
D. Urolithiasis.
E. Hematuria.
19. How is a U-shaped kidney characterized on excretory urograms?
A. Rotation of the pelvicalyceal system, the change of angle by the longitudinal axes of the fused kidneys.
B. By change the angle composed of the longitudinal axes of the united kidneys.
C. The presence of the "fish hook" symptom.
D. A) and B).
E. All of the above.
20. Where is the renal hilum located near the S-shaped kidney?
A. Medially.
B. Laterally.
C. Some are medially, others are cranial.
D. Some are medially, others are laterally.
E. Cranial.
21. Where is the renal hilum located near the L-shaped kidney?
A. Some are medially, others are cranial.
B. Medially.
C. Cranial.
D. Laterally.
E. Some are medially, others are laterally.
22. The pathogenesis of solitary cyst is related to:

- A. Tubular occlusion (congenital or acquired), with renal ischemia, with urinary retention.**
- B.** Urinary retention
- C.** Renal tissue ischemia
- D.** A) and B)
- E.** B)
23. The cyst puncture and cystography involve a certain sequence of stages:
- 1) cyst puncture
 - 2) introduction of radiopaque substances into the cyst cavity
 - 3) aspiration of cyst content
 - 4) introduction of sclerosing solutions into the cyst cavity
 - 5) cytological and bacteriological examinations
 - 6) evacuation of radiopaque substances from the cyst
- A. 1,3,5,2,6 and 4 are true.**
- B.** 1,6,3,2,5 and 4 are true.
- C.** 1,2,3,6,4 and 5 are true.
- D.** 1,3,2,6,5 and 4 are true.
- E.** 1,2,3,5,6 and 4 are true.
24. What are the indications for surgery of kidney solitary cyst:
- A. Arterial hypertension, cyst suppuration, impaired passage of urine.**
- B.** Suppuration of the cyst.
- C.** Disorder of urine passage and chronic infection in the kidney and upper urinary tract.
- D.** A) is true.
- E.** A) and B).
25. What are the indications for surgery of the kidney solitary cyst:
- A. All of the following.**
- B.** Hematuria.
- C.** Malignancy of the cyst wal.
- D.** Combination of cyst and kidney cancer.
- E.** Constant pain.
26. Polycystic kidney disease is a disease:
- A. Congenital and bilateral.**
- B.** Acquired.
- C.** One way.
- D.** Bilateral.
- E.** a) and B).

Tests of the 2nd level:

1. How are the radiological signs of pelvic and lumbar dystopia of the kidney characterized by?
 - A. Rotation of the kidney.**
 - B. Low grow away, short vascular pedicle.**
 - C. Spiral ureter with adequate distance.
 - D. Upper grow away, short vascular pedicle.
 - E. C) and D).

2. Ureterocele is diagnosed on the following data:
 - A. Cystoscopy.**
 - B. Excretion pyelography.**
 - C. Cystography.
 - D. Urethrocytography.
 - E. Renal angiography.

3. What disease is related to the abnormal localisation of kidneys:
 - A. Homolateral dystopia (thoracic, lumbar, iliac, pelvic).**
 - B. Heterolateral dystopia(crossed).**
 - C. Nephroptosis.
 - D. A) and C).
 - E. All listed.

4. The indications for endoscopic surgery for solitary cyst of the kidney are:
 - A. Constant pain. Increased blood pressure.**
 - B. Malignancy of the cyst wall.**
 - C. Hematuria.
 - D. Combination of cyst and renal cancer
 - E. All listed above.

5. The indications for surgical treatment of nephroptosis are all given above with the exception of:
 - A. 1 stage of nephroptosis.**
 - B. Asthenization.**
 - C. Vasorenal hypertension.
 - D. Hydronephrotic transformation of the kidney
 - E. Constant pain in the kidney area, without patient's working ability.

Tests of the 3rd level:

1. A 2-year-old boy does not have right testicle in the scrotum. Hypoplasia of the right half of the scrotum and the absence of testicle are detected on examination. The volumetric rounded formation (1.0 × 1.5 × 1.5 cm) is palpable, elastic and painless which is NOT reduced in the scrotum. It is located in the inguinal canal closer to the external opening. What is the most accurate diagnosis?

- A. Cryptorchidism (inguinal).**
 - B. Monorchism on the left.
 - C. Ectopic testis (pubic).
 - D. Retraction of the right testicle (pseudo-cryptorchism).
 - E. Cyst of the spermatic cord.
2. The painful, nodule, tightly elastic formations are palpated in both hypochondria in a child. The signs of chronic renal failure are diagnosed in the laboratory. What disease should be diagnosed?
- A. Polycystic kidney disease.**
 - B. Kidney duplication.
 - C. Chronic pyelonephritis.
 - D. Renal echinococcosis.
 - E. Tumors of the kidneys.
3. The urethra opening is located in the penoscrotal angle area. It was established by the examination of the external genital organs in 3-year-old boy. Determine the kind of anomaly in the child?
- A. Hypospadias.**
 - B. Epispadias.
 - C. Ectopia of the urethra.
 - D. Urethral fistula.
 - E. Exstrophy of bladder.
4. A 24-year-old patient complains of severe pain and swelling of the penis. When the patient performs the return movement of the narrowed preputium of the penis balanus back than he cannot reduce it. Objectively: swelling of the penis balanus and hyperemia are observed. What is your diagnosis?
- A. Paraphimosis.**
 - B. Phimosis.
 - C. Bruise of the penis.
 - D. Acute cavernitis.
 - E. Acute balanoposthitis.
5. A 24-year-old patient complains of severe pain and swelling of the penis. When the patient performs the return movement of the narrowed preputium of the penis balanus back than he cannot reduce it. Objectively: swelling of the penis balanus and hyperemia are observed. Specify the urgent measures.
- A. Try to reduce the penis balanus. If the manipulation is ineffective, open the preputium circle immediately.**
 - B. Apply cold and compression bandage.
 - C. Prescribe antibiotics and uroantiseptics.
 - D. Prescribe antibiotics and antiseptics.
 - E. Introduce painkillers and antispasmodics.

6. The patient has a tumor-like formation in the right half of the scrotum; he feels heavy and moderate pain. The patient has been sick for 5 months. The painless, dense, oval and tumor-like formation of $15 \times 10 \times 10$ cm is determined in the scrotum on the right. The testicle and appendage are not differentiated. The testicle and appendage are not changed on the left. Urination is not changed. Your diagnosis:
- Edemata of the right testicle membranes.**
 - Right-sided epididymitis.
 - Right-sided inguinoscrotal hernia
 - Right-sided funiculitis.
 - Right-sided orchoepididymitis.
7. A 16-year-old patient noticed two-stage act of urination. He felt the urine in the bladder after emptying of the bladder, accompanied with pain in the lumbar region for a minute or more, which is confirmed by secondary urination. What kind of pathology is described?
- Bladder diverticulum.**
 - Bladder-ureteral reflux.
 - Chronic cystitis.
 - Cystic calculi.
 - Neurogenic lesions of the bladder
8. The presence of solitary cysts of the lower pole of the right kidney 2×2 cm is accidentally detected by ultrasound in 45-year-old M. patient. According to isotope renography the secretory - excretory function of the kidneys is not impaired. The pathology is not noticed in the general urine test. What is the treatment strategy?
- Case follow-up.**
 - Cyst puncture under X-ray control.
 - Open surgery.
 - Cyst puncture under ultrasound control.
 - Sclerotherapy.
9. The kidney of 19-year-old patient is located at level L_5 in both positions (lying and standing) on the excretory urogram. What anomaly is described:
- Lumbar dystopia of the right kidney.**
 - Nephroptosis.
 - Hydronephrosis.
 - Polycystic kidney disease.
 - Spongy kidney.
10. The pelvis of the right kidney was observed at the L_{3-4} level by the intern urologist on the excretory urogram (7 minutes). Nephroptosis of 3 degree was diagnosed by intern. Necessary surgery, such as nephropexy was prescribed. Determine the mistake of firm conclusion of the intern.

- A. Unperformed differential diagnosis with iliac dystopia is not treated surgically.**
- B. Nephroptosis is recognized only by the retrograde pyelogram.
- C. It is better to perform nephrectomy.
- D. Nephropexy is technically impossible.
- E. The operation on the right side is not possible because the liver interferes to perform it.
11. A 55-year-old patient complaints of weakness, thirst, nausea, headache and constant back pain on both sides. The skin is pale and dry. Both enlarged kidneys are palpable. They are dense, lumpy and moderately painful. Name the preliminary diagnosis.
- A. Polycystic kidney disease.**
- B. Urolithiasis.
- C. Chronic pyelonephritis.
- D. Nephroncus.
- E. Nephrotuberculosis.
12. A 45-year-old woman was hospitalized with complaints of general weakness, fatigue, dry mouth and thirst. The skin was pale. AP was 170/105 MmHg. The enlarged and tuberoso kidneys are palpated. Serum residual nitrogen concentration was 100 mmol / l. Daily variation of USG was 1010-1012. The patient's grandmother died of unknown kidney disease at the age of 43 years old. Which of the following methods is the most informative to make the diagnosis?
- A. Ultrasound of the kidneys.**
- B. Excretory urography.
- C. Chromocytoscopy.
- D. Dynamic scintigraphy.
- E. Radioisotope renography.
13. A 48-year-old patient has complained of dull pain in the right lumbar region for more than three years. The kidneys are in normal size, the fluid formation is up to 12 cm in diameter in the upper pole of the right kidney. It was determined during ultrasound. The norm is on the left and the deformation of the upper group of calyces is on the right, the function is satisfactory. These were observed on the excretory urogramm. What disease are described in this case?

- A. Right renal fluid cyst.**
 - B. Polycystic kidney disease.
 - C. Right renal multicystosis.
 - D. Right renal tumor.
 - E. Hydronephrosis.
14. A 46-year-old woman complains of the general weakness, fatigue, dry mouth and thirst. The skin is pale. AP is 180/110 MmHg. The enlarged and tuberous kidneys are palpated. Serum residual nitrogen concentration is 105 mmol / l. Daily variation of USG is 1010-1012. The patient's grandmother died of unknown kidney disease at the age of 43 years old. Which of the following diagnoses is most accurate?
- A. Polycystic kidney disease.**
 - B. Renal unicameral cyst.
 - C. Bilateral hydronephrosis.
 - D. Nephrotuberculosis.
 - E. Nephroncus.
15. A 32-year-old female patient complains of dull pain in the lumbar region and increased blood pressure to 180/120 MmHg. She felt sick for 3 years. The pulse is 80 beats / min., rhythmic and satisfactory volume. The abdomen is soft and the kidneys are not palpable, CVA Tenderness is slightly positive on the right. The lower pole of the right kidney is palpable in the upright position. Dysuria is absent. Hematuria is observed. Make a diagnosis.
- A. Nephroptosis and renal hypertension.**
 - B. Hydronephrosis.
 - C. Polycystic kidney disease.
 - D. Renal dystopia.
 - E. Renal trauma.
16. Right-sided varicocele was found in 34-year-old patient during periodic health examination. It does not disappear in the upright position. What is the doctor's examination?
- A. Renal Multiple investigations.**
 - B. Case follow-up.
 - C. Dressing of spermatic cord venae.
 - D. Surgery of spermatic venae dressing.
 - E. Suspensory bandage.
17. The absence of testicles in the scrotum and in the inguinal canals was revealed in a 16-year-old young man. Physical development is normal. What is recommended?
- A. Surgery - abdominoscopy with the installation of testicle into the scrotum.**
 - B. Hormonotherapy.

- C. Case follow-up.
 - D. Surgery – bilateral orchiectomy.
 - E. This condition does not need treatment.
18. Varicocele of II stage on the left was diagnosed in a 19-year-old patient. What should be recommended to him?
- A. Ivanissevich operation.**
 - B. Suspensory bandage.
 - C. Physiotherapy on the scrotum.
 - D. Case follow-up.
 - E. This condition does not need treatment.
19. A 16-year-old patient has congenital phimosis. What is appropriate for him?
- A. B) and C) are possible.**
 - B. Excision of the prepuce.
 - C. Plastic surgery with preservation of the prepuce.
 - D. Expansion of the prepuce by tools.
 - E. Surgical treatment is not indicated.
20. A 24-year-old patient is suspected of hydronephrotic transformation of one left kidney. The urea level is 10.5 mmol / l, the creatinine level is 0.467 μ mol / l in the biochemical blood test. Which of the following methods will allow you to establish the diagnosis immediately?
- A. Ultrasound examination.**
 - B. Excretory urography.
 - C. Retrograde ureteropyelography.
 - D. Plain urography.
 - E. Radioisotope renography.
21. A 24-year-old patient complained of episodic dull pain in the left half of the scrotum, which occurs after physical exertion. A cyst-like, as ball of worms, painless elastic mass is determined by palpation along the left spermatic cord. It disappears in the upright position. What is your diagnosis?
- A. Varicocele on the left.**
 - B. Tuberculosis of the epididymis of the left testicle.
 - C. Torsion of Testicular Appendage (Hydatid of Morgagni).
 - D. Funiculitis on the left.
 - E. Cyst of the left spermatic cord.
22. A 28-year-old patient notes the pain in the right lumbar region during the last 2 years. The pain occurs in upright position and mainly in the second half of the day, especially during physical exertion and gradually passes in the prone position. A smooth, mobile and moderately painful formation, the lower edge of which is located at the level of the upper anterior iliac spine. It is determined by physical examination in the right half of the abdomen. Preliminary diagnosis:

- A. Renal nephroptosis.**
- B. Tumor of ascendens part of colon.**
- C. Lumbar renal dystopia.**
- D. Oophoritic cyst.**
- E. Hydrocholecystis.**

23. A 21-year-old patient complains of pain in the left half of the abdomen during exercise. Smooth, nonmobile and painless mass is determined by palpation at the level of the umbilicus. The palpable mass is a kidney, the ureter which is not clearly visualized by excretory urography. The right kidney is located normally, its function is satisfactory. What method will allow you to accurately detect the anomaly of the kidney?

- A. Renal angiography.**
- B. Ultrasound.**
- C. Chromocytoscopy.**
- D. Radioisotope renography.**
- E. Cystography.**

24. During examination the doctor discovered that the newborn had a defect in the anterior abdominal wall below the umbilicus without anterior wall of the bladder and protrusion of its posterior wall: the ureter eyes are visible, urine rhythmically flows into the pubic skin and the inner surface of the thighs. Consultation of the urologist: exstrophy of the bladder, surgical treatment is indicated. When is it necessary to perform the operation?

- A. During the first year of a child's life.**
- B. in 3-5 years.**
- C. In adolescence.**
- D. With the menstruation or the first sexual signs.**
- E. After puberty.**

25. The patient complained of the painful increased foreskin volume, the impossibility of the balanus closing, arising after sexual intercourse. On examination: the balanus is bare, swollen and cyanotic. The foreskin is purple-cyanotic color, sharply swollen, painful. Your diagnosis:

- A. Paraphimosis.**
- B. Lymphoma of the penis.**
- C. Fracture of the penis.**
- D. Cavernositis**

E. Priapism.

26. An 18-year-old patient complained of difficulty urination and swelling of the preputial sac during urination. On examination the balanus of the penis is not exposed due to a sharp narrowing of the external opening of the preputial sac.

Your diagnosis:

A. Phimosis.

B. Paraphimosis.

C. Stone of hanging urethra.

D. Stricture of the external opening of the urethra.

E. Acute balanoposthitis.

27. A 16-year-old patient has urination that is accompanied by dull aching pain in the lumbar region, which is aggravated by straining. Specify the pathology.

A. Vesicoureteral reflux.

B. Bladder diverticulum.

C. Neurogenic lesions of the bladder.

D. Chronic cystitis.

E. Bladder stone.

Topic: Acute pyelonephritis

Tests of 1st level:

1. A 26-year-old patient was treated for acute pyelonephritis. The treatment was effective; normalization of all indicators was noted. What sanatorium-resort therapy can be recommended?
 - A. It is not recommended.**
 - B. Kuialnyk.
 - C. Morshyn.
 - D. Myrhorod.
 - E. Truskavets.
2. What are the forms of acute purulent pyelonephritis:
 - A. All listed.**
 - B. Interstitial purulent.
 - C. Apostematous.
 - D. Abscess.
 - E. Carbuncle.
3. What is the frequency of occurrence of gestational pyelonephritis?
 - A. 11%**
 - B. 1%
 - C. 0%
 - D. 50%
 - E. 100%
4. What is the infectious pathogen that often causes kidney inflammation:
 - A. Collibacillus.**
 - B. Necturus.
 - C. Pseudomonas aeruginosa
 - D. Staphylococci.
 - E. Enterococcus.
5. What are the factors that contribute to the occurrence of acute pyelonephritis?
 - A. Disturbance of urine passage and outflow of venous blood from the kidney.**
 - B. Polyuria.
 - C. Hyperthermia.
 - D. Impaired arterial blood flow to the kidney.
 - E. All of the above.
6. What is primarily affected by hematogenous acute pyelonephritis?

- A. The venous system of the kidney and interstitial tissue.**
 - B. Pelvicalyceal system.
 - C. Kidney glomeruli.
 - D. Kidney tubules.
 - E. All of the above.
7. What are the changes in the kidney with purulent acute pyelonephritis?
- A. All of the above.**
 - B. Disorder of vascular permeability.
 - C. Leukocyte infiltration of the interstitial tissue.
 - D. Microbial accumulation in the interstitial tissue.
 - E. Destruction of renal tissue (tubules and glomeruli)
8. The following time course of symptoms is noted in acute pyelonephritis with symptoms of urinary stasis:
- 1) chills
 - 2) pain in the kidney area
 - 3) high temperature
 - 4) excessive sweat
 - 5) weakness
- A. 2,1,3,4 and 5 are correct.**
 - B. 1,2,3,4 and 5 are correct.
 - C. 1,3,4,5 and 2 are correct.
 - D. 3,2,1,5 and 4 are correct.
 - E. 5,1,3,2 and 4 are correct.
9. The minimum number of leukocytes in the urine sediment, indicating the presence of leukocyturia is composed of:
- A. More than 10 white blood in FOV.**
 - B. 2-5 leukocytes in FOV.
 - C. More than 6 white blood cells in FOV.
 - D. More than 20 white blood cells in FOV.
 - E. Leukocytes cover all fields of view.
10. What amount of leukocytes in 1 ml of urine indicates the presence of "leukocyturia":
- A. More than 4000.**
 - B. Less than 1000.
 - C. From 1000 to 2000.
 - D. From 2000 to 4000.
 - E. More than 5000.
11. Which test can the most quickly reveal bacteremia:
- A. Griess test.**
 - B. TTC-test.

- C. Bacterioscopy.
 D. Braude test.
 E. Urine culture.
12. The most effective antibacterial drugs for acid reaction of urine are:
A. Penicillin + 5-NOK.
 B. Erythromycin.
 C. Lincomycin.
 D. Streptomycin.
 E. All of the above.
13. What are the most effective antibacterial drugs for alkaline urine:
A. Kanamycin and gentamycin.
 B. Tetracycline.
 C. Nitrofurans.
 D. Sulfanilamides.
 E. All of the above.
14. The same antibiotic for acute pyelonephritis is not continuously used more:
A. 5-7 days.
 B. 3 days.
 C. 8-10 days.
 D. 10-14 days.
 E. More than 14 days.
15. How much liquid should a patient drink with acute pyelonephritis?
A. Increased amount.
 B. Sharply limit.
 C. Normal amount.
 D. Large amount.
 E. It does not matter.
16. A 47-year-old female patient was admitted to the urology department due to suspicion of the left kidney calculus. She has been sick for 6 days; body temperature is 37.8/38.5 °C. Determine the tests in the following sequence to the patient:
 1) isotope renography
 2) urine and blood tests
 3) ultrasound
 4) dynamic nephroscintigraphy
 5) renal venography
 6) excretory urography
 7) retrograde pyelography
A. 2,3,6,4 are true.

- B. 1,2,3,4,5,6 and 7 are true.
- C. 2,4,1,3,7,5 and 6 are true.
- D. 2,1,5,4,6,7 and 3 are true.
- E. 7,4,3 are true.

Tests of the 2nd level:

1. A 49-year-old woman complains of back pain and fever. She has been sick for 4 days. The patient worked in a cold room. Objectively: the body temperature is 39.4°C. In the blood test: erythrocytes are $4.2 \times 10^{12} / l$, Hb is 148 g / l, leukocytes are $14 \times 10^9 / l$, stab neutrophils are 19%, ESR is 12 mm / h. In the urine test: cloudy, specific gravity is 1019, protein is 0.456 g / l, leukocytes are on the entire field of view, red blood cells are 0-4 in the field of view. Which instrumental test is used to begin the examination:
 - A. Ultrasound examination of the kidneys.**
 - B. Computed tomography of the kidneys.**
 - C. Fibrogastroscopy
 - D. Plain urography.
 - E. Prednisolone test.

2. The most common causative agent of pyelonephritis is:
 - A. Colibacillus.**
 - B. Enterococcus.**
 - C. Necturus.
 - D. Staphylococci.
 - E. Viruses.

3. A 52-year-old patient has a carbuncle (2.0 / 4.0cm) of the lower pole of the right kidney. The patient has been sick for 4 days. He was treated with herbs. Name the urologist's actions:
 - A. Revision of the right kidney. Nephrostomy.**
 - B. Detoxification therapy. Antibiotics of broad-spectrum.**
 - C. Inspection.
 - D. Renal catheterization.
 - E. Antibacterial therapy.

4. The complications of acute pyelonephritis are:
 - A. Necrosis of the renal papillae.**
 - B. Paranepritis.**
 - C. Sepsis.**
 - D. Renal failure.
 - E. Polycystosis.

5. What are the ways of penetration of kidney infection:

- A. Lymphogenous.**
- B. Hematogenous.**
- C. Urogenic.**
- D. Airborne.**
- E. Fecal-oral.**

Tests of the 3rd level:

1. An 18-year-old patient has the pains in the lumbar region, radiating to the groin after hypothermia, cloudy urine, the body temperature is to 38°C. The blood leukocytosis is $9.8 \times 10^9 / l$. In the urine: protein has submicrograms, red blood cells are 2-3 in the field of view, leukocytes are by $\frac{1}{4}$ field of view. The most likely diagnosis:
 - A. Acute pyelonephritis.**
 - B. Acute glomerulonephritis.**
 - C. Acute cystitis.**
 - D. Acute prostatitis.**
 - E. Renal tuberculosis.**

2. A 22-year-old woman notes pain in the lumbar region after hypothermia, the body temperature is to 38.8 °C. In the blood, leukocytosis is $13.2 \times 10^9 / l$, left shift is stab neutrophils of 12%. In urine: protein is 0.33 g / l, leukocytes are 30-40 in the field of view that cover the entire field of view. Choose the most optimal empirical antibiotic therapy.
 - A. Semisynthetic penicillins**
 - B. Simple penicillins**
 - C. Tetracyclines**
 - D. Anti-TB drugs.**
 - E. Macrolides**

3. A 29-year-old woman complains of lower back pain and fever. She has been sick for 2 days after hypothermia. Objectively: body temperature is 38.1°C, In blood: erythrocytes are $3.8 \times 10^{12} / l$, Hb is 128 g / l, leukocytes are $12 \times 10^9 / l$, stab neutrophils are 12%, ESR is 5 mm / h. In urine: cloudy, specific weight is 1016, protein is 0.133 g / l, leukocytes are $\frac{1}{2}$ field of view and red blood cells are 16-18 in the field of view. Which instrumental test is used to begin the exam:
 - A. Ultrasound examination of the kidneys.**
 - B. Radiography of the abdominal cavity.**
 - C. Computed tomography of the kidneys.**
 - D. Plain urography.**
 - E. Rehberg Test.**

4. A 43-year-old man complains of pain in the lumbar region on the right in the form of renal colic with radiating to the groin and the right testicle, the brown color of urine, the body temperature is to 37.9°C. The patient has been sick a day ago. Costovertebral angle tenderness is positive to the right. In the blood: leuk. are $12,6 \times 10^9 / l$, stab neutrophils are 14%, ESR is 4 mm / hour. In the urine: protein is 0.33 g / l, changed er. are 30-40 in FOV, leuk. are 15-20 p / h. The most likely diagnosis:
- Acute calculous pyelonephritis.**
 - Acute glomerulonephritis.
 - Acute prostatitis.
 - Chronic pyelonephritis.
 - Acute epididymitis.
5. A 22-year-old woman complains of increased body temperature to 37.4 ° C after hypothermia and the appearance of back pain. The change in the transparency of urine is periodically noted. Objectively: HR is 90 / min., AP is 115/90 MmHg. Costovertebral angle tenderness is weakly positive on both sides. In the blood: leuk. are $9,6 \times 10^9 / l$, thromb. are $115 \times 10^9 / l$, ESR is 31 mm / hour. In the urine: protein is 0.33 g / l, changed er. are 4-6 in FOV, leuk. are 1/2 in FOV. What is the most likely diagnosis ?
- Acute pyelonephritis.**
 - Hemorrhagic vasculitis.
 - Periarteritis nodosa.
 - Systemic lupus erythematosus.
 - Thrombocytopenic purpura.
6. A 46-year-old man complains of headaches, malaise, decreased urine output and cloudy urine. The above symptoms appeared after occurrence of carbuncle of shoulder. AP is 150/110 MmHg. In the urine test: protein is 0.33 g / l, erythrocytes are 0-1 in FOV, and leukocytes are 28-40 in the preparation. Hypoproteinemia, total blood protein is 56 g / l. What is the most likely diagnosis:
- Acute pyelonephritis.**
 - Acute glomerulonephritis.
 - Nephrotic syndrome.
 - Renal tuberculosis.
 - Malignant glomerulonephritis.
7. A pregnant woman (30 weeks) complains of a headache, decreased amount of urine per day, increased temperature to 38 °C. AP is to 120/65 MmHg. Daily proteinuria is 0.5 g / l. Blood creatinine is 90 $\mu\text{mol} / l$. Hematocrit is 42%. In the urine test leukocytes are in the entire field of vision. The right-sided hydronephrosis of 1 degree is observed by the ultrasound. What is the most likely diagnosis:
- Gestational pyelonephritis. The right-sided hydronephrosis of 1 degree.**
 - Nephropathy of pregnant woman.
 - Acute glomerulonephritis.

- D. Tubulo-interstitial nephritis.
 - E. Hypertensive heart disease. The right-sided hydronephrosis of 1 degree.
8. A 60-year-old man was hospitalized with attacks of lower back pain and fever up to 39°C, and frequent desire to urinate. He felt acutely ill 5 days ago. The painkillers and antispasmodics were received. According to the ultrasound the left kidney is enlarged to 122x63x39 mm, the parenchyma thickness in the middle segment is 33 mm, a decrease and inhomogeneous echogenicity, an extension of the pelvicalyceal system and ureter. Determine your diagnosis.
- A. **Stone of the left ureter. Apostemetic pyelonephritis.**
 - B. Acute calculous pyelonephritis.
 - C. Acute suppurative prostatitis.
 - D. Acute non obstructive pyelonephritis.
 - E. Stone of the left ureter. Acute cystitis.
9. A 36-year-old patient was hospitalized with a diagnosis of apostemetic pyelonephritis. The fever was to 39°C, chills, malaise and general weakness were noted. He felt acutely ill 2 days ago. From the anamnesis: gangrenous appendicitis was operated in the patient 3 weeks ago. According to the ultrasound the left kidney is increased to 112x56x39 mm, the thickness of the parenchyma in the middle segment is up to 28 mm, a decrease and non-uniform echogenicity, the renal pelvis system is not expanded. What changes can you detect in urine test?
- A. **Leukocyturia, bacteriuria.**
 - B. No heavy proteinuria, leukocyturia.
 - C. Cilindruria, bacteriuria.
 - D. Erythrocyturia, proteinuria.
 - E. Glycosuria, bacteriuria.
10. A 69-year-old patient was hospitalized with complaints of back pain, fever up to 39.8 °C, fever, nausea, vomiting, dizziness, deterioration of consciousness. He has been feeling acutely sick about a day. The patient has been ill with diabetes for 12 years. According to the ultrasound the left kidney is enlarged to 122x69x54 mm, the parenchyma thickness is up to 38 mm, a decrease in heterogeneous echogenicity, an extension of the renal pelvis and ureter system, gas accumulation in the kidney parenchyma and in the kidney parenchyma. What is your diagnosis?
- A. **Emphysematous pyelonephritis.**
 - B. **Acute pyelonephritis.**
 - C. Apostemetic nephritis.
 - D. Acute pyelonephritis.
 - E. Diabetic nephropathy.
11. A 33-year-old the patient was hospitalized with renal colic. A stone of the lower third of the right ureter and right ureterohydronephrosis were revealed according to CT data. What are the characteristic laboratory signs of acute calculous pyelonephritis:

- A. Erythrocyturia, leukocyturia.**
 - B.** Severe proteinuria.
 - C.** Cilindruria, leukocyturia.
 - D.** Bacteriuria, proteinuria.
 - E.** Glycosuria, bacteriuria.
12. A 22-year-old patient notes pain in the lumbar region and increased body temperature to 38.8 °C after hypothermia. In the blood test, leukocytosis is $13.2 \times 10^9 / l$, the left shift is 12% stab neutrophils. In urine test: protein is 0.33 g / l, leukocytes are 30-40 in the field of view, and in some places they cover the entire field of view. Choose the most optimal empirical antibiotic therapy.
- A. Semisynthetic penicillins.**
 - B.** Simple penicillins.
 - C.** Tetracyclines.
 - D.** Tuberculosis mediators.
 - E.** Macrolides.
13. A pregnant woman (19 weeks) complains of pain in the lumbar region on the right, frequent desire to urinate and increased temperature to 38.2°C. She has been sick for 3 days. AP is 130/70 MmHg. Blood creatinine is 100 $\mu\text{mol} / l$. In the blood test: leuk. are $14.9 \times 10^9 / l$, stab neutrophils are 22%, ESR is 29 mm / hour. In the urine test: protein is 0.9 g / l, er. are 10-12 in FOV, leuk. are at 1/2 p / s. The most likely diagnosis:
- A. Gestational pyelonephritis.**
 - B.** Acute glomerulonephritis.
 - C.** Nephropathy of pregnancy.
 - D.** Acute cystitis.
 - E.** Nephrotic syndrome.
14. A 23-year-old man complains of pain in the lower back with radiation to the scrotum, frequent desire to urinate, increased body temperature to 37.7 °C. He felt acutely sick 2 days ago. Costovertebral angle tenderness is positive to the left. In the blood test: leuk. are $10.6 \times 10^9 / l$, stab neutrophils are 10%, ESR is 11 mm / hour. In the urine test: protein is 0.93 g / l, changed er. on all f / v, leuk. are 15-20 p / h. The most likely diagnosis:
- A. Acute calculous pyelonephritis.**
 - B.** Acute glomerulonephritis.
 - C.** Acute paranephritis.
 - D.** Chronic pyelonephritis.
 - E.** Acute epididymitis.
15. A 36-year-old patient was hospitalized with complaints of pain in the lumbar region on the right and increased body temperature to 39°C, fever. He felt acutely, sick 3 days ago. He has been treated for paratonzillarnogo abscess for 2 weeks. Costovertebral angle tenderness is weakly positive on the right. In the blood test: leuk. are $16.0 \times 10^9 / l$, stab neutrophils are 17%, ESR is 56 mm / hour. In the urine

test: the specific gravity is 1020, protein is 0.93 g / l, changed er. are 1-2 in FOV, leuk. are 8-12 in FOV. According to CT data: the hypodense formation (22 units H) with a diameter of 28 mm with the surrounding compaction of the parenchyma is observed in the middle segment of the right kidney. The most likely diagnosis:

- A. Kidney abscess.**
- B. Acute calculous pyelonephritis.**
- C. Acute paranephritis.**
- D. Chronic pyelonephritis.**
- E. Renal tuberculosis.**

An 86-year-old patient was hospitalized with complaints of pain in the lumbar region on the right and increased temperature up to 39°C and fever. He had been treated for the skin furunculosis of the right lower extremity for 3 weeks. Costovertebral angle tenderness is weakly positive on the right. In the blood test: leuk. are $19.1 \times 10^9 / l$, stab neutrophils are 17%, ESR is 56 mm / hour. In the urine test: the specific gravity is 1020, protein is 0.93 g / l, changed er. are 1-2 in FOV, leuk. - 18-22 in FOV. Staphylococcus aureus and 105 CFU / ml are observed in the urine test. According to CT data: the hypodense formations (22 units N) with a diameter of 18 mm with the surrounding compaction of the parenchyma are noted in the middle segment of the right kidney. Diagnosis: Carbuncle of the right kidney. Prescribe the treatment:

- F. Conservative antibiotic therapy.**
- G. Nephrostomy, renal decapsulation.**
- H. Decapsulation of the kidney, excision of the carbuncle.**
- I. Percutaneous nephrostomy, antibacterial therapy.**
- J. Nephrostomy, excision of the carbuncle.**

16. A 51-year-old patient was hospitalized with complaints of pain in the lumbar region on the right, increased body temperature to 38.2°C, fever. He has been sick about one week. He had been treated for paratonsillar abscess 2 weeks ago. Costovertebral angle tenderness is weakly positive on the right. According to CT data with contrasting bolus enhancement: a hypodense formation (20 units H) with a diameter of 48 mm does not accumulate a contrast agent and with a hyperechoic pyogenic capsule of uneven thickness in the middle segment of the right kidney. Diagnosis: abscess of the right kidney. What is proper treatment:

- A. Percutaneous abscess drainage.**
- B. Nephrostomy, renal decapsulation.**
- C. Nephrostomy, removal of an abscess.**
- D. Decapsulation of the kidney, drainage of the abscess.**
- E. Conservative antibiotic therapy.**

17. A 41-year-old T. patient was hospitalized with complaints of pain in the lumbar region on the right in the form of renal colic and body temperature to 39 ° C and fever. According to CT data with bolus contrasting: an extension of the pelvicalyceal system and 1/3 upper part of the ureter is observed in the right kidney. A calculus of 12x8x6 mm with density of 936 units is visualized at the level of the lower pole of the kidney. 3 hypodential formations with a diameter of 12 mm, 16 mm and 18 mm are noted in the middle and lower segments. Name the complication of urolithiasis:
- A. Multiple carbuncles of the right kidney.**
 - B. Acute calculous pyelonephritis.
 - C. Acute paranephritis.
 - D. Chronic pyelonephritis.
 - E. Suppurative nephritis.
18. A 59-year-old man was hospitalized with complaints of pain in the lumbar region on the right, increased temperature up to 38.9°C, and fever. In the blood test: leuk. are 16.9x10x9 / l, stab neutrophils are 22%, ESR is 26 mm / hour. According to CT data with bolus contrasting: an extension of the pelvicalyceal system and 1/3 upper part of the ureter is observed in the right kidney. A calculus of 15x8x6 mm with density of 1232 units is visualized at the level of the lower pole of the kidney. Diagnosis: KSD, ureterolith of the right ureter, acute purulent pyelonephritis. What is the proper treatment:
- A. Percutaneous nephrostomy.**
 - B. Distance ureterolithotripsy.
 - C. Contact ureterolithotripsy.
 - D. Ureterolithotomy.
 - E. Conservative antibacterial therapy.
19. A 66-year-old A. patient was hospitalized with attacks of pain in the lumbar region on the left, fever up to 39 ° C and frequent urination. He has been feeling acutely sick 5 days ago. The painkillers, antispasmodics were received. According to the ultrasound, the left kidney is increased to 122x63x39 mm, the thickness of the parenchyma in the middle segment is 33 mm, the decrease in echogenicity, the expansion of the pelvicalyceal system and the /3 of ureter. Characteristic laboratory signs of acute calculous pyelonephritis:
- A. Erythrocyturia.**
 - B. Not expressed proteinuria.
 - C. Cylindruria.
 - D. Bacteriuria.
 - E. Glycosuria.
20. A 61-year-old patient was hospitalized with attacks of pain in the lumbar region on the left, fever up to 39 ° C and frequent urination. He has been feeling acutely sick for 5 days ago. The painkillers, antispasmodics were received. According to the ultrasound the left kidney is increased to 122x63x39 mm, the

thickness of the parenchyma in the middle segment is 33 mm, the decrease in echogenicity, the expansion of the pelvicalyceal system and in 1/3 the ureter. Characteristic laboratory signs of acute calculous pyelonephritis:

- A. Erythrocyturia, leukocyturia.**
 - B. Not expressed proteinuria, bacteriuria.
 - C. Cilindruria, leukocyturia.
 - D. Bacteriuria, leukocyturia.
 - E. Glycosuria, erythrocyturia.
21. A 69-year-old patient was hospitalized with complaints of back pain, fever up to 39.8°C, nausea, vomiting, and dizziness of consciousness. He has been feeling acutely sick about one day. He has been sick with diabetes for 12 years. According to the ultrasound the left kidney is enlarged to 122x69x54 mm, the parenchyma thickness is up to 38 mm, a decrease in heterogeneous echogenicity, an extension of the pelvicalyceal and ureter system, gas accumulation in the kidney parenchyma and in the kidney parenchyma. What is your diagnosis?
- A. Emphysematous pyelonephritis.**
 - B. Acute pyelonephritis.**
 - C. Apostematic nephritis.
 - D. Acute paranephritis.
 - E. Diabetic nephropathy.
22. A 65-year-old patient was hospitalized with complaints of back pain, fever up to 39.8°C, nausea, vomiting, and dizziness of consciousness. The patient has been sick about 18 hours. He has been received the insulin for diabetes for more than 20 years. According to ultrasound the left kidney is enlarged to 122x69x54 mm, the thickness of the parenchyma is up to 38 mm, a decrease, and non-uniform echogenicity, expansion of the pelvicalyceal and ureter system. The gas accumulation in the parenchyma of the kidney and kidney tissue are observed by CT. Diagnosis: Emphysematous pyelonephritis. What is proper treatment:
- A. Nephrectomy on the left.**
 - B. Conservative antibiotic therapy.**
 - C. Percutaneous nephrostomy.
 - D. Nephrostomy, renal decapsulation.
 - E. Catheterization of the left kidney.
23. A 48-year-old patient was hospitalized with complaints of pain in the lumbar region on the right, an increased temperature to 38 ° C and fatigue. The patient has been sick about one week. He was operated for paratonsillar abscess 2 weeks ago. Costovertebral angle tenderness is weakly positive on the right. According to CT data with contrasting bolus amplification: hypodense formation (20 units H) with a diameter of 18 mm does not accumulate a contrast agent in the middle segment of the right kidney with an unequal thickness of the hyperechoic pyogenic capsule. Diagnosed: abscess of the right kidney. What is the proper treatment?
- A. Conservative antibiotic therapy.**
 - B. Nephrostomy, renal decapsulation.**
 - C. Nephrostomy, abscess removal.

- D. Decapsulation of the kidney, drainage of the abscess.
- E. Percutaneous abscess drainage.

24. A 69-year-old patient was hospitalized with complaints of back pain, fever up to 39.8 °C, nausea, vomiting, and dizziness. He has been sick with diabetes for 12 years. In the urinetest: Proteus is secreted 10⁵ CFU / ml. According to ultrasound the left kidney is enlarged to 122x69x54 mm, the thickness of the parenchyma is up to 28 mm, with a reduced and heterogeneous echogenicity. Diagnosis: Apostematic nephritis. Which of the 2 symptoms are indicated the presence of a septic condition:

- A. **Blood leukocytosis more than 12x10⁹ / l, heart rate more than 90 / min.**
- B. BR more than 20 / min., Leukocyturia.
- C. Bacteriuria, leukocyturia.
- D. Left deviation, erythrocyturia.
- E. Body temperature above 37.8 ° C, bacteremia.
- F. Weakness.

- A 12-year-old girl complains of pain in the lower back, which increases with urination. Costovertebral angle tenderness is weakly positive on the right. Her temperature was 38.8°C after hypothermia. In the blood test: leuk. are 13.9x10⁹ / l, stab neutrophils are 17%, ESR is 16 mm / hour. In the urine test: the specific gravity is 1020, protein is 0.93 g / l, changed er. are 1-2 in FOV, leuk. are on all FOV. Enterococcus fecalis, 10⁶ CFU / ml was detected in the urine. The expansion of the pelvicalyceal system and ureter of the right kidney with the filled bladder is revealed by the ultrasound examination. What pathology can cause an infectious inflammatory process in the kidney?

- A. **Vesicoureteral-pelvic reflux.**
- B. Hypothermia.
- C. Undertreated kidney infection in the past.
- D. Cystitis.
- E. Decrease in immunity.

25. A 35-year-old patient (pregnancy 24 weeks) was hospitalized with complaints of pain in the lumbar region on the right, increased body temperature to 38.8 °C, fever. She has been sick about one week. According to the ultrasound the right kidney is 112x59x39 mm, the thickness of the parenchyma is up to 22 mm, heterogeneous echogenicity and the extension of the pelvicalyceal system and the ureter. The leukocytes are 1/2 field of view in the urine. Diagnosis: Gestational pyelonephritis. What is proper treatment:

- A. Endopyelovesical stenting on the right.**
 - B. Conservative antibiotic therapy.
 - C. Percutaneous nephrostomy.
 - D. Nephrostomy, renal decapsulation.
 - E. Catheterization of the left kidney.
26. A 67-year-old patient was urgently admitted with complaints of pain in the lower back on the right, increased temperature to 39°C, fever. He has been suffering from urolithiasis for 10 years (Coral stone of the right kidney). In the cystoscopy: the pus is detected from the right ureteral orifice. Objectively: the right kidney is enlarged and painful. Costovertebral angle tenderness is positive on the right. What is the treatment strategy?
- A. Percutaneous nephrostomy.**
 - B. Conservative antibiotic therapy.
 - C. Nephrectomy.
 - D. Nephrostomy, renal decapsulation.
 - E. Catheterization of the kidney.
27. A 33-year-old patient applied to the doctor with complaints of acute back pain on the left, rapid and sharp urination. The temperature is 37.8°C. She has been sick 2 days. Pyuria is in the urine. Costovertebral angle tenderness is positive on the left. What is preliminary diagnosis?
- A. Acute pyelonephritis.**
 - B. Acute cystitis.
 - C. Acute paranephritis.
 - D. Acute urethritis.
 - E. Acute adnexitis.
28. A 38-year-old patient has acute pain in the lumbar region on the right, rapid and with sharp urination, and the body temperature is 37.5°C. CVA Tenderness is positive to the right. In the urine test: the specific gravity is 1018, protein is 0.66 g / l, changed er. are 4-6 in FOV, leuk. are on all FOV. What additional method is necessary to begin the examination from?
- A. Ultrasound.**
 - B. CT.
 - C. Cystoscopy.
 - D. KUB X-ray.
 - E. Excretory urography.
29. A 47-year-old patient complains of general weakness. The temperature is up to 39°C. The aching pain in the lower back on the right is noted. The attack of renal colic appeared 2 hours ago. What is your diagnosis?
- A. Stone of the right ureter, acute obstructive purulent pyelonephritis.**

- B. Condition after an attack of right-sided renal colic.
 - C. Pyelitis.
 - D. Acute hematogenous pyelonephritis
 - E. Chronic pyelonephritis.
30. A 64-year-old patient has been sick for 3 days. The carbuncle of the lower pole of the left kidney 2×3 cm and the disturbance of urine passage from the left kidney are diagnosed. What is your tactics:
- A. Urgent surgery (decapsulation of the kidney, and dissection / excision of the carbuncle, nephrostomy, drainage of the p/o wound), massive antibacterial and detoxification therapy in the p/o period.**
 - B. Planned surgery (kidney revision, and dissection / excision of the carbuncle, drainage of wound p/o, antibacterial therapy).
 - C. Nephrostomy.
 - D. Percutaneous carbuncle puncture, antibiotic therapy.
 - E. Nephrectomy.
31. A 32-year-old patient brought to the urological clinic with the diagnosis of urolithiasis. The stone of the lower third of the right ureter is noted. Acute purulent pyelonephritis. What is your tactics?
- A. Urgent surgery - nephrostomy and intensive antibacterial and detoxification therapy.**
 - B. Routine examination to clarify renal function.
 - C. Catheterization of the ureter.
 - D. Ureterolithotomy.
 - E. Intensive antibiotic therapy.
32. A 24-year-old patient (26 weeks of pregnancy) has complaints of back pain to the right. The temperature rises up to 38.5 ° C. She has hydronephrosis of the right side on the ultrasound. What aid should be given to a pregnant woman:
- A. Drainage of the right kidney and antibiotic prescriptions.**
 - B. Right-sided nephrectomy.
 - C. Abortion.
 - D. Ureteral catheterization.
 - E. Permanent position of the patient on the opposite side, antibacterial therapy.

Topic: Chronic pyelonephritis

Tests of the 1st level:

1. The characteristic symptoms of acute paracystitis are all of the above except:
 - A. Pain in the lumbar region.**
 - B. High temperature.
 - C. Swelling over the pubis.
 - D. Dysuric phenomena.
 - E. Radiating pain to the rectum.

2. Which pathogen probably leads to inflammation of the kidneys?
 - A. E. coli.**
 - B. Staphylococcus aureus.
 - C. Streptococcus viridans.
 - D. Pyogenic streptococcus.
 - E. Proteus.

3. The outcomes of chronic pyelonephritis:
 - A. Nephrosclerosis.**
 - B. Chronic renal failure.
 - C. Pionephrosis.
 - D. All of the above.
 - E. KSD.

4. Chronic pyelonephritis most often occurs:
 - A. In the elderly age and senium.**
 - B. In the newborns.
 - C. In the early childhood.
 - D. In the juvenile age.
 - E. In the middle age.

5. The incidence of chronic pyelonephritis due to gender has the following pattern:
 - A. Women get sick 4 times more often.**
 - B. Men get sick 4 times more often.
 - C. Men get sick 2 times more often.
 - D. Men get sick equally often.
 - E. Women get sick 3 times more often.

6. The most common cause of chronic pyelonephritis:
 - A. E. coli**

- B. Staphylococcus.
 - C. Proteus.
 - D. Enterococcus.
 - E. Mycoplasma.
7. What is the most characteristic of the kidney damage in chronic pyelonephritis:
- A. Focal, polymorphic kidney damage.**
 - B. Diffuse kidney damage.
 - C. Focal monomorphic kidney damage.
 - D. Kidney glomerular damage.
 - E. The damage of the kidney tubules.
8. Latent leukocyturia is detected by:
- A. Prednisone Test.**
 - B. Urine test.
 - C. Addis-Kakovsky test.
 - D. Nechiporenko's test.
 - E. All of the above.
9. What is primarily affected by chronic pyelonephritis:
- A. Kidney tubules.**
 - B. Vascular loops of glomerular kidney.
 - C. Bowman's capsule.
 - D. Descending limb of Henle's loop.
 - E. Ascending limb of Henle's loop.
10. What disorders are most typical for chronic pyelonephritis:
- A. Dysfunction of the tubules.**
 - B. Dysfunction of glomeruli.
 - C. Dysfunction of the calyces.
 - D. Impaired renal filtration function.
 - E. Impaired renal pelvis function.
11. The most characteristic sign of chronic pyelonephritis is:
- A. Different degrees of the right and left kidneys dysfunction.**
 - B. Increased size of the affected kidney.
 - C. Decreased size of the affected kidney.
 - D. The same degree of the right and left kidneys dysfunction.
12. The main distinguishing features of active leukocytes are::
- A. The ability to respond to changes in the osmotic concentration of the surrounding fluid.**

- B. Red staining with supravital staining.
 - C. Blue staining with supravital staining.
 - D. Special core shape.
 - E. BM of protoplasm granules.
13. Hodson's symptom for chronic pyelonephritis is based on:
- A. Focal and polymorphic inflammatory changes in the kidney.**
 - B. Changing of the tonus of calyces.
 - C. Changing of the tonus of renal pelvis.
 - D. Changing of the size of the kidney.
 - E. Impaired kidney function.
14. Renal-cortical index, which indicates the presence of chronic pyelonephritis is:
- A. Less than 60%**
 - B. Less than 20%
 - C. Less than 40%
 - D. More than 60%
 - E. More than 80%

Tests of the 2nd level:

1. Parasytosis diagnosis is based on research, except for:
 - A. Uroflowmetry.**
 - B. Radioisotope renography.**
 - C. Cystography.
 - D. Cystoscopy.
 - E. Ultrasound.

2. There are the following forms of non-infectious urethritis, except for:
 - A. Autoimmune.**
 - B. Allergic.**
 - C. Calculous.
 - D. Trichomonas.
 - E. Chlamydial.

3. Urethritis venerea is:
 - a. Gonorrhoeal.**
 - b. Trichomonas.**
 - c. Herpetic.
 - d. Candida.
 - e. Bacterial.

4. The predisposing factors for developing balanoposthitis are:
 - a. The narrowing of the foreskin.**

b. Diabetes Mellitus.

- c. Poor hygiene.
- d. Cavernitis.
- e. Peyronie's disease.

5. The treatment of paraphimosis is composed of:

- a. The reduction of the foreskin.**
- b. The incision of the entrapment ring.**
- c. Cold pack.
- d. Antibiotic.
- e. Antispasmodics.

Tests of the 3rd level:

1. A 49-year-old patient complains of fatigue, headache, and general weakness. She suffered from acute pyelonephritis 3 years ago. Objectively: the pulse is 82 beats. / min., AP is 150/90 MmHg and swelling on the legs. In the blood test: creatinine is 300 $\mu\text{mol} / \text{l}$, urea is 16.0 mmol / l. glomerular filtration is 46 ml / min. Suggest the syndromic diagnosis.
 - A. Chronic pyelonephritis. III degree of CKD.**
 - B. Hypertensive disease.
 - C. Chronic pyelonephritis. Secondary arterial hypertension.
 - D. Chronic pyelonephritis. II degree of CKD.
 - E. Chronic pyelonephritis. IV degree of CKD.
3. A 42-year-old patient was admitted with complaints of aching pain in the lower back, more to the right, the temperature periodically rised to subfebrile numbers and headache. She had the attack of pain in the right half of the waist with chills and increased temperature during pregnancy 10 years ago; she had increased blood pressure to 200/110 MmHg 5 years ago. In the urine test: protein is 0.99 g / l, leukocytes are 10-15, erythrocytes are 2-4, hyaline cylinders are 1-2 in the field of view. Serum creatinine is 102 $\mu\text{mol} / \text{L}$. What is the most likely diagnosis?
 - A. Chronic pyelonephritis.**
 - B.Chronic glomerulonephritis.
 - C. Renal tuberculosis.
 - D. Renal amyloidosis.
 - E.Hypertensive disease.
4. A 42-year-old woman came to the doctor complaining of a headache, periodically nagging back pain. It is known that the urine test was changed during pregnancy 12 years ago. Objectively: The boundaries of the heart are within the normal range. Transients are dull, P. is 72 beats. AP 160/100 MmHg. The signs of left ventricular hypertrophy are observed on ECG. The er. are 1500, leuk. are 6000 by Nechiporenko's test. What is the most likely diagnosis:

- A. Chronic pyelonephritis. Secondary arterial hypertension.**
 - B. Chronic glomerulonephritis, hypertension.
 - C. Renovascular hypertension
 - D. I stage of hypertension.
 - E. II stage of hypertension, Vascular lesions of the kidneys.
5. A 45-year-old patient complains of the temperature up to 37.8 ° C, cloudy urine, headache, weakness, loss of appetite, thirst, swelling of the face and legs. He receives 42-54 units of insulin per day about diabetes from 18 years old. His condition is serious. The face is gray, puffy, swelling in the legs. AP is 210/110 MmHg, pulse is 110 per minute, rhythmic. The heart and lungs are without features. The liver is located at the edge of the costal arch. Glycemic profile is 9-12-10 mmol / l. The urine test: urine specific gravity is 1022, sugar is 3%, protein is 1.32 g / l, leuk. are densely on the entire field of view. Daily diuresis is 350 ml. What are the most common complications of diabetes in the patient?
- A. Diabetic nephropathy. Exacerbation of chronic pyelonephritis.**
 - B. Renal Amyloidosis.
 - C. Chronic pyelonephritis.
 - D. Nephrotic syndrome.
 - E. Glomerulonephritis.
6. A 22-year-old patient suffered from acute pyelonephritis half-year ago. The pain appeared in the lower back after hypothermia and cloudy urine, increased temperature to 38.8°C appeared too. In the blood test: leukocytosis is $13.2 \times 10^9 / l$, the shift of the leukocyte formula to the left. In urine test: protein is 0.33 g / l, leukocytes are 30-40 in FOV or they are on the entire field of view. Choose the most optimal empirical antibiotic therapy.
- A. Semisynthetic penicillins.**
 - B. Simple penicillins.
 - C. Tetracyclines.
 - D. Antituberculous antibiotics.
 - E. Macrolides.
7. A 32-year-old patient had almost constant subfebrile condition, dull pain in the lumbar region on the left, and increased diuresis. Nocturia was noted during examination. The patient has been suffering from chronic adnexitis. On examination: blood pressure is 140/110 MmHg, diuresis is 1900 ml. The blood test: Hb is 105 g / l, erythrocytes are $3.6 \times 10^9 / l$, ESR is 18 mm / hour. The urine analysis: specific gravity is 1010, protein is 0.066 g / l, leukocytes are 20-25 in the p / v, and erythrocytes are 1-2 in the p / v. What is the most likely diagnosis:
- A. Chronic pyelonephritis.**

- B. Chronic glomerulonephritis.**
 - C. Acute glomerulonephritis.**
 - D. Renal amyloidosis.**
 - E. Chronic cystitis.**
8. A 40-year-old patient was hospitalized with complaints of dull aching pain in the lower back, but more to the right, increased temperature to subfebrile. She had the attack of pain in the right half of the lumbus and temperature rise up to 39°C during pregnancy 10 years ago. The patient was treated with antibiotics. She felt satisfactory in recent years. The increased blood pressure is noted about 5 years. In the urine test: protein is 0.66 g / l, leukocytes are 10-15 in FOV, erythrocytes are 2-3 in FOV. Make diagnosis.
- A. Chronic pyelonephritis.**
 - B. Hypertensive disease.**
 - C. Chronic glomerulonephritis.**
 - D. Renal urolithiasis.**
 - E. Renal tuberculosis.**
9. A 40-year-old patient was admitted to the nephrology department with complaints of back pain on both sides. He was treated on an outpatient department for 2 years. The urine is constantly changed. In the urine test: the urine specific gravity is 1016, protein is 0.56 g / day, erythrocytes are 0-2 in the field of view, leukocytes are 1/4 in the field of view. What is the most likely diagnosis?
- A. Chronic pyelonephritis.**
 - B. Chronic glomerulonephritis, nephrotic syndrome.**
 - C. Acute glomerulonephritis.**
 - D. Tubulo-interstitial nephritis.**
 - E. Chronic pyelonephritis.**
10. An 84-year-old patient complains of frequent painful urination, chills, fever up to 38 ° C. In urine analysis; protein is 0.33 g / l, leukocytes are up to 50-60 in in field of vision, and the red blood cells are 5-8 in the field of vision, gram-negative rod-shaped bacteria. What antibacterial drug is the best in this case?
- A. Ciprofloxacin**
 - B. Erythromycin**
 - C. Tetracycline**
 - D. Gentamycin**
11. A 56-year-old man complains of aching pain in the lumbar region, it aggravates after long stay in a static position, exercise or excessive fatigue. The pain is noted in the kidney about 10 years. Objectively: pallor of the skin, t is 37.2°C, AP is 180/100 MmHg. CVA tenderness is weakly positive on both sides. The blood test: er. are $3.5 \times 10^{12} / l$, leukocytes are $6.5 \times 10^9 / l$, ESR is 22 mm / hour. The urine test: the urine specific gravity is 1,010, leukocytes are 12-15 in the field of vision, and erythrocytes are 2-3 in the field of vision. The microbial count of

urine is 100.000 per 1 ml. What is the most likely diagnosis?

- A. Chronic pyelonephritis.**
 - B. Urinary stone disease.
 - C. Polycystic kidney disease.
 - D. Chronic glomerulonephritis.
 - E. Hypertensive disease.
12. A 49-year-old patient complains of back pain and swelling in his legs. He has been sick for 8 years. Objectively: the skin is dry, pale, swelling of the face, legs and anterior abdominal wall. Proteinuria is 0.5 g / day, red blood cells are 0-3 in the field of vision, leukocytes are in the entire field of view, hyaline cylinders are 0-1 in the preparation, the total blood protein is 69 g / l., hyper cholesterolemia is 8.3 mmol / l. Make the probable diagnosis:
- A. Chronic pyelonephritis.**
 - B. Chronic glomerulonephritis, nephrotic form.
 - C. Chronic glomerulonephritis, latent form.
 - D. Lardaceous kidney.
 - E. Malignant glomerulonephritis.
13. A 57-year-old female patient was admitted with complaints of aching pain in the lumbar region, increased amount of urine, and sometimes increased temperature to subfebrile numbers, headache. She noted an attack of pain in the right lumbar region, increased body temperature, and changes in the urine during pregnancy 20 years ago. Increased blood pressure is noted about 7 years. In urine analysis: the urine specific gravity is 1009-1010, protein is 0.99 g / l, leuk. are 10-15 in FOV, er. are 2-4 in FOV, hyaline cylinders are 1-2 in FOV. Creatinine serum is 392 μ mol / l. Which of the diagnoses is most likely for this patient? Около 7 лет отмечает повышение
- A. Chronic pyelonephritis.**
 - B. Chronic glomerulonephritis.
 - C. Nephrotic syndrome.
 - D. Lardaceous kidney.
 - E. Renovascular hypertension
14. A 30-year-old woman suffered from the back pain, subfebrile, frequent urination for 5 months. In urine tests: proteinuria is moderate, leukocytes are in the entire field of view, bacteriuria. Leukocytosis and increased ESR are in the blood test. Which of the listed diagnoses is the most likely?
- A. Chronic pyelonephritis.**
 - B. Acute glomerulonephritis.
 - C. Chronic glomerulonephritis.
 - D. Acute pyelonephritis.
 - E. Acute cystitis.

15. A 37-year-old female patient complains of periodic dull back pain to the left, increased body temperature to 37.5 ° C and increased urination. She has been sick about 4 years after hypothermia. Objectively: the pulse is 80 per minute and rhythmic, AP is 160/100 MmHg. The pain is noted with palpation of both kidneys, CVA tenderness is weakly positive. The edema is not noted. In the urine test: the urine specific gravity is 1012, protein is 0.99 g / l, leukocytes are 12-14 in the field of view, erythrocytes are 2-3 in the field of view. ESR is 20 mm / hour. The most likely diagnosis:

- A. Chronic pyelonephritis.**
- B. Chronic glomerulonephritis.
- C. Urinary stone disease.
- D. Ureteral colic.
- E. Chronic cystitis.

16. A 19-year-old woman complains of low back pain, fever. She has been sick about 6 months. Objectively: the temperature is 38.1 °C, RF is 18 per min., pulse is per min., AP is 110/60 MmHg. Moderate tenderness in the costovertebral angle on both sides is observed by palpation. In the blood test: Hb is 128 g / l, erythrocytes are 3.8 T / l, leukocytes are 9.0 g / l, rod-shaped nuclear neutrophils are 10%, microcyphil cells are 57%, eosinophils are 3%, lymphocytes are 30%, monocytes are 4%, ESR is 25 mm / hour In urine analysis: cloudy, specific gravity is 1018, protein is 0.133 g / l, leukocytes are ½ field of view, red blood cells are 5-7 in the field of view. Nechiporenko's test: leukocytes are 20.000, red blood cells are 590 in 1 ml. Which is the most appropriate instrumental exam before starting drug therapy:

- A. Ultrasound examination of the kidneys.**
- B. Radiography of the abdominal organs.
- C. CT.
- D. Excretory urography.
- E. Angiography of the kidneys.

17. A 35-year-old M. patient was hospitalized to the nephrology department with a diagnosis of chronic pyelonephritis, recurrent attacks (with frequent exacerbations). The sanatorium treatment was offered for the patient to prevent recurrent attacks. Which health-resort is most suitable for the patient?

- A. Truskavets.**
- B. Kuialnyk.
- C. Saky.
- D. Myrhorod.
- E. Hmelnyk.

18. A 35-year-old patient notes subfebrile, dull back pain. Increased blood pressure to 130/90 MmHg is revealed during the examination. Daily diuresis is 1300 ml. The urine test: specific gravity is 1012, protein is 0.065 g / l, leukocytes are 20-35 in FOV, and red blood cells are 1-3 in FOV. What are the main drugs in

the treatment of this patient?

- A. Antibiotics.**
- B. Immunodepressant.**
- C. Anticoagulants.**
- D. Glucocorticosteroids**
- E. Antihypertensive drug**

19. A 50-year-old patient has been suffering from dysuria, back pain, periodic fever for 6 months. Make a diagnosis.

- A. Chronic pyelonephritis.**
- B. Chronic glomerulonephritis.**
- C. Chronic cystitis.**
- D. Chronic prostatitis.**
- E. Renal tuberculosis.**

20. A 47-year-old was hospitalized with complaints of aching pain in the lower back and more to the right, sometimes increased body temperature to subfebrile, headache. The patient had the attack of back pain, accompanied by fever, changes in urine tests during pregnancy 10 years ago. The blood pressure was to 200/110 MmHg 5 years ago. In the urine analysis: protein is 0.99 g / l, leuk. are 10-15 in FOV, er. are 2-4 in FOV, hyaline cylinders are 1-2 in FOV. Serum creatinine is 102 $\mu\text{mol} / \text{L}$. What is the most likely diagnosis?

- A. Chronic pyelonephritis.**
- B. Chronic glomerulonephritis.**
- C. Renal tuberculosis.**
- D. Renal amyloidosis.**
- E. Hypertensive heart disease.**

21. A 37-year-old female patient complains of periodic increase in body temperature, back pain, frequent, painful urination. She has been sick for 1.5 years, aggravation after hypothermia is noted. General blood test: er. are $3.5 \times 10^{12} / \text{l}$, leuk. are $11.4 \times 10^9 / \text{l}$, ECT is 3, rod-shaped nuclear neutrophils are 8, microxyphil cells are 64%, mon. are 8%, lymph. are 17%, ESR is 25 mm / hour. General urine test: protein is 0.066 g / l, leukocytes are 10-15 FOV. The microbial count of urine is 200,000. Your diagnosis:

- A. Chronic pyelonephritis.**
- B. Acute cystitis.**
- C. Chronic glomerulonephritis.**
- D. Acute pyelonephritis.**
- E. Chronic cystitis.**

22. A 39-year-old patient was admitted with complaints of fatigue, headache, loss of appetite, nausea, vomiting in the morning, recurrent nosebleeds. She suffered from acute pyelonephritis at the age of 15. During examination: the blood pressure is 200/130 MmHg, skin and mucous membranes are pale, the marks of scratching and hemorrhage on the skin are observed. In the urine test: specific gravity is 1005, protein is 3.3 g / l, leukocytes are 13-15, erythrocytes are 2-4, hyaline cylinders are 1-2 in the field of view. What biochemical parameter is the most informative for the patient examination?
- Serum creatinine.**
 - Sodium of blood plasma.
 - Uric acid in the blood.
 - Blood fibrinogen.
 - Blood bilirubin.
23. A 48-year-old patient arrived from the prison. He complains of headache, decreased vision, nausea, dry mouth, thirst. He had been treated for chronic pyelonephritis for 8 years. Objectively: the skin and mucous membranes are pale. The pulse is 90 in 1 min., AP is 140/90 MmHg. The liver is located on 3 cm below of the costal arch. CVA Tenderness is weakly positive on both sides. The blood test: red blood cells are 2.4×10^{12} / l, leukocytes are 10.4×10^9 / l, ESR is 48 mm / hour. Blood creatinine is 0.143 mmol / l. The urine test: S.G. is 1011, protein is 0.67 g / l, er. are 2-4 FOV., leuk. are 1 \ 2 in FOV., hyaline cylinders are 0-1 in FOV. What is the most likely diagnosis?
- Chronic pyelonephritis, CKD II st.**
 - Chronic glomerulonephritis, CKD II st.
 - Renal tuberculosis, CKD I st.
 - Renal amyloidosis, CKD I st.
 - Nephrotic syndrome, CKD I st.
24. A 43-year-old patient complains of a periodic increased body temperature to 37.6 °C, back pain, painful urination. She has been sick for 3 years, aggravation after hypothermia is observed. The blood test: er are 3.5×10^{12} / l, leuk.- 11.4×10^9 / l, ECT is 3, stab neutrophils are 8, segmented neutrophils are 64%, mon. are 8%, lymph. are 17%, ESR is 25 mm / hour. General urine test: protein is 0.066 g / l, leukocytes are on the entire field of view. The microbial count of urine is 200,000. What is your diagnosis:
- Chronic pyelonephritis.**
 - Acute cystitis.
 - Chronic glomerulonephritis.
 - Acute pyelonephritis.
 - Chronic cystitis.

25. AP to 150/100 MmHg was revealed by the doctor during the medical examination of a 37-year-old man. In urine test: protein is 0.066 g/l, leukocytes are 14-18 and erythrocytes are 3-4 in FOV. From which instrumental examination should begin to clarify the condition of the kidneys?
- Ultrasound of the kidneys.**
 - Angiography of the kidneys.
 - Intravenous pyelography.
 - Radioisotope renography.
 - Plan radiography
25. A 56-year-old patient complains of general weakness, fatigue. The pain in lower back is permanent. He had been periodically treated for furunculosis over the past 5 years. Objectively: HR is 88 beats/min., blood pressure is 140/90 MmHg. The skin is pale, dry, reduced turgor. Leukocytes are found on the entire field of vision and bacteria are in the urine test. What is the most likely pathological process in the kidneys?
- Chronic pyelonephritis.**
 - Amyloidosis.
 - Chronic glomerulonephritis.
 - Interstitial nephritis.
 - Renal tuberculosis.
26. A 42-year-old woman complains of vomiting, nausea, general weakness, a decrease in daily diuresis to 450 ml. She has been suffering from chronic pyelonephritis for 18 years. Objectively: the skin is pale, dry, smells of ammonia from the mouth. AP is 210/115 MmHg. In the urine test: protein is 0.3 g/day, leuk. are 2-4 in FOV, er. are 8-10 FOV, waxy cylinders are 2-4 in the preparation. Nocturia and the relative density of urine in the Zimnitsky's test are 1005-1011 observed. In the blood test: Hb is 92 g/l, er. are 2.7×10^{12} /l. Blood creatinine is 720 μmol / l, k. is 5.25 mmol / l. Which of the kidneys function is impaired?
- Nitrogen released.**
 - Homeostatic.
 - Osmoregulation.
 - Endocrine (renin production).
 - Regulation of erythropoiesis.
27. A 16-year-old teenager had the back pain and changes in the urine at 2 weeks after purulent appendicitis. The pathology of the cardiovascular system was not detected. In the blood test: Hb is 148 g/l, leuk. are 10 g/l, ESR is 32 mm/h, creatinin is 0.095 mmol/l. In the urine test: protein has submicrogram, leuk. are on the whole FOV, er. are up to 2 FOV. Specify the most likely mechanism of kidney damage:
- Kidney damage by infectious pathogen.**
 - The toxic effect of degradation products of bacteria.

- C. Effect of specific antibodies on the renal tubules.
 D. Allergic reaction of immediate type.
 E. Allergic reaction of the slow type.
28. A 46-year-old patient was treated about acute pyelonephritis 10 years ago. He was hospitalized with complaints of headache, general weakness, and fatigue. The swelling of the face and the lower limbs is observed by the doctor during the examination. AP is 220/130 MmHg. In the urine test: SG is 1004, protein is 0.9 g/l, leukocytes 10-12 in FOV, erythrocytes are 10-12 in FOV, hyaline cylinders are 3-4 in the preparation. Creatinine serum is 0,290 mmol/l. What is the most likely cause of hypertension:
- A. Parenchymal arterial hypertension**
 B. Hypertensive disease III st.
 C. Renovascular hypertension
 D. II CKD. Nonobstructive pyelonephritis
 E. III CKD. Nonobstructive pyelonephritis
29. A 39-year-old patient was hospitalized with complaints of fatigue, headache, loss of appetite, nausea, vomiting in the morning, recurrent nosebleeds, decreased amount of urine to 600-800 ml per day. She has been suffering from pyelonephritis for 15 years. The blood pressure is to 220/120 MmHg, the skin and mucous membranes are pale, the marks from scratching and hemorrhage on the skin are observed during examination. In the urine test: specific gravity is 1004, protein is 0.86 g/l, leukocytes are 13-15 in FOV, erythrocytes are 4-6 in FOV, hyaline cylinders are 3-4 in the preparation. Which of the biochemical parameters determines the patient's condition:
- A. Serum creatinine is 0.62 mmol/l.**
 B. Uric acid is 0,41 mmol/l in the blood.
 C. Sodium of blood plasma is 148 mmol/l.
 D. Blood fibrinogen 5,9 g/l.
 E. Indirect bilirubin 12,0 mmol/l.
30. A 51-year-old patient has been suffering from rheumatoid arthritis more than 10 years old. She was treated with diclofenac and prednisone. The changes of the urine in the form of leukocyturia were observed six months ago. Objectively: the skin is pale. BP is 140/70 MmHg. The liver is enlarged by 1 cm. Serum creatinine is 126 $\mu\text{mol/L}$. The most likely cause of leukocyturia:
- A. Overlay of chronic pyelonephritis.**
 B. Development of secondary amyloidosis.
 C. Overlay of diffuse glomerulonephritis.
 D. Development of medicinal nephritis.
 E. Development of nutritional dystrophy.
31. A 39-year-old patient complains of general weakness, malaise, dull pain in the lumbar region. He has been suffering from paraproctitis for 3 months. The body temperature is to 37.9°C. BP is 130/90 MmHg. The urine test: protein is 0.5 g/l,

erythrocytes are 0-1 in FOV, leukocytes are 1/2 in FOV, hyaline cylinders are 1 in FOV, and the bacteria are observed. Escherichia is detected in urine culture on microflora. Creatinine serum is 0.89mmol/l. What disease has developed:

- A. Chronic pyelonephritis.**
- B. Amyloid disease.
- C. Chronic glomerulonephritis.
- D. Interstitial nephritis.
- E. Nephrotuberculosis

32. An 81-year-old patient complains of back pain, malaise, fever up to 37.8°C. Type 2 diabetes was found about 7 years ago. General urine analysis: alkaline reaction, specific gravity is 1014, protein is 0.033 g/l, sugar has submicrogram, leukocytes are 1/4 in FOV, erythrocytes are 2-4 in v/, hyaline cylinders are 12 in FOV, salts amorphous phosphates and gram-negative bacteria in large quantities are observed. Serum creatinine is 112 $\mu\text{mol} / \text{L}$. What antibacterial drug should be prescribed before the verification of causative agents of the infectious inflammatory process:

- A. Auhmentin.**
- B. Hentamicin.
- C. Amikacin.
- D. Tetracycline.
- E. Azithromycin.

33. A 59-year-old patient was hospitalized with complaints of fatigue, headache, and cloudy urine. She has been suffering from chronic calculous pyelonephritis for 20 years old. Blood pressure is to 180/110 MmHg. In the urine test: SG is 1014, protein is 0.86 g/l, leukocytes are 13-15 in FOV, erythrocytes are on all FOV, hyaline cylinders are 1-2 in the preparation. What is the cause of macrohaematuria:

- A. Presence of concrement.**
- B. Exacerbation of the inflammatory process in the kidneys.
- C. Increased filtration pressure.
- D. Changes at the level of the tubular apparatus of the kidney.
- E. Arterial hypertension.

34. A 69-year-old patient has been periodically noting the pain in the lumbar region on the right, increased blood pressure to 210/150 or 160/130 MmHg. for 2 years. The urine test: protein is 0.033 g/l, leukocytes are 1/4 in FOV fresh erythrocytes are 6-10 in FOV. On the ultrasound data: right kidney is 72x34 mm, with irregular contours, parenchyma thickness is 4-6 mm with increased echogenicity, calices-pelvis system is moderately expanded; the left kidney is 112x56 mm, the thickness of the parenchyma is 16-18 mm, the structure is not changed. What is the cause of arterial hypertension:

- A. Chronic pyelonephritis. Secondary renal scarring.**

- B. Hypertensive heart disease.
- C. Inadequate antibiotic therapy.
- D. Abnormal development, hypoplasia of the right kidney.
- E. Amyloidosis of the kidneys.

35. A 77-year-old patient was hospitalized with complaints of recurrent pain in the lumbar region, general weakness, fatigue, loss of appetite, polyuria, nocturia, increased body temperature to subfebrile numbers, increased blood pressure to 160/110 MmHg. Objectively: the skin is dry, pale, gray. The urine test: specific gravity is 1005, protein is 0.53 g/l, leukocytes are 18-20 in FOV, lysed erythrocytes are 3-5 in FOV, hyaline cylinders are 0-2 in FOV. The blood test shows anemia. Serum creatinine is 643 $\mu\text{mol/L}$. Glomerular filtration of plasma is 12 ml/min. Tubular reabsorption of water is 72%. The most likely diagnosis:

- A. V CKD: non-obstructive pyelonephritis.**
- B. Hypertensive heart disease.
- C. Involuntary nephrosclerosis.
- D. Nephrotuberculosis.
- E. Chronic glomerulonephritis.

36. A 34-year-old patient has 25-30 leukocytes in the urine sediment in FOV. The patient does not have complaints. The indications for urological disease are observed in the case-history. The most likely diagnosis:

- A. Chronic pyelonephritis.**
- B. Chronic cystitis.
- C. Chronic urethritis.
- D. Chronic adnexitis.
- E. Pregnancy.

37. The patient was admitted to the urology department in regards to right-sided acute serous pyelonephritis and stone in the lower third of the ureter is 0.6 g and 0.8 cm. In this case, the treatment includes the following sequence of therapeutic measures:

- 1) intensive antibiotic therapy
- 2) surgery - revision of the kidney, nephrostomy
- 3) right ureter catheterization
- 4) ureterolithotomy
- 5) percutaneous puncture nephrostomy

- A. 1,2,3,4 and 5 are correct**
- B. 1,3,4,5 and 2 are correct
- C. 2,4,5,1 and 3 are correct
- D. 3,4,2,1 are correct

E. 2,4,5,3 and 1 are correct

38. A 47-year-old patient was admitted to the urology department due to suspected exacerbation of chronic pyelonephritis. She has been sick for 6 days; the body temperature is 37.8-38.5 °C. The tests in the following sequence are necessary to perform:

- 1) isotope renography
- 2) urine and blood tests
- 3) ultrasound
- 4) dynamic nephroscintigraphy
- 5) renal venography
- 6) excretory urography
- 7) retrograde pyelography

A. 2,3,6,4 are correct.

B. 1,2,3,4,5,6 and 7 are correct.

C. 2,4,1,3,7,5 and 6 are correct.

D. 2,1,5,4,6,7 and 3 are correct.

39. A 64-year-old patient had automedication treatment of chronic pyelonephritis. The treatment did not work. Then he was hospitalized to the urological department. The carbuncle of the lower pole of the left kidney is 2-3 cm observed by the examination. The passage of urine and the function of the kidneys are not changed. What measures must be performed:

A. Percutaneous carbuncle puncture, antibiotic therapy.

B.Emergency surgery - revision of the left kidney, excision or dissection of the carbuncle, nephrostomy, drainage of perirenal space.

C.Planned surgery - revision of the kidney, excision or dissection of the carbuncle, drainage of the perinephric space, antibiotic therapy.

D. Nephrostomy.

E.Nephrectomy.

Topic: Pyonephrosis, paranephritis

Tests of the 1st level:

1. What is observed on the plain urography at paranephritis:
 - A. Scoliosis of the spine into the opposite direction.**
 - B. Scoliosis of the spine into the direction of the lesion.
 - C. Incomplete union of the spine arches L2- 4 ,S1.
 - D. Severe osteoporosis of the entire spinal column.
 - E. Rotation of the vertebra.

2. What is characteristic of acute purulent paranephritis at the onset of the disease:
 - A. Normal body temperature.**
 - B. Septic fever
 - C. Permanent fever
 - D. Intermittent fever
 - E. Subfebrile temperature

3. Specify the nature of the pain at paranephritis:
 - A. Localization to the lumbar region.**
 - B. Irradiate to the area of the scapula.
 - C. Irradiate anteriorly and downward to the thigh.
 - D. Irradiate to the neck.
 - E. Irradiate to the umbilicus.

4. What is observed on the plain urography in the case of acute paranephritis:
 - A. The disappearance of the transverse processes, blurred contours of the psoas muscles.**
 - B. Scoliosis of the spine into the direction of the lesion
 - C. Rotation of the spine
 - D. Absence of psoas muscle contours
 - E. Lumbarization of XII thoracic vertebra

5. What method of paranephritis diagnosis is the most informative:
 - A. Ultrasound examination.**
 - B. Plan radiography.
 - C. Excretory urography.
 - D. Isotopic renography.
 - E. Paranephric puncture.

6. There are the following forms of paranephritis:
 - A. Fibro-sclerotic and fibro-lipomatous.**
 - B. Purulent-necrotic.
 - C. Sclerotic.

- D. Latent.
 - E. b) and c).
7. The most frequent causative agent of paranephritis is:
- A. Staphylococcus and E. coli.**
 - B. Chlamydia.
 - C. Viruses.
 - D. Yeast.
 - E. Enterococcus.
8. What pain is typical for acute paranephritis at the onset of the disease:
- A. It appears on the first day.**
 - B. It is absent throughout the process.
 - C. It appears 7 days after the first symptoms
 - D. It appears 12-14 days after the onset of the first symptoms.
 - E. It appears 3-4 days after the onset of the disease and the appearance of the first symptoms
9. The signs of psoas symptom of acute paranephritis:
- A. Pain is in the lower back in the position of the patient on the opposite side.**
 - B. Pain is observed when straightening the legs.
 - C. Pain is noted when walking for a long time.
 - D. c) and d).
 - E. The leg is on the side of the lesion flexed to the knee, coxofemoral joint and slightly reduced to the abdomen

Tests of the 2nd level:

1. The most effective method for the diagnosis of perirenal abscess is:
 - A. Ultrasound examination.**
 - B. Excretory pyelography (medical image of respiration).**
 - C. Plain radiography of the urinary tract
 - D. Isotopic renography.
 - E. Paranephric puncture.

2. What are the main methods of paranephritis treatment:
 - A. Drainage of paranephritis.**
 - B. Broad spectrum antibiotics.**
 - C. Antispasmodics.
 - D. UHF and electrophoresis
 - E. Enzymes.

3. Specify the complications of paranephritis:
 - A. Sepsis.
 - B. Peritonitis.
 - C. Pleuritis.
 - D. Orchitis.
 - E. Enterocolitis.

4. Taking the acute onset of paranephritis, it is necessary to carry out differential diagnosis with the following pathology:
 - A. Malaria.
 - B. Influenza.
 - C. Typhus.
 - D. Lumbodynia.
 - E. Osteochondrosis.

5. A 30-year-old patient was admitted to hospital three days after the onset of the disease with complaints of pain in the lower abdomen and the right lumbar region. The nausea and vomiting were not observed. Overall condition is satisfactory. The temperature is 37.8 C, pulse is 92 '. The patient calls attention to the forced position of the patient on the back with flexed legs in coxofemoral joint and led to the stomach by right hip. The movement in the joints is in full, lameness is not noted. When the patient tries to straighten the thigh, severe pain occurs in the lumbar region. The abdomen is soft, painful in the right iliac region with deep palpation, Blumberg's sign is negative. Pasternatsky's symptom is sharply positive on the right. Rovsing's symptom is negative. The dysuric phenomena is not observed, the urine is not changed. Blood leukocytes are 14.3×10^3 . The excretory function of the kidneys is satisfactory on the excretory urography, but complete immobility of the right kidney is found during inhalation and exhalation. Specify nosology, except for:
 - A. Osteochondrosis.
 - B. Shingles.
 - C. Renal colic.
 - D. Pyelonephritis.
 - E. All listed

Tests of the 3rd level:

1. Increased blood pressure to 150/110 MmHg is found in a 26-year-old patient year after suffering acute purulent paranephritis. In the urine ttest: S.G. is 1014, protein is 0.099 g/l, leukocytes are 2-4 in FOV, erythrocytes are 1-2 in FOV, hyaline cylinders are 1-2 in the preparation. Creatinine of blood serum is 0,090 mmol/l. The most effective method for determining the nature of hypertension:
 - A. Angiography.
 - B. Ultrasound.
 - C. Nephroscintigraphy.

- D. Excretory urography.**
E. Rehberg's Test.
2. Increased blood pressure to 160/110 MmHg was found in a 45-year-old K. patient 10 months after the accident with a rupture of the left kidney, formation and percutaneous drainage of retroperitoneal hematoma. In the urine test: S.G. is 1014, protein is 0.33 g/l, leukocytes are 8-10 in FOV, erythrocytes are 1-2 in FOV. Creatinine of blood serum is 116 $\mu\text{mol/l}$. According to the ultrasound data: the right kidney has the normal size and structure, the left kidney is enlarged, the extension of the pelvicalyceal system and the upper 1/3 of the ureter are observed. Specify the cause of high blood pressure.
- A. Sclerosing paranephritis.**
B. Chronic pyelonephritis.
C. III degree of hypertension.
D. Abnormal development of the renal arteries.
E. Cardiosclerosis.
3. Increased blood pressure to 160/120 MmHg was found in a 65-year-old patient 11 months after percutaneous nephrostomy due to acute suppurative left-sided pyelonephritis. According to the ultrasound data: the right kidney has normal size and structure, the left kidney is reduced to 82x43x32 mm, the parenchyma is thinned to 8-9 mm, with increased echogenicity. The most likely nature of AP is:
- A. Renoparenchymatous.**
B. Involutive nephrosclerosis.
C. III degree of hypertension.
D. Atherosclerotic lesion of the renal arteries.
E. Chronic pyelonephritis.
4. Increased blood pressure to 190/130 MmHg. was discovered in a 78-year-old patient for the first time. From the anamnesis: He had nephrectomy on the left about pyonephrosis 30 years ago. In the urine test: the pathology is not noted. Creatinine of blood serum is 98 $\mu\text{mol/l}$. According to ultrasound data: the right kidney has normal size and structure. According to CT: a widespread of atherosclerotic vascular lesion is observed. Specify the cause of high blood pressure.
- A. Atherosclerotic lesions of the renal arteries.**
B. Involutive nephrosclerosis.
C. III degree of hypertension.
D. Abnormal development of the renal arteries.
E. Ormond's disease.
5. A 69-year-old patient was hospitalized with complaints of headache, general weakness, and rapid fatigue. The skin is pale, swelling on the face and lower limbs is observed on the examination. AP is 200/150 MmHg. In the urine test: specific gravity is 1004, protein is 0.9 g/l, leukocytes are 40-50 in FOV, erythrocytes are

10-12 in FOV, hyaline cylinders are 4-6 in the preparation. Creatinine of blood serum is 0,490 mmol / l. According to the ultrasound data: renal scarring is noted. Specify the reason of increased blood pressure?

- A. Constant renal release of renin into the blood.**
- B. Kidney infection.**
- C. Hyperazotemia.**
- D. Anemia.**
- E. Disorder of water-salt metabolism.**

6. A 26-year-old patient has increased blood pressure to 220/140 MmHg. He was operated at 22 years of age for acute paranephritis on the right. On the ultrasound data: a reduction in the size of the right kidney to 6.0 cm and a decrease in the parenchyma to 7 mm are observed. The left kidney has normal size. The parenchyma is to 14mm. In urine tests: specific gravity is 1014, protein is 0.099 g/l, leukocytes are 2-4 in FOV, erythrocytes are 1-2 in FOV, hyaline cylinders are 1-2 in the preparation. Creatinine of blood serum is 0,090 mmol/l. Specify the most likely character of arterial hypertension.

- A. Renoparenchymatous.**
- B. Vasorenal.**
- C. III degre of hypertension.**
- D. II CKD. Neobstructive pyelonephritis.**
- E. Chronic glomerulonephritis.**

7. Bilateral ureterohydronephrosis was found in a 59-year-old patient undergoing a control examination six months after surgery for rupture of aortic aneurysm. The urine analysis: protein has submicrograms, white blood cells are 20-28 in the FOV, red blood cells are single in the FOV. On the excretory urograms data: the enlargement of the pelvicalyceal system and ureters of both kidneys to the junction with the iliac vessels is observed. What is the diagnosis:

- A. Retroperitoneal fibrosis.**
- B. Chronic pyelonephritis.**
- C. Chronic prostatitis.**
- D. Chronic colitis.**
- E. Abnormality of the ureters.**

8. The coral calculus of the left kidney was found in a 48-year-old patient by an outpatient examination. On the excretory urography: a sharp decrease in left kidney function is found. Its pelvicalyceal system is expanded, the kidney parenchyma is thinned. The ureteropelvic junction is narrowed. The urine test: protein is 0.165%, leukocytes completely cover the FOV, red blood cells are 30-40 in FOV. What are the complications of urolithiasis:

- A. Calculous pyonephrosis.**
- B. Terminal hydronephrosis.**
- C. Chronic pyelonephritis.**

- D. Renal abscess.
 - E. Perinephritis.
9. A 45-year-old patient with acute purulent paranephritis, decompensated diabetes mellitus, on the back of antibacterial therapy has dramatically reduced pressure and developed tachycardia. What is the complication of the patient?
- A. Septic shock.**
 - B. Hyperglycemia.
 - C. Hypoglycemia.
 - D. Acute renal failure.
 - E. Myocardial infarction.
10. A 56-year-old patient was hospitalized with complaints of pain in the right half of the abdomen, lumbar region, fever up to 39.9°C, dizziness of consciousness. He has been sick for 12 days. Diabetes mellitus is noted in the case-history. Leukocytosis is in the blood test. The urine test: sugar is 1.2 g/l, protein is 0.33% g/l, white blood cells are 20-30 in the FOV, and fresh red blood cells are 2-4 in the FOV. On the ultrasound data: the kidneys have normal size and structure. A hypoechoic formation without clear contours of 80x60 mm is visualized in paranephric body. Preliminary diagnosis is perirenal abscess. Prescribe the proper treatment.
- A. Percutaneous drainage of perirephral abscess.**
 - B. Lumbotomy.
 - C. Renal catheterization.
 - D. Conservative antibiotic therapy.
 - E. Removal of abscess.
11. A 43-year-old patient was hospitalized with dull pain in the lumbar region on the right. From the anamnesis: she is operated on the occasion of appendicular infiltrate 20 years in a row. The urine test: protein has submicrograms, white blood cells are 14-18 in the FOV, and red blood cells are single in the FOV. On the excretory urogram data: a moderate expansion of the pelvicalyceal system and ureter to the junction with the iliac vessels. What is the cause of ureterohydronephrosis:
- A. Retroperitoneal fibrosis.**
 - B. Chronic pyelonephritis.
 - C. Chronic colitis.
 - D. Chronic adnexitis.
 - E. Urolithiasis.
12. A 25-year-old patient was hospitalized with increased body temperature to 38.9° C, pain in the lower back and stomach on the right. The blood test has leukocytosis. The urine analysis: the changes are not observed. The muscles in the lumbar region and on the right part of abdomen are strained with palpation. The

right thigh is let down to the stomach. On the plain urogramm: the contour of the psoas muscle is erased on the right. Make the most likely diagnosis.

- A. Acute paranephritis.**
- B. Acute pyelonephritis.**
- C. Lumbosacral radiculitis.**
- D. Acute myositis.**
- E. Acute appendicitis.**

13. A 45-year-old patient was hospitalized with increased body temperature to 38.5°C, pain in the lower back and stomach on the right. The patient has been sick for week after hypothermia. The blood test has leukocytosis. The urine analysis does not have changes. The muscles in the lumbar region and right abdomen are strained with palpation. The peritoneal sign is doubtful. On the ultrasound data: kidneys have normal size and structure, reducing of the respiratory mobility of the right kidney. A hypoechoic formation without clear contours of 32x45 mm is visualized below the kidney in the paranephric body. The most likely diagnosis is:

- A. Acute paranephritis.**
- B. Acute appendicitis.**
- C. Appendicular infiltration.**
- D. Acute myositis.**
- E. Urolithiasis.**

14. A 66-year-old patient was hospitalized with complaints of pain in the right half of the abdomen, lumbar region, body temperature to 38.9 ° C, fever. He has been sick for 6 days. In the case-history: the patient has been suffering from diabetes mellitus for 2 weeks in a row, he was operated with paratonsial abscess. The abdominal muscles in the lumbar regions on the right are tense. The blood test has leukocytosis. The urine analysis: protein is 0,033% g/l, leukocytes are 10-12 in the FOV, and fresh erythrocytes are 2-4 in the FOV. On the ultrasound data: kidneys have normal size and structure. A hypoechoic formation without clear contours of 82x66 mm is visualized on the right paranephric body. The preliminary diagnosis is:

- A. Peripephral abscess.**
- B. Pyonephrosis.**
- C. Purulent pyelonephritis.**
- D. Acute appendicitis.**
- E. Renal abscess.**

15. A 55-year-old patient was hospitalized with complaints of pain in the right half of the abdomen, lumbar region, body temperature to 39.9 °C, and fever. He has been sick for 8 days. Furunculosis of the right forearm was observed 7 days ago. The abdominal muscles in the lumbar regions are tense on the right. The blood test has leukocytosis $16 \times 10^9 / l$, ESR is 45mm. The urine analysis: protein is 0,063% g/l, white blood cells are 14 in the FOV, and fresh red blood cells are 1-2 in FOV. On the ultrasound data: kidneys have normal size and structure. A hypoechoic formation without clear contours of 32x56 mm is visualized on the right in the

paranephric body. The preliminary diagnosis is

- :
- A. Perihephral abscess.**
 - B. Pyonephrosis.**
 - C. Purulent pyelonephritis.**
 - D. Furunculus of the right forearm.**
 - E. Renal abscess.**
16. A 40-year-old patient was brought to hospital with complaints of pain in the left abdomen and lumbar region, aggravated by movements. He has been sick for 3 weeks. Coral calculus of the left kidney was operated. Body temperature is 38 °C. The abdominal muscles in the hypogastric and lumbar regions are tense on the left. The blood test has leukocytosis. The urine test: protein is 0.165%, leukocytes are on the entire FOV, and fresh red blood cells are 20-30 in the FOV. On the ultrasound data: right kidney has normal size and structure, the left kidney is enlarged and it contains coral-shaped calculus (55-34 mm). The nonuniform areas of low echogenicity (50x48 mm.) are observed in the paranephric body along the external contour of the kidney. The respiratory excursion of the left kidney is absent. What is the complication of ICD caused by the condition of the patient:
- A. Acute paranephritis.**
 - B. Pyonephrosis.**
 - C. Purulent pyelonephritis.**
 - D. Acute myositis.**
 - E. Renal abscess.**
17. A 39-year-old patient was hospitalized with increased body temperature, chills, pain in the back and abdomen, radiating to the left groin. Blood test has leukocytosis. There is no change in the urine analysis. The muscles in the lumbar region and in the epigastric region on the left are strained during palpation. Scoliosis is observed on the left side. CVA Tenderness is left positive. On the ultrasound data: kidneys have normal size and structure, reducing of the respiratory mobility of the left kidney. Make a diagnosis:
- A. Acute paranephritis.**
 - B. Acute pyelonephritis.**
 - C. Lumbosacral radiculitis.**
 - D. Acute myositis.**
 - E. Pneumonia.**
18. A 28-year-old patient has been suffered from the fever with chills, pain in the lower back, which increases with breathing for 3 days. Previously observed bouts of pain in the lower back, but without fever. Blood test has leukocytosis. There is no change in the urine analysis. The muscles in the lumbar and epigastric region are strained on the right during palpation. CVA Tenderness is sharply positive on the right. On the ultrasound data: decreased respiratory mobility of the right kidney. Make a diagnosis:

- :
- A. Acute paranephritis.**
 - B. Acute pyelonephritis.
 - C. Acute pneumonia.
 - D. Acute pleuritis.
 - E. Acute appendicitis.
19. A 45-year-old man was hospitalized with complaints of hyperthermia up to 38.9 ° C, attacks of pain in the lower back and abdomen to the left, frequent desire to urinate. Increased pain of the left kidney determined is determined by palpation. CVA Tenderness is positive on the left. In the blood test: the number of leukocytes is $9 \times 10^9/l$, stab neutrophils are 7%. Pyuria is observed in the urine. On the excretory urogram: a “white kidney” of 16x12x8 cm is determined on the left. Which of the following methods allows you to specify the cause of pyonephrosis:
- :
- A. CT.**
 - B. Chromocytoscop.
 - C. Radioisotope renography.
 - D. Ultrasound.
 - E. Plain urography.
20. A 55-year-old patient was hospitalized with complaints of dull pain in the lumbar region on the left, increased body temperature to 39.2°C. He has been suffering from the fever for 12 days. Coral calculus of the left kidney was found 3 years ago in the anamnesis. On the ultrasound data: the kidney is enlarged to 182x89x72 mm, the thickness index of parenchyma is 3-4 mm, it is hypoechoic, a coral calculus with 52x41 mm is visualized. Specify the tactics at calculous pyonephrosis:
- A. Percutaneous nephrostomy.**
 - B. Conservative antibiotic therap.
 - C. Catheterization of the kidney.
 - D. Nephrectomy.
 - E. Pelviolithotomy, nephrostomy.
21. A 45-year-old patient was admitted to the emergency department with complaints of dull pain in the lumbar region on the left and fever up to 39.2 °C. He has been suffering from fever for 6 days. The surgical treatment of hydronephrosis has been suggested several times. The pyuria is in the urine. On the ultrasound data, the kidney is enlarged to 180x90x78 mm, the thickness of the parenchyma is 2-3 mm. On the observational urogram: the shadows of the stones was not detected. On delayed excretory urogram: the left kidney function is absent. What is a preliminary diagnosis:
- A. Pyonephrosis.**
 - B. Terminal hydronephrosis.

- C. Acute pyelonephritis.
 - D. Renal abscess.
 - E. Paranephritis.
22. A 69-year-old patient has been periodically noting the pains in the lumbar region on the right, increased in blood pressure to 210/150 - 160/130 MmHg for 2 years. The urine test: protein is 0.033 g/l, leukocytes are on the 1/4 of the FOV, fresh red blood cells are 6-10 in the FOV. On the ultrasound: the right kidney is 72x34 mm, with irregular contours, thickness of parenchyma is 4-6 mm, increased echogenicity, the pelvicalyceal system is moderately expanded; the left kidney is 112x56 mm, the thickness of the parenchyma is 16-18 mm, the structure is not changed. The cause of hypertension is :
- A. **Secondary renal scarring.**
 - B. Hypertensive heart disease.
 - C. Inadequate antibiotic therapy.
 - D. Abnormal development, hypoplasia of the right kidney.
 - E. Atherosclerotic lesion of the renal vessels.
23. A 56-year-old patient complains of general weakness, malaise, nausea, lack of appetite, increased amount of urine to 2.5 - 3 l. The surgery history of appendicular infiltrate is noted. The blood pressure is 150/100 MmHg. The kidneys are not palpable. CVA Tenderness is negative. The ultrasound: the extension of the pelvicalyceal system of both kidneys and ureters to the average 1/3 on both sides are observed. Creatinine of blood serum is 398 mol/l, glomerular filtration is 25 ml/min. What is the cause for suspicion of ureterohydronephrosis, renal failure:
- A. **Ormond's disease.**
 - B. Chronic glomerulonephritis.
 - C. Chronic pyelonephritis.
 - D. Hypertensive heart disease.
 - E. Surgery history.
24. A 49-year-old patient was hospitalized with complaints of fatigue, headache. She was operated with bilateral purulent pyelonephritis, perirenal abscess. The blood pressure is to 180/110 MmHg. In the urine test: specific gravity is 1004, protein is 0.86 g/l, leukocytes are 13-15 in FOV, erythrocytes are on all FOV, hyaline cylinders are 1-2 in the preparation. The cause of chronic renal failure is:
- A. **Secondary renal scarring.**
 - B. Arterial hypertension.
 - C. Perinephric abscess.
 - D. USD.
 - E. Purulent pyelonephritis.

25. A 34-year-old patient complains of headache, weakness and loss of appetite. The temperature is to 38C. He has been sick for 5 days. The patient has been receiving the insulin for diabetes from the 16 years old. The right kidney with pyonephrosis was removed at the 19 years old. Glycemic profile is 10-14-18 mmol/l. Blood creatinine is 456 $\mu\text{mol/l}$. The urine test: SG is 1005/1009, sugar is 0.3%, protein is 1.32 g/l, leuk. are 3-5 in FOV. Daily diuresis is 1850 ml. Decreased size of the left kidney to 7.0 * 3.0 cm is observed on the ultrasound. The hypodense formation is up to 7.0 cm on the left edge. What complication has diabetic patient developed?
- Paranephritis on the left.**
 - Renal amyloidosis.
 - Chronic pyelonephritis.
 - Nephrotic syndrome.
 - Glomerulonephritis..
26. A 74-year-old patient complains of headache, weakness, loss of appetite, nausea. The single right kidney is congenital. She has been treating diabetes from 70 years old. She was operated with acute right-sided purulent pyelonephritis at 45 years of age. On the ultrasound: the pcs is enlarged to 4.0 cm and the upper and middle third of the ureter are enlarged. The blood pressure is to 160/110 MmHg. Blood creatinine is 340 $\mu\text{m/l}$. The urine test: SG is 1009/1012, sugar is 0.3%, protein is 0.56 g/l, leuk. are 5-8 in FOV. Daily diuresis is 1850 ml. The cause of CKD is:
- Ormond's disease.**
 - Paranephritis.
 - Chronic pyelonephritis.
 - Nephrotic syndrome.
 - Hypertensive heart disease.
27. A pain was appeared in the lumbar region on the right in a 28-year-old patient 3 days ago after hypothermia. The pain was increased with breathing and the body temperature was to 38.8°C. In the blood test: leukocytosis is $13.9 \times 10^9/\text{l}$, the left shift is observed. In the urine test: protein is 0.033 g/l, erythrocytes are 1-2 in the FOV, leukocytes are 4-6 in the FOV. On the ultrasound: decreased respiratory mobility of the right kidney. The most likely diagnosis is
- Acute paranephritis.**
 - Acute appendicitis.
 - Acute pneumonia.
 - Acute pleuritis.
 - Acute myositis.
28. AP to 140/90 MmHg. was found in a 33-year-old man after acute paranephritis suffered 8 months ago. In the urine test: protein has submicrograms, leukocytes are 4-6 in the FOV, and erythrocytes are 0-2 in the FOV. From which

instrumental examination should begin to eliminate the nephrogenic nature of hypertension?

- A. Ultrasound of the kidneys.**
- B. Renal angiography.**
- C. Intravenous pyelography.**
- D. Radioisotope renography.**
- E. Plain X-ray of the kidneys.**

29. A 43-year-old patient got into an accident 2 weeks ago. She has been suffering from increased body temperature to 38.7°C for 3 days. A retroperitoneal hematoma on the right is detected by the CT. A decreased respiratory mobility of the right kidney is detected by the ultrasound. In the urine test: protein has submicrograms, leukocytes are 4-6 on the FOV, and erythrocytes are 0-2 on the FOV. The most likely diagnosis is

- A. Suppuration of hematoma.**
- B. Acute pyelonephritis.**
- C. Acute appendicitis.**
- D. Acute paranephritis.**
- E. Acute myositis.**

30. Increased body temperature after hypothermia to 39.9°C, fever, general weakness, pain in the lower back, aggravating during breathing are observed in a 33-year-old patient. He has been sick for a week. The patient was treated in the district hospital with pneumonia but the treatment was without effect. Pyuria is in the urine. Left-sided hydronephrosis was discovered 5 years ago. He refused from the proposed surgical treatment. On the excretory urogram: the function of the right kidney is not impaired, the function of the left kidney is absent. On the ultrasound: hypoechogenicity and nonuniform formation with a horizontal level of 18x12x8 cm is in the area of the left kidney. The most likely diagnosis is

- A. Pyonephrosis.**
- B. Terminal hydronephrosis.**
- C. Pneumonia.**
- D. Renal abscess.**
- E. Perinephric abscess.**

31. A 68-years-old patient was hospitalized with complaints of general weakness, fatigue, and fever to subfebrile numbers during the last year, periodically dull pain in the right half of the abdomen. He has been sick from USD for 22 years. A coral stone of the right kidney is revealed during outpatient examination about a year ago. On the plain and excretory urogram: the size of the right kidney is 18x12x10 cm; the shadow of a coral-shaped calculus is in the projection of the kidney, the function is sharply reduced, the pelvicalyceal system is expanded, the parenchyma is thinned to 2-4 mm with increased density. The thick pus is discharged from the entrance of the right kidney by the cystoscopy. The function of the left kidney is not impaired. The urine test: protein is 1.6 g/l, white blood cells completely cover

the FOV, red blood cells are 30-40 on FOV. Therapeutic tactic for pyonephrosis and coral stone of the right kidney is

- A. Nephrectomy.**
 - B. Percutaneous nephrostomy.**
 - C. Pyelolithotomy.**
 - D. Antibacterial therapy.**
 - E. Detoxification therapy.**
32. A 45-year-old patient was hospitalized with acute paranephritis without purulent fusion, poorly controlled diabetes. What is the main condition for successful treatment?
- A. Compensation of hypoglycemia.**
 - B. Detoxification therapy.**
 - C. Identification of bacterial pathogen.**
 - D. Surgical drainage of paranephritis.**
 - E. Percutaneous drainage of paranephritis.**
33. A 29-year-old patient was hospitalized with complaints of pain in the right half of the abdomen, lumbar region, general weakness, fever. Renal abscess is observed with CT. The indications for surgical treatment are
- A. The ineffectiveness of antibiotic therapy.**
 - B. Accompanying diabetes mellitus.**
 - C. Measurement of suppurative focus is to 2.0 cm.**
 - D. Patient's age.**
 - E. Pain syndrome.**
34. A 32-year-old patient was admitted to the hospital with complaints of the body temperature 0 to 39 ° C, chills. A pain appeared in the lumbar and subcostal areas on the right four days ago, especially with deep breathing. The pain gradually intensified. On examination: pain is noted at palpation of the right lumbar region, especially in the costovertebral angle, the spine is curved to the right. The palpation of the right kidney is painful, Israel's and Pasternatsky's symptoms are sharply positive on the right (soreness with pressure in the lumbar triangle). The patient lies in a position with leading to the stomach the right thigh. The hip extension is sharply painful. The protrusion and hyperemia of the skin are in the right lumbar region. The blurred contours of the lumbar muscle and the spinal curvature to the right are detected on the overall radiogram. The shadow of the kidney is blurred. The ureter is medially rejected; its pelvic department is poorly differentiated on the excretory urogram. The mobility of the right kidney at breathing is sharply limited. Make a diagnosis:
- A. Paranephritis on the right.**
 - B. Tumor of kidney**
 - C. Bilateral pyelonephritis**
 - D. Right kidney stone.**
 - E. Osteochondrosis of the lumbar spine.**

35. A 37-year-old patient was admitted to the clinic with complaints of body temperature to 39.6 ° C. The patient's condition is severe. Severe pain during extension is observed in the position with leading hip to the abdomen. Bulging in the lumbar region and redness on the right, pain in the lumbar region, especially in the right costovertebral angle, protective contraction of the lumbar muscles during light palpation, scoliosis of the lumbar spine are noted. What emergency examination is necessary to make a diagnosis:
- A. Ultrasound examination.**
 - B. Uroflowmetry.**
 - C. Chromocytoscopy.**
 - D. Survey urogram.**
 - E. Radioisotope renography.**

Topic: Cystitis, prostatitis, urethritis, cavernitis, epididymitis

Tests of the 1st level:

1. What is the most effective method of administering of gentamicin or ceftazidime in the treatment of acute prostatitis:
:
 - A. Intravenous**
 - B. Endolymphatic
 - C. Intra-arterial
 - D. Intramuscular
 - E. Transrectal

2. Emergency intravenous injection of _____ is reasonable in case of bacteremic shock:
 - A. Polyglucin and corticosteroids.**
 - B. Saline solution of sodium chloride.
 - C. 5% glucose solution
 - D. Hemodez.
 - E. Rheopolyglucin.

3. Such a physiotherapeutic method as _____ is reasonable at acute parenchymal prostatitis:
 - A. Electrophoresis with aloe vera.**
 - B. Laser therapy on the perineum.
 - C. Sonic driving.
 - D. Ultra-high-frequency treatment.
 - E. Paraffin (ozocerite).

4. What is appropriate for chronic parenchymal prostatitis in the latent phase and prostate hypotension:
 - A. Sonic driving.**
 - B. Ultra-high-frequency treatment.
 - C. Electrophoresis with novocaine.
 - D. Direct electrical stimulation with "Intraton"
 - E. Ultraviolet irradiation of the perineum.

5. What is reasonable in the case of acute epididymoorchitis?
 - A. Ultraviolet irradiation.**
 - B. Electrophoresis with novocaine and antibiotics in the scrotum.
 - C. UHF.
 - D. Inductothermy.
 - E. Ozokerite (paraffin) therapy.

6. What is appropriate to apply for a patient with a mixed anaerobic urinary tract infection:
- Cephalosporin + metranidazol.**
 - Carbenicillin + gentamicin.
 - Biseptol + gentamicin.
 - Gentamicin.
 - All answers are correct.
7. What is appropriate in the case of chronic latent parenchymal prostatitis:
- Physiotherapy.**
 - Cold water treatment.
 - Physical training – exercises on the lumbus and perineum muscles
 - Instillation of drugs into the bladder.
 - Charcot's douche.
8. What is reasonable in the case of cystalgia:
- Hormone replacement therapy.**
 - Acupuncture.
 - Therapeutic exercise.
 - Electrophoresis and sinusoidal currents.
 - Electrostimulation.
9. What is prescribed in the case of cystalgia:
- None of the above.**
 - Gentamicin intramuscularly.
 - Instillation into the bladder of 0.25% solution of saltpeter silver
 - All drugs.
 - Prozerin.
10. What health-resorts are recommended to the patients with inflammatory diseases of the prostate gland:
- Saky.**
 - Marcial mineral waters, Narzan of the North Caucasus
 - Borzhomi.
 - Truskavets.
 - Beryozovskiminwater.

Tests of the 2nd level:

1. What physiotherapy method is reasonable in the case of chronic prostatitis:
- Electrophoresis with antibiotics:**
 - Ozokerite.**
 - Electrical stimulation with “Intraton”.

- D. UHF.
 - E. Light therapy.
2. Everything is reasonable in the case of chronic prostatitis, except for:
 - A. **Cryo sauna.**
 - B. **Hypnosis.**
 - C. Mud therapy.
 - D. Antibiotics.
 - E. Immunostimulants.
 3. What is recommended in the case of acute hemorrhagic cystitis, except for:
 - A. **Cystoscopy.**
 - B. **Instillation of drugs into the bladder.**
 - C. Antibiotics.
 - D. Antispasmodics.
 - E. Nonsteroidal anti-inflammatory drugs.
 4. The following drugs are prescribed in the case of vesiculitis:
 - A. **Antibiotics.**
 - B. **Diclofenac.**
 - C. **Vitreous humor.**
 - D. Prednisolone.
 - E. Adrenaline.
 5. Name the drugs that are used for acute orchitis:
 - A. **Amikacin.**
 - B. **Heparin.**
 - C. **Cefepime.**
 - D. Trianol.
 - E. Omnadren.

Tests of the 3rd level:

1. A 60-year-old patient complains of frequent, sharp urination, pain in the perineum with irradiation to the scrotum, body temperature to 38.2°C. He has been sick for a day after hypothermia. Three-glass test was made. In the first portion: protein is 0.33 g/l, leukocytes are 50-60 in the FOV, red blood cells are 8-12 in the FOV; II portions: protein has submicrograms, leukocytes are 10-12 in the FOV, erythrocytes are 1-3 in the FOV; in the III portion: protein has submicrograms, leukocytes are 12-14 in the FOV, erythrocytes are 3-5 in the FOV, protein has submicrograms. The most likely diagnosis is
 - A. **Acute prostatitis.**
 - B. Acute glomerulonephritis.

- C. Acute pyelonephritis.
 - D. Benign prostatic hyperplasia.
 - E. Acute epididymitis.
2. A 30-year-old patient complains of frequent, sharp urination, pain along the urethra, perineum with irradiation to the scrotum. He has been sick after hypothermia. Prostate gland is enlarged to 4x5 cm with the digital rectal examination of the prostate gland; it is tightly elastic, painful and interlobar groove can be observed. The most likely diagnosis is:
- A. **Acute prostatitis.**
 - B. Acute urethritis.
 - C. Acute pyelonephritis.
 - D. Prostatic Hyperplasia.
 - E. Acute epididymitis.
3. A 33-year-old patient complains of frequent, sharp urination, incomplete emptying of the bladder. She has been sick for several years. In the urine test: leukocytes are
- 20-25 on FOV, lysed erythrocyte are 4-8 on the FOV. In the cystoscopy: the bladder capacity is 200 ml, the openings of the ureter are in a typical place, vascular injection of the mucous membrane of the bladder neck. The most likely diagnosis is:
- A. **Chronic cystitis.**
 - B. Acute pyelonephritis.
 - C. Acute cystitis.
 - D. Chronic urethritis.
 - E. Benign prostatic hyperplasia.
4. A 29-year-old patient complains of acute pain in the perineum, high temperature to 40⁰C, the inability to urinate. He felt acutely sick after hypothermia. The prostate gland is increased, intense and sharply painful; a fluctuation area is present during digital rectal examination. What is the most likely diagnosis:
- A. **Abscess of the prostate gland.**
 - B. Acute pyelonephritis.
 - C. Acute cystitis.
 - D. Acute prostatitis.
 - E. Benign prostatic hyperplasia.
5. A 32-year-old patient complains of acute pain in the perineum with radiation to the right testicle, body temperature to 39°C and frequent desire to urinate. He felt acutely sick after hypothermia. In the blood test: leuk. are $15.9 \times 10^9/l$, stab neutrophils are 18%, ESR is 6 mm/h. On the ultrasound: the prostate gland is enlarged, the volume is 66 cm³, a hypoechoic formation (35x30mm) is in the right lobe and the residual urine is 80 cm³. He is hospitalized with a diagnosis of abscess of the prostate gland. What is the proper treatment?

- A. Percutaneous abscess drainage.**
 - B. Percutaneous cystostomy.
 - C. Conservative antibiotic therapy.
 - D. Catheterization of the bladder.
 - E. Surgical drainage of abscess.
6. A 39-year-old patient complains of pain in the right half of the scrotum, testicular enlargement, the presence of a fistula with the release of pus. He has been sick for 6 weeks. The antibacterial therapy is ineffective. Make a diagnosis, prescribe proper treatment:
- A. Abscess of testicle. Exploration of the testicle.**
 - B. Abscess. Orchiectomy.
 - C. Tuberculosis. Specific therapy.
 - D. Testicular cancer. Orchiectomy
 - E. Testicular cancer. Biopsy.
7. The patient was admitted to the emergency department with complaints of blood purities in the urine, increased desire to urinate, pain during urination, pain in the lower abdomen. In the urine test: protein is 0.99 g/l, white blood cells are 1/2 in the FOV, fresh red blood cells are 14-20 in the FOV. What method is use by a urologist to make a diagnosis?
- A. Ultrasound.**
 - B. Survey urography.
 - C. CT.
 - D. MRT.
 - E. Cystoscopy.
8. A 35-year-old patient complains of pelvic pain, difficulty urinating, fever up to 38°C, fever. He has been sick for 10 days. In the urine test: leukocytes are in the entire FOV. The gland is sharply painful and is evenly increased in size during examination of the prostate gland. A purulent content is secreted from urethra after the massage. What pathology is suspected?
- A. Acute prostatitis.**
 - B. Acute paraproctitis.
 - C. Abscess of the prostate gland.
 - D. Chronic prostatitis.
 - E. Benign prostatic hyperplasia.
9. A 23-year-old patient sought to medical attention with complaints of pain over the pubic in the perineum, radiation to the scrotum and frequent urination. He has been sick for day. The prostate gland is swollen and painful during rectal digital examination. What pathology is suspected?
- A. Acute prostatitis.**

- B. Acute cystitis.**
 - C. Abscess of the prostate gland.
 - D. Acute urethritis.**
 - E. Acute epididymitis.

- 10. The patient sought to medical attention with complaints of blood purities in the urine, increased desire to urinate, urethralgia, pain in the lower abdomen. In the urine: protein is 0.99 g/l, white blood cells are 1/2 in the FOV, fresh red blood cells are 14-20 in the FOV. Your preliminary diagnosis is:
 - A. Acute cystitis.**
 - B. Acute pyelonephritis.
 - C. Bladder cancer.
 - D. Acute adnexitis.**
 - E. Urolithiasis.

- 11. The profuse discharge from the urethra and frequent urination, urethralgia are noted in a 29-year-old male about 3 days after intercourse. What is the preliminary diagnosis:
 - A. Acute urethritis.**
 - B. Acute pyelonephritis.
 - C. Acute cystitis.
 - D. Cystic calculi.**
 - E. Acute prostatitis.

- 12. Acute pain was being appearing in the right inguinal region with radiation to the scrotum in a 3.5-year-old boy since past two hours in a row. The right testicle is increased and strained. Your preliminary diagnosis is:
 - A. Torsion of the testicle.**
 - B. Acute orchiditis.
 - C. Acute appendicitis.
 - D. Impaction of bubonocoele.**
 - E. Infectious parotitis, orchitis.

- 13. Acute pain was appeared in a 13-year-old boy after a game of football in the evening. It was sharply located in the right inguinal region with radiation to the scrotum. The skin of the scrotum is not changed during examination, the right testicle is not enlarged, and it is painful on palpation. Ultrasonic Doppler examination of the scrotum: testicles and epididymis have normal size, the blood supply is not disturbed, a small amount of fluid is visualized around the right testicle. The preliminary diagnosis is:
 - A. Torsion hydatid.**
 - B. Acute orchiditis.
 - C. Trauma of testicle.
 - D. Torsion of the testicle.**
 - E. Rupture of testicle.

14. An 89-year-old patient has been on a permanent urethral catheter due to benign prostatic hyperplasia and acute urinary retention for 10 days. A pain was appeared about a day in the right half of the scrotum; increased body temperature to 38.9 °C was noted. A natural urination did not recover after removal of the catheter. A seropurulent discharge is observed from the urethra. The right testicle is enlarged, sharply painful; the hyperemia of the skin of the scrotum above the testicle is noted. Your treatment tactic is:
- A. Percutaneous cystostomy.**
 - B. Retropubic prostatectomy.**
 - C. Transurethral prostatic resection.**
 - D. Repeated catheterization of the bladder.**
 - E. Conservative antibacterial therapy.**
15. A 16-year-old boy complains of pain in the right iliac region with radiation to the scrotum, increased its size. Temperature is 37.8°C. The boy fetched a blow of ball into the groin playing football three days ago. Objectively: the skin is pale. The changes are not revealed by a palpation of a stomach. A slight hyperemia of the skin is observed by examination of the scrotum. The appendage has thickening and soreness during palpation. On the ultrasound: the testicle has normal size and structure, the appendage is enlarged, the fluid is in the membranes of the testicles. Your diagnosis is:
- A. Acute epididymitis.**
 - B. Acute orchitis.**
 - C. Spermatocele.**
 - D. Torsion of the testicle.**
 - E. Trauma of the testicle**
16. A sharp pain without apparent reason was noted in a 17-year-old patient at 2:00 am in the right half of the scrotum. On examination: the right testicle with an appendage is pulled to the external inguinal ring. The testicle is enlarged, sharply painful, the appendage is determined in front of the testicle; the boundary between them is not clearly defined. What is the doctor's tactic?
- A. Revision of the scrotum.**
 - B. Conservative antibiotic therapy.**
 - C. Dynamic observation.**
 - D. Novocainic blockade of the spermatic cord.**
 - E. Prescription of painkillers.**
17. A 77-year-old patient has been on a permanent urethral catheter concerning acute urinary retention after a stroke for 5 days. Increase body temperature to 38°C is noted about a day. A pain is in the urethra, increased penis is noted about a day too. On examination: the penis is swollen, painful on palpation. Hyperemia of the skin of the penis and tighten of cavernous body are observed. What complication was developed as a result of prolonged urinary bladder drainage with a urethral catheter?

- A. Acute cavernitis.**
 - B.** Abscess of the prostate gland.
 - C.** Purulent urethritis.
 - D.** Chronic prostatitis.
 - E.** Acute prostatitis.
18. An 80-year-old patient has been on a permanent urethral catheter for 10 days concerning acute urinary retention. He has the body temperature to 38.8°C. A pain in the urethra and purulent discharge from the urethra are observed. What process has developed in the patient?
- A. Purulent urethritis.**
 - B.** Cystitis.
 - C.** Orchoepididymitis.
 - D.** Acute prostatitis.
 - E.** Incontinence of urine.
19. A 24-year-old patient complains of severe pain and swelling of the penis, difficulty urination. He has been sick during the day. It is known from the anamnesis that he could not insert constricted front skin of the head of the penis back when the withdrawal motion is performed. Objectively: balanus is swelling, hyperemia is noted. Attempt to perform withdrawal motion of balanus was ineffective. What urgent priority measures will you hold?
- A. Dissection of the front skin ring.**
 - B.** Conservative antibiotic therapy.
 - C.** Percutaneous cystostomy.
 - D.** Catheterization of the bladder.
 - E.** Prescription of painkillers.
20. A 64-years-old patient complains of severe pain, swelling of the balanus, serous-purulent discharge from the prepuce and increased body temperature to 37.3°C. He has been sick for 3 days. From the anamnesis it is known that he has been suffering from diabetes for 10 years. Objectively: the swelling of the balanus and hyperemia are observed. The most likely diagnosis is:
- A. Acute balanoposthitis.**
 - B.** Acute cavernitis.
 - C.** Purulent urethritis.
 - D.** Purulent prostatitis.
 - E.** Acute prostatitis.
21. A 67-year-old patient complains of pain in the right half of the scrotum and the scrotum has increased size, body temperature to 38.4°C, chills. Considers himself sick during the day. The onset of the disease is associated with colds and exercise. With an objective examination the right half of the scrotum is enlarged, the skin is strained hyperemic. The enlarged and sharply painful right testicle and appendage are palpated. Spermatic cord thickened painful. Complete blood test: red blood cells are

4.0x10¹²/l, hemoglobin is 124 g/l, white blood cells are 9.2x10⁹/ l, stab neutrophils are 10%, segmented neutrophils are 54%, lymphocytes are 27%, monocytes are 9%; ESR is 12 mm/h. What is the most likely pathology?

- A. Acute right-sided epididymitis.**
- B.** Hydrocele of the right testicle.
- C.** Tumor of the right testicle.
- D.** Torsion of the spermatic cord.
- E.** Strangulated right-sided inguinal hernia.

22. A 27-year-old patient was admitted to the hospital with complaints of sharp pain in the left half of the scrotum, its increase in size, body temperature to 39°C, sweating, and general weakness. He felt sick after hypothermia, when the pain in the scrotum appeared and gradually increased, the temperature increased, the left half of the scrotum increased. An objective examination: the left testicle is increased in size, dense, sharply painful on palpation; the skin of the scrotum is hyperemic. Leukocytosis with a shift of the formula to the left is in the blood test. What disease is described?

- A.** Acute orchiditis.
- B.** Acute venous thrombosis of the spermatic cord.
- C.** Acute funiculitis.
- D.** Acute orchitis.
- E.** Acute colliculitis.

23. A 35-year-old patient complains of frequent, painful, difficult urination, constant desire to urinate, and the appearance of a few drops of blood in the urine at the end of urination. She felt sick suddenly after hypothermia. On the ultrasound: a little urine in the bladder, the walls of the bladder are swollen, evenly thickened. In the urine test

- Protein is g/l, erythrocytes are (5-7 in the FOV) not changed, leukocytes are 30-40 on the FOV. Make a diagnosis:

- A. Acute cystitis.**
- B.** Acute salpingo-oophoritis.
- C.** Ureterocele.
- D.** Bladder tumor.
- E.** Bladder stone.

24. A 20-year-old N. patient complains of frequent urination, false desire to urinate, pain, burning sensation in the suprapubic region, aggravated by urination. Several drops of blood appeared with urine in the last portion of urine.

She has been sick for several days after sexual intercourse. The patient noted four such episodes during the year; she did not seek to the doctors. The temperature did not rise. The urine is cloudy, protein is 0.066 g/l, erythrocytes are unchanged and they are 5-7 on the FOV, leukocytes are on 1/4 of the FOV. What disease is described?

- A. Chronic cystitis in the stage of active exacerbation.**
- B. Acute cystitis.
- C. Exacerbation of chronic urethritis.
- D. Bladder tumor.
- E. Bladder stone.

25. A 12-year-old girl was admitted to the hospital with complaints of pain in the lower abdomen, frequent and cutting urination. She has been sick for a day after hypothermia. The urine analysis: protein is 0.033 g/l, erythrocytes are 3-4 on the FOV, and leukocytes are 30-40 on the FOV. What pathology is likely described?

- A. Acute cystitis.**
- B. Acute glomerulonephritis.
- C. Acute interstitial nephritis
- D. Acute pyelonephritis.
- E. Infection of the urinary tract.

26. A 6-year-old girl was hospitalized with complaints of pain in the lower back, lower abdomen, frequent and cutting urination. E. coli is in the bacteriological examination of urine. What pathology is described?

- A. Infection of the urinary tract.**
- B. Acute glomerulonephritis.
- C. Acute interstitial nephritis.
- D. Acute pyelonephritis.
- E. Acute salpingo-oophoritis.

27. A 35-year-old patient complains of frequent, painful, urination, the appearance of a few drops of blood in the urine at the end of urination. She has been suffering from chronic cystitis for 2 years. The above symptoms appeared after hypothermia about 3 days ago. On the ultrasound, a little urine in the bladder are detected, the walls of the bladder are swollen and evenly thickened. In the urine tests, leukocytes are on the entire FOV, protein is 0.056 g/l, red blood cells are not changed, they are to 10 on the FOV. Determine the diagnosis:

- A. Exacerbation of chronic cystitis.**
- B. Acute salpingo-oophoritis.
- C. Ureterocele.
- D. Bladder tumor.
- E. Bladder stone.

28. A 10-year-old child has been sick for a week. The pain in the abdomen and in the lower back, frequent urination, the body temperature to 38⁰C appeared after hypothermia. In the analysis of urine: leukocytes are 25-30 on the FOV, protein is 0.33 g/l. What examination should be carried out for the appointment of etiotropic treatment?
- A. Bacteriological urine culture.**
 - B. Intravenous urography.
 - C. Zimnitsky's test.
 - D. Nechiporenko' test.
 - E. Cystography.
29. A 13-year-old girl complains of pain in the suprapubic area, frequent and sharp urination or in small portions of urine. The fever is 37,7⁰C. In the urine test: proteinuria is 0.033 g/l, fresh erythrocytes are completely in the preparation, leukocytes are on ½ FOV. What is the most likely diagnosis?
- A. Acute cystitis.**
 - B. Acute urethritis.
 - C. Acute glomerulonephritis.
 - D. Acute pyelonephritis.
 - E. Urolithiasis
30. A 3-year-old girl seeks to the doctor with complaints of fever and abdominal pain for the third time in the last year. The skin is pale. The pathology was not detected from the side of the heart and lungs; the stomach is soft. In the general analysis of urine: leukocytes are 70-80 on the FOV, erythrocytes are 1-2 on the FOV. The abnormalities were not revealed from the ultrasound of the kidneys. Which of the examinations will be the most informative for diagnosing the cause of frequent inflammation in the urogenital system:
- A. Micturating cystography.**
 - B. Excretory urography.
 - C. Dynamic renal scintigraphy.
 - D. Examination of blood for urea and creatinine.
 - E. Zimnitsky's test.
31. A 9-year-old girl has complaints of pain during urination, above the pubis, frequent desire to urinate. She was treated concerning enterobiosis a month ago. Objectively: the condition is not disturbed, the skin is clean and without edema, moderate pain over the pubis with deep palpation is observed. A pain is not marked with tapping in the projection of the kidney. The urination is frequent, the urine is cloudy. What is the most likely diagnosis?
- A. Acute cystitis.**
 - B. Renal tuberculosis.
 - C. Acute glomerulonephritis.

- D. Acute pyelonephritis.**
E. Acute vulvovaginitis.
32. A 12-year-old girl was treated twice with antibacterial drugs concerning urinary tract infection. She does not have gross kidney malformations on the ultrasound. The backset of leukocyturia and bacteriuria is observed. The body temperature is 38.5°C and pain is in the left lower back. What research should be carried out to clarify the cause of recurrence of urinary infection?
- A. Excretory urography.**
B. Micturating cystography.
C. Retrograde pyelography.
D. Thermography..
E. Radioisotope renography.
33. A 22-year-old man observes a blunt perineum, sometimes frequent urination and pain during urination, poor mucous discharge from the urethra. He has been sick for one year. The disease is associated with the beginning of sexual relations. On the gital rectal examination: the prostate gland is not enlarged, heterogeneous consistency, moderately painful. In the analysis of prostate juice: red blood cells are 8-10 in the field of view, leukocytes are 50-60 in the field of view. What examination is necessary for the appointment of etiotropic treatment?
- A. Studies of urethral contents for urogenital infection.**
B. Bacteriological urine culture.
C. Urine test.
D. Nechiporenko's test.
E. Bacteriological culture of prostate juice.
34. A 29-year-old woman has complaints of pain during urination, frequent desire to urinate. She was treated concerning colpitis about a month ago. Objectively: the condition is not disturbed, the skin is clean and no edema, moderate pain over the pubis is noted with deep palpation. A pain is not marked during tapping on the projection of the kidney. The urine analysis is normal. What is the most likely diagnosis?
- A. Cystalgia.**
B. Chronic cystitis.
C. Chronic urethritis.
D. Chronic adnexitis.
E. Chronic vulvovaginitis..

Topic: Tuberculosis of the urinary and male reproductive systems

Tests of the 1st level:

1. What does the most often cause the tuberculin test of the following changes in the analyzes:
 - A. Increasing leukocyturia, erythrocyturia.**
 - B. Increased blood urea.
 - C. Increase of globulins.
 - D. Occurrence of tuberculosis mycobacterium in urine.
 - E. All changes are correct.
2. A patient who has renal tuberculosis, the differential diagnostic is not conducted with:
 - A. Simple kidney cyst.**
 - B. Chronic pyelonephritis.
 - C. Infected calyceal stones.
 - D. Chronic leukocyturia.
 - E. Necrotic papillitis.
3. Mycobacterium tuberculosis enters into the kidney most often through:
 - A. Hematogenous way.**
 - B. Contact way from neighboring organs.
 - C. Восходящим путем.
 - D. Ascending way.
 - E. On the walls of the ureters.
4. The most frequent and characteristic changes in urine at kidney tuberculosis are:
 - A. Leukocyturia and hematuria.**
 - B. Cylindruria.
 - C. Absence of elements in urine sediment.
 - D. Leukocyturia.
 - E. Hematuria.
5. To identify tuberculous mycobacteria in the urine, all of the above methods are used, except for:
 - A. Immunological.**
 - B. Bacteriological.
 - C. Bacterioscopic.
 - D. Biological.
 - E. Except 3 and 4.

6. Radiological signs of petrification in case of renal tuberculosis have:
- A. Fuzzy contours and inhomogeneous structure and they are located in the projection of the parenchyma.**
 - B. Clear contours and homogeneous structure.
 - C. They are located in the projection of the pelvicalyceal system.
 - D. They are located in the projection of the renal hilum.
 - E. 2 and 4 are true.
7. What is used in the treatment of streptomycin to eliminate side effects:
- A. Multivitamins and calcium pantothenate.**
 - B. Increased fluid intake.
 - C. Low-salt diet.
 - D. Only vitamin D complex.
 - E. 2 and 4 are true.
8. Healing criteria for renal tuberculosis are based on:
- A. On the stability of an X-ray picture and the negative results of provocative tests for 5 years.**
 - B. On the negative results of urine culture for 2 years after the end of treatment.
 - C. The absence of red blood cells in the urine.
 - D. On the negative results of provocative tuberculin tests for 3 years.
 - E. 1 and 3 are true.
9. How many times urine culture is performed to monitor the results of treatment of patients with renal tuberculosis:
- A. 1 time in 6 months.**
 - B. Every week.
 - C. Every month.
 - D. 1 time in 2 months.
 - E. 1 time in 3 months.
10. What are the symptoms of prostate tuberculosis?
- A. Pain in the perineum and rectum. Dysuria**
 - B. Dysuria.
 - C. Discharge of pus from the urethra.
 - D. All of the above.
 - E. 2 and 3.

11. What is more often detected by digital rectal examination at tuberculous prostatitis:
- A. The tuberous surface of the prostate gland with dense nodules and foci of fluctuation.**
 - B. Reducing of the size of the prostate gland.
 - C. Clear contours of the prostate gland.
 - D. Presence along with dense foci of fluctuation sites.
 - E. 2 and 4 are correct.
12. The diagnosis of renal tuberculosis is not carried out:
- A. Simple renal cyst.**
 - B. Chronic pyelonephritis.
 - C. Spongy kidney.
 - D. With calix calculus.
 - E. With necrotic papillitis.

Tests of the 2nd level:

1. What is the characteristic of an X-ray picture of tuberculosis:
- A. Foci of destructive changes.**
 - B. Irregular shape and contours of cavities.**
 - C. Regular shape and contours of the cavities.
 - D. Uniformity of retentional changes.
 - E. All answers are true.
2. What are the radiological signs of petrification at renal tuberculosis:
- A. Fuzzy contours and inhomogeneous structure.**
 - B. They are located mainly in the projection of the parenchyma of the kidney.**
 - C. They are located behind the projection of the kidney, on the vessels.
 - D. Clear contours and homogeneous structure.
 - E. They are located in the projection of the pelvicalyceal system.
3. At renal tuberculosis the changes of the renal ureter opening include:
- A. Cystic protrusion.**
 - B. Retraction.**
 - C. Hyperemia.**
 - D. Edema.
 - E. The absence of any manifestations.
4. What are the characteristic changes of urine at tuberculosis:
- A. Acidic reaction.**

- B. Content of moderate amount of protein (0.35-0.98%).**
 - C. Neutral reaction and a lot of flat and transitional epithelium.
 - D. Hematuria.
 - E. Presence of hyaline cylinders are to 15 in FOV.
5. What is not used at tuberculosis for the purpose of ureteral stenosis:
- A. Azathioprine.**
 - B. Trental.**
 - C. Prednisolone.
 - D. Lydasum.
 - E. Vitreous humor.
6. What vitamins are taken to reduce side effects in the treatment of IAH drugs?
- A. Vitamin B6 complex**
 - B. Vitamin B12 complex**
 - C. Vitamin C and K complex
 - D. Vitamin K complex
 - E. Vitamin E complex.

Tests of the 3rd level:

1. A 54-year-old patient complains of occasional frequent urination with cutting pain. The intake of antiseptics does not provide significant relief. What diseases can cause these symptoms?
- A. Tuberculosis of the bladder.**
 - B. Simple bladder ulcer.
 - C. Bladder cancer.
 - D. Chronic pyelonephritis.
 - E. Chronic cystitis.
2. A 42-year-old patient has dysuria and microhematuria. The capacity of the bladder is 110 ml observed during cystoscopy, the mucosa in the area of the right mouth is hyperemic, swollen, the opening is retracted. What disease can be suspected in a patient?
- A. Urinary tuberculosis.**
 - B. Chronic cystitis.
 - C. Contraction of bladder.
 - D. Ureterocele on the right.
 - E. Stricture of the lower third of the right ureter.
3. A 45-year-old patient has repeated episodes of dysuria. Leukocyturia and erythrocyturia are revealed by microscopy of urine sediment. Tuberculous spondylitis is present in the case-history. Choose the most appropriate examination to diagnose urinary system tuberculosis:
- A. Bacteriological examination of urine.**

- B. Biological sample.
 - C. Pirquet's test.
 - D. Microscopy of ejaculate.
 - E. Microscopy of urine.
4. A 30-year-old man addressed to a surgeon which complains of pain in the left half of the scrotum, testicular enlargement, and discharge of pus from the urine. He has been ill for 6 months. What is the indication of genital tuberculosis in a patient?
- A. All listed below.**
 - B. Chronic course..
 - C. Recurrent nature of the disease.
 - D. The presence of fistula.
 - E. Secondary lesions.
5. The urologist suspected a specific lesion of the genital organs in a patient with pulmonary tuberculosis. What is the most appropriate in this case?
- A. Biopsy of the epididymis.**
 - B. Cystoscopy.
 - C. Tuberculostatic therapy.
 - D. Surgical treatment.
 - E. None of the above.
6. The prostate gland was enlarged, irregular, dense, and painless in a 47-year-old patient during palpation. Renal tuberculosis is in the case-history. What is the most likely diagnosis?
- A. Tuberculosis of the prostate gland.**
 - B. Sclerosis of the prostate gland.
 - C. Prostate gland cancer.
 - D. Prostate gland hyperplasia.
 - E. Chronic prostatitis.
7. A 45-year-oldp has a complaint of dysuria, low-grade fever, dull pain in the lumbar region on the right, and general weakness. In urine tests: leukocytes cover the entire field of view. The reaction of the urine is acidic. According to the bacteriological examination: pathological flora was not detected in the urine. What diagnosis should be determined?
- A. Tuberculosis of the genitourinary system.**
 - B. Acute cystitis.
 - C. Acute prostatitis.
 - D. Prostate gland hyperplasia..
 - E. Acute pyelonephritis.

8. Infiltrative tuberculosis of the right kidney was diagnosed in a 29-year-old Sh. patient. How long should a course of antibiotic therapy of this disease last?
- A. **0.5-2 years.**
 - B. 6 months.
 - C. 3 months.
 - D. 1 month.
 - E. 9 months.
9. The extension of the pelvis of the right kidney, “amputation” of the upper calyx, multiple narrowing of the right ureter were showed according to the results of excretory urography in a 33-year-old patient. What is the most likely diagnosis?
- A. **Tuberculosis of the urinary system.**
 - B. Renal dystopia.
 - C. Renal cancer.
 - D. Ureterohydronephrosis.
 - E. Chronic pyelonephritis.
10. The opening of the right ureter was retracted, deformed, gaping during cystoscopy in a 32-year-old patient. Small pale-yellow tubercles are around the ureter opening. What disease can be described in this cystoscopy data?
- A. **Urinary tuberculosis.**
 - B. Abnormal development of the bladder.
 - C. Chronic cystitis.
 - D. Tumor of ureter.
 - E. Bladder tumor.
11. A 40-year-old patient has dull, aching pain in the right lumbar region, sweating, loss of working capacity, low-grade fever. Tuberculosis of the cervical vertebrae is noted in the case-history after treatment. She released from the dispensary registration. In the urine test: leukocytes cover the entire field of view, protein is 1.0 g/l, the urine reaction is acidic. Make a diagnosis.
- A. **Renal tuberculosis.**
 - B. Chronic pyelonephritis.
 - C. Paranephritis.
 - D. Nephritis.
 - E. Vertebral tuberculosis recurrence.
12. A 48-year-old female patient was treated concerning renal tuberculosis. She has complaints of frequent pain during urination and urination in small portions, hematuria. The urine is cloudy, Koch's bacillus is revealed in the microscopy. Make a diagnosis.
- A. **Urinary tuberculosis, scarring of the bladder.**

- B. Chronic cystitis.
 - C. Chronic pyelonephritis.
 - D. Sexual tuberculosis.
 - E. Bladder tumor.
13. A 32-year-old patient had been suffering from chronic epididymitis for 2 years, and he complains of the presence of a purulent fistula of the scrotum. The epididymis is hilly, dense on the examination and inverted fistulas are determined, the scrotal skin is attached to the epididymis. Make a diagnosis.
- A. Tuberculous epididymitis.**
 - B. Chronic epididymitis.
 - C. Testicular tumor.
 - D. Acute purulent epididymitis.
 - E. Suppuration of scrotal hydrocele.
14. A 36-year-old patient complains of frequent painful urination in small portions. She has been sick for 3 months. She was treated concerning cystitis by a family doctor. Healing was marked temporarily, but dysuria was repeated after some time. The pathological changes in the urine (proteinuria is to 1.0 g/l, leukocyturia) did not disappear after 10-12 day course of antibiotic therapy. Focal pulmonary tuberculosis was found in the father of the patient. The pathological changes on the side of the internal organs were not detected by objective examination. What diseases are characterized by these symptoms?
- A. Urinary tuberculosis.**
 - B. Chronic cystitis.
 - C. Bladder ulcer.
 - D. Chronic pyelonephritis.
 - E. Bladder tumor.
15. A 46-year-old patient has been suffering from expressed dysuria for 4 months. Periodic antibacterial therapy led to a temporary healing without improvement of laboratory parameters of urine (proteinuria is 1.2 g/l, leukocyturia is on ½ of the visual field). The patient has contact with patients with pulmonary tuberculosis at work. Physically: the pathology on the part of the internal organs was not noted. What examination of the patient is necessary to make the diagnosis?
- A. All of the following.**
 - B. Bacteriological examination of urine is performed to detect mycobacterium tuberculosis.
 - C. Cystoscopy.
 - D. Microscopy of urine is carried out on mycobacterium tuberculosis.
 - E. Survey urography and excretory urography.

16. A 40-year-old patient has been suffering from dull pain in the left lumbar region, dysuria, and occasionally low-grade body temperature a long time. Objectively: the abdomen is soft. The kidneys are not palpable. Pasternatsky's symptom is negative. In the analysis of urine: the reaction is acidic, the specific gravity is 1022, the leukocytes are on $\frac{1}{4}$ FOV, the erythrocytes are 7-9 on FOV, the bacteria are not observed. The aerobic bacterial flora is not detected by urine culture. The shadow of irregular shape and heterogeneous density is on the survey urography in the projection of the parenchyma of the lower segment of the right kidney
- Other pathology was identified. What research methods should be used to clarify the diagnosis?
 - A. Bacteriological examination of urine is performed to determine mycobacterium tuberculosis.**
 - B. Bacterioscopic urine tests.
 - C. Ultrasound of the urinary system.
 - D. Biological sample.
 - E. Chest X-ray examination.
17. A 36-year-old patient has dysuria for a long time. The treatment of cystitis does not have effect. On the chromocystoscopy: the cystoscope is introduced unhindered, residual urine is absent, a bladder capacity is 170 ml, yellow hills are determined in the area of the opening of the right ureter, area of hyperemia is around. The mucosa is not changed in other parts of the bladder. The indigo carmine is released on the 4th minutes from the left opening; it is released on the 14th minutes from the right. The urine analysis: color is yellow pH is 6.0, specific gravity is 1026, protein is 0.28 g/l, leukocytes are 17-18 on the field of view. Make a diagnosis.
- A. Urinary tuberculosis.**
 - B. Chronic cystitis.
 - C. Bladder tumors.
 - D. Chronic pyelonephritis.
 - E. Bladder ulcers.
18. Leukocyturia was found in 32-year-old patient during a physical examination. The patient has ankylosis of the left knee-joint after suffering from tuberculous gonitis in childhood. What is the possible cause of leukocyturia?
- A. Urinary tuberculosis.**
 - B. Chronic pyelonephritis.
 - C. Chronic cystitis
 - D. Chronic prostatitis.
 - E. Urolithiasis.
19. A 44-year-old patient felt ill 2 months ago when sudden pain appeared in the left half of the scrotum within a few hours. Hyperemia, edema, body temperature was to 38.6⁰C. He was treated with anti-inflammatory drugs in the OPC. He was discharged after 2 weeks with improvement. A dull pain in the left half of the scrotum is noted with examination.

The patient denies the contact with tuberculosis patients. A dense, irregular swelling (2×1.5 cm) is palpable in the tail section of the epididymis of the left testicle. The skin of the scrotum is tightly soldered to the appendage; a fistula with purulent content is present. During a digital rectal examination: the prostate gland has normal size and shape, the surface is undulating and the gland is painful by palpation. What is your preliminary diagnosis?

- A. Chronic left-sided epididymitis with fistula.**
- B. Tuberculous epididymitis on the left.
- C. Abscess of the left testicle.
- D. Tumor of the epididymis of the left testicle.
- E. Tuberculous prostatitis.

20. A 48-year-old patient complains of pain in the right half of the scrotum, the scar is 2×3 cm. The epididymis of the testis on the right is dense and enlarged, soldered to the skin in the region of the scar. A purulent fistula was in place of the scar previously. The urine analysis: pH is 5.8, protein is 0.6 g/l, specific gravity is 1012, white blood cells are 60-80, and red blood cells are single on the FOV. What is a disease?

- A. Urinary and genital tuberculosis.**
- B. Sexual tuberculosis.
- C. Urinary tuberculosis.
- D. Chronic epididymitis.
- E. Chronic orchitis.

21. A cystoscopy was performed for a 48-year-old patient concerning prolonged macrohaematuria. He had infiltrative pulmonary tuberculosis at 40-years-old. The damage of the mucous membrane of the bladder was revealed in the form of exophytic eroded papillary formations on the broad pedicle. What is the leading role in the differential diagnosis of the disease?

- A. Endovesical biopsy.**
- B. Pneumocystography.
- C. Polycystography.
- D. Excretory urography.
- E. Determination of serum tumor markers.

22. A 50-year-old patient has been suffering from post-tubercular scarring of the bladder. What following operation is recommended to reduce dysuria and improve the flow of urine from the upper urinary tract:

- A. Intestinal plastic bladder.**
- B. Cystostomy.
- C. Ureterocutaneostomy.
- D. Nephrostomy.
- E. Cystectomy.

23. A specific renal damage is suspected in a patient with pulmonary tuberculosis. What research will help us to confirm the suspicion?
- A. Bacteriological examination of urine is performed to detect special nutrient media and the presence of mycobacteria in it.**
 - B. The presence of increased number of leukocytes in the urine.
 - C. A positive tuberculin test.
 - D. A positive result by Ziehl-Nielsen staining smears.
 - E. A positive polymerase chain reaction.
24. What is the appropriate treatment with the aim of achieving a cure for a patient with focal tuberculosis of the renal parenchyma?
- A. Combined chemotherapy and organ-preserving surgery.**
 - B. Nephrectomy.
 - C. Chemotherapy.
 - D. Nephrotomy.
 - E. Cavernotomy.
25. A 50-year-old patient has frequent episodes of dysuria. The leukocytes and erythrocytes are microscopically in the urine. Tuberculous spondylitis is in the case-history. What is the most appropriate research that will help us to confirm urinary system tuberculosis?
- A. Survey and excretory urography.**
 - B. Retrograde ureteropyelography.
 - C. Microscopy of urine.
 - D. Ultrasound of the genitourinary system
 - E. Bacteriological examination of prostate secretions for the detection of mycobacterium tuberculosis
26. A 30-year-old man addressed to a surgeon who complains of pain in the left half of the scrotum, testicular enlargement, and discharge of pus from the fistula. He has been sick for 6 months. What is most appropriate in this case?
- A. Diagnosis of sexual tuberculosis concurrently with orchidectomy.**
 - B. Treatment with broad-spectrum antibiotics.
 - C. Surgical treatment followed by examination..
 - D. Surgical treatment after confirming the diagnosis of sexual tuberculosis.
 - E. Secondary lesion.
27. A specific lesion of the genital organs was revealed by the urologist while examination of a patient with pulmonary tuberculosis. What is most appropriate in this case?
- A. Bacteriological examination of prostate secretion for the detection of mycobacterium of tuberculosis.**

- B. Cystoscopy.
 - C. Tuberculostatic therapy.
 - D. Surgical treatment.
 - E. Prostate gland biopsy.
28. Tuberculous epididymitis was confirmed in a 43-year-old patient. The surgical treatment is carried out with:
- A. Simultaneously with tuberculostatic therapy.**
 - B. After tuberculostatic therapy.
 - C. Before tuberculostatic therapy.
 - D. After administration of broad-spectrum antibiotics.
 - E. All are correct.
29. The prostate gland is enlarged, irregular, dense and painless in a 35-year-old with palpation of it. Renal tuberculosis is in the case-history. What is the most appropriate research method?
- A. Bacteriological examination of prostate secretion for the detection of mycobacterium of tuberculosis.**
 - B. Bacteriological examination of urine for the detection of tuberculosis mycobacterium.
 - C. Ultrasound of the prostate gland.
 - D. Microscopy of prostate gland secretion.
 - E. Biopsy of the epididymis.
30. Infiltrative tuberculosis of the right kidney was diagnosed in a 22-year-old patient. What type of treatment does this disease require?
- A. Conservative therapy with anti-tuberculosis drugs.**
 - B. Resection of the kidney.
 - C. Nephrectomy.
 - D. Dynamic observation.
 - E. Sanatorium-resort therapy.
31. The amputation of the upper calyx and dilated pelvis of the right kidney, multiple narrowing of the right ureter were found in a 32-year-old patient on the excretory urogram. What is the most appropriate examination method to confirm the diagnosis?
- A. Bacteriological examination of urine is performed to detect mycobacterium of tuberculosis.**
 - B. Ultrasound of the genitourinary system.
 - C. Cystoscopy.
 - D. Computed tomography of the retroperitoneal space and small pelvis.
 - E. Retrograde ureteropyelography.

32. A 50-year-old patient has a cavity of 4 cm in diameter in the lower segment of the right kidney on the excretory urography. What is the stage of the tuberculous process?
- A. **III.**
 - B. V.
 - C. I.
 - D. II.
 - E. V.
33. A 45-year-old patient has complaints of dull pain in the left side, the presence of subfebrile body temperature, frequent painful urination in small portions. She has been sick 3 years. The patient has been suffering from cystitis with frequent exacerbations for a long time. Pulmonary tuberculosis is in the case-history. The urine tests include microhematuria and leukocyturia. Make the preliminary diagnosis.
- A. **Tuberculosis of the kidney and bladder.**
 - B. Urolithiasis.
 - C. Chronic pyelonephritis.
 - D. Renal tumor.
 - E. Chronic cystitis.
34. A 32-year-old patient has been suffering from a pain in the lumbar region on the right for a long time. He has frequent painful urination and low-grade fever sometimes. The abdomen is soft, the kidneys are not palpable and Pasternatsky's symptom is negative. The urine analysis: pH is 5.4; specific gravity is 1022, leukocytes are 20-25, erythrocytes are 5-7 on FOV. The growth of microflora is absent on the bacterial examination of urine. A shadow of irregular shape, resembling the outlines of a deformed upper calyx is observed on the survey radiograph in the projection of the upper pole of the right kidney. This shadow corresponds to the upper calyx aligning with its shadow, filled with a contrasting substance on the excretory urogram. What is the diagnosis?
- A. **Renal tuberculosis.**
 - B. Nephropoysis.
 - C. Urolithiasis.
 - D. Renal tumor.
 - E. Solitary cyst of the kidney.
35. A 58-year-old woman complains of pain in the left lumbar region, she suffers from a low-grade body temperature sometimes. The left kidney was not functioning on an X-ray examination. The blood test: ESR is 34 mm/hour. The urine analysis: leukocytes are 10-15 in the FOV, bacillus Kochii is found. What disease can be in this case?
- A. **Renal tuberculosis.**
 - B. Tumor of the left kidney.
 - C. Nephritis.

- D. Chronic pyelonephritis.
- E. Renal development abnormality.

Topic: Urinary stone disease

Tests of the 1st level:

1. A kidney is 25g 20 mm at pelvis stone and a kidney is 12g 9 mm on the same side at juxtavesical segment stone:
 - A. Lumbotomy according to Fedorov and incision according to Pirogov.**
 - B. Incision according Israel.
 - C. Pararectal incision.
 - D. Ureterolithotomy of first stage.
 - E. Pyelolithotomy of second stage.
2. Pyelolithotomy, nephrotomy and nephrostomy are planned in case of 3rd stage of coral stone. The location of the kidney is high, X1 and HP ribs are long. Rational surgical approach will be:
 - A. Lumbotomy according Nahamatsu.**
 - B. Lumbotomy with the transition to the 9th intercostal space.
 - C. Lumbotomy with the transition to the 11th intercostal space.
 - D. Lumbotomy according Israel.
 - E. Lumbotomy according Fedorov.
3. What is shown in the case of urate (an X-ray negative) stone of the middle third of the ureter with the size of 15x9 mm on the same side:
 - A. Ureterolithotomy.**
 - B. Insert ureteral catheter.
 - C. Litolysis.
 - D. Antispasmodic therapy, electrical stimulation of the ureter.
 - E. Nephrostomy.
4. What should be done in the case of persistent phosphaturia after pyelolithotomy?
 - 1) Prescribe a milk diet.
 - 2) Intake 1 lemon daily.
 - 3) Prescribe broad-spectrum antibiotics, anti-septics.
 - 4) Prescribe methionine, ascorbic acid.
 - 5) Eat foods rich in protein (meat, fish), fats, oils.
 - 6) Prescribe diuretic herbal remedies.
 - 7) Prescribe citrate drugs (magurlite, blemarin, etc.).
 - A. All variants are true, except for 1,2,7.**
 - B. All variants are true, except for 1,4,7.
 - C. All variants are true, except for 5 and 7.
 - D. All variants are true, except for 1,2,3.
 - E. All variants are true, except for 2,5,7.
5. What should be recommended in the case of persistent oxalaturia after three times

the discharge of oxalate stones

- 1) Leafy greens rich food, legumes, citrus.
- 2) Calcium rich food (dairy products, potatoes, eggs, etc.).
- 3) Food containing B and A vitamin complexes, magnesium.
- 4) Citrate drugs.
- 5) Magnesium oxide, magnesium thiosulfate.
- 6) B6, A vitamins.
- 7) Wheat bran particles.
- 8) Increase diuresis to 2 liters.

A. All variants are true, except for 1,2,4.

B. All variants are true, except for 2 and 5.

C. All of the above are correct.

D. All variants are true, except for 3,5,6,7 and 8.

E. All variants are true, except for 1 and 5.

6. In case of persistent uraturia, the treatment includes:

- 1) Milk diet.
- 2) Vegetable diet.
- 3) Meat diet.
- 4) Diuresis 2-2,5 l.
- 5) Diuresis less than 1l.
- 6) Citrate drugs.
- 7) Purine metabolism blockers (allopurinol, hipurik, etc.)

A. All variants are correct, except 3 and 5.

B. All are true.

C. All are true, except for 1,3,5.

D. All are true except for 1,2,3 and 4.

E. All are true except for 1,3,4 and 6.

7. The patient has bilateral radiopaque coral-shaped kidney stones. Hyperparathyroidism is suspected. What should be involved in the diagnostic plan:

A. All, except for renin and aldosterone blood.

B. Determination of renin, blood aldosterone.

C. Determination of calcium, serum phosphorus and daily urine.

D. Determination of para-hormone, blood calcitonin.

E. Sample with parathyroid hormone, scan of the skeleton.

Tests of the 2nd level:

1. What type of ureteral stone diagnosis is advisable:

A. Excretory pyelography.

B. Computed tomography of the genitourinary system.

C. Catheterization of the ureter.

D. Survey urogram.

- E. Ultrasound scan of the urinary system.
2. What operation is carried out in the case of bladder stones:
 - A. **Cystolithotomy.**
 - B. **Cystolithotripsy.**
 - C. Extraction of calculus loop.
 - D. Ureterolithotomy.
 - E. Ureterocystostomy.

 3. What is the most informative method for diagnosing a of bladder stone:
 - A. **Cystography.**
 - B. **Cystoscopy.**
 - C. Survey urogram.
 - D. Pneumocystography.
 - E. Excretory pyelography.

 4. Specify the complications of nephrolithiasis of a single congenital kidney:
 - A. **Hydronephrosis.**
 - B. **Pyelonephritis.**
 - C. Anuria.
 - D. Polycystic.
 - E. Varicocele.

 5. What treatment should be applied to relieve renal colic:
 - A. **Antispasmodics.**
 - B. **Caterization of the ureter and renal pelvis.**
 - C. Prozerin.
 - D. Novocainic blockade of the spermatic cord or round ligament of the uterus.
 - E. Administration of diuretic drugs.

 6. Which of the following nosologies is it necessary to conduct a differential diagnosis when a stone is localized in the lower third of the ureter?
 - A. **Appendicitis.**
 - B. **Urethritis.**
 - C. Adnexitis.
 - D. Colitis.
 - E. Pancreatitis.

Tests of the 3rd level:

1. A severe pain in the right lumbar region (radiating to the right inguinal region and testicle) is observed in a 40-year-old patient. The urine is red during urination. What is a preliminary diagnosis?

- A. Ureteral stone.**
 - B. Acute pyelonephritis.**
 - C. Osteochondrosis of the spine.**
 - D. Prostatitis.**
 - E. Intestinal colic.**
2. A 45-year-old woman was admitted to the urology department a day after the onset of the disease. She complained of pain in the right lumbar region, chills. The body temperature is 38 C. Leukocytosis is 13000. In the urine tests: white blood cells are 3-6 on the FOV, unchanged red blood cells are 24-40 on the FOV. A shadow is in the projection of the lumbar part of the right ureter, the size is 0.9x1.0 cm and it is visible on the survey urogram. What is your further diagnostic and treatment tactics?
- A. Restore the passage of urine and prescribe antibiotic therapy.**
 - B. Chromocytoscopy.**
 - C. Back massage.**
 - D. Local heat.**
 - E. Antispasmodics.**
3. A 50-year-old physically strong man suddenly noticed stabbing pain in the groin on the right. Soon the pain was felt throughout the half of the abdomen and lumbar region on the right, the pain took an unusual sharp and unbearable character. He took a knee-elbow position due to severe pain, then jumped up, ran around the room, groaned, did not know what to do with himself. The patient complains about urethrodynia, frequent desire to urinate. He covers with sweat. The pulse is 90 per minute, AP is 110/60 MmHg, the temperature is normal. The urine is cloudy. In a laboratory study: red blood cells are to 10 on the FOV, phosphates +++++. What medical research is needed for diagnosis and treatment:
- A. Survey and extretial urography.**
 - B. Caprogram.**
 - C. Biochemical blood parameters.**
 - D. Rectal examination of the prostate gland.**
 - E. Analysis of the secret of the prostate gland.**
4. A 43 year-old K. patient has been suffering from urolithiasis. Which of the following x-ray diagnostic is the most informative?
- A. Computed tomography.**
 - B. Survey radiography.**
 - C. MRT.**
 - D. Excretory urography.**
 - E. Ultrasonography.**

5. A 20-year-old patient has a coral X-ray positive stone of II stage (type of pelvis is extrarenal), chronic latent pyelonephritis, pedunculite. What is the optimal treatment method?
- A. Intervention is not performed.**
 - B. Shock wave lithotripsy.
 - C. Sectional nephrolithotomy.
 - D. Pyelcalicolithotomy, nephrostomy.
 - E. Litolysis.
6. A 43-year-old patient was delivered to the clinic with preliminary diagnosis: urinary stone disease. A stone of the right ureter is observed. What is the patient's behavior in renal colic?
- A. Continuously changes the body position.**
 - B. Motionless on the back.
 - C. Lie sidelong.
 - D. Forced sitting in a chair.
 - E. Upright position.
7. Left-sided renal colic was diagnosed in a 42-year-old. The attack lasts 2 days. An expansion of the pelvis of the left kidney is on the ultrasound. What is the typical irradiation of pain in renal colic:
- A. Into the groin, genitals.**
 - B. Into the xiphoid process of the sternum.
 - C. Into the epigastric region.
 - D. Into the perineum.
 - E. Into the neck.
8. A 60-year-old patient has stones in the projection of the left kidney on a survey urogram. The radiopaque urinary stones include all listed below, except:
- A. Urates and uric acid stones.**
 - B. Phosphates.
 - C. Mixed
 - D. Oxalates.
 - E. Urates and oxalates.
9. A 46-year-old patient has been suffering for 4 years. In the urine tests: salts are found, urates are in large quantities. What food should a patient exclude?
- A. Meat food.**
 - B. Mixed food.
 - C. Non-acidic varieties of vegetables and fruits.
 - D. Sour varieties of vegetables and fruits.
 - E. Mineral water "Borjomi".

10. A 37-year-old patient applied to the clinic complaining of general weakness, aching pain in the lower back on the right. She suffered an attack of right-sided renal colic two hours ago, accompanied by fever, chills and rapid decrease in temperature, pouring sweat and the disappearance of lower back pain. Pasternatsky's symptom is weakly positive on the right, the kidneys are not palpable, urination is not disturbed, the urine is clear; the body temperature is 37.4 C during examination. What is the most likely diagnosis?
- A. Stone of the right ureter, acute pyelonephritis.**
 - B. Acute purulent pyelonephritis.
 - C. Pyelitis.
 - D. Acute hematogenous pyelonephritis.
 - E. Intestinal colic.
11. A 65-year-old patient was admitted to the hospital concerning acute purulent pyelonephritis, a pelvis stone of the right kidney has the size of 1.5 * 2 cm. The patient has been suffering from the high temperature with occasional chills for 10 days. What is necessary to perform?
- A. Kidney revision, nephrostomy.**
 - B. Catheterization of the ureter.
 - C. Intensive antibiotic therapy.
 - D. Distant shock wave lithotripsy.
 - E. Scheduled examination.
12. A 62-year-old patient has a stone of the right ureter, acute right-sided pyelonephritis. Bacteremic shock is present. Renal drainage is failed. What is necessary to perform in this case?
- A. Stabilize the patient's condition, then carry out an operation such as a revision of the kidney with the subsequent installation of a nephrostomy.**
 - B. Prescribe intravenous antibiotics.
 - C. Conduct endolymphatic antibiotic administration.
 - D. Detoxification therapy.
 - E. Continue intensive therapy with the aim of the elimination from shock.
13. The small white stones are in the case-history of a 33-year-old patient. The pathology is not detected in blood tests. In the urine tests: SG is 1010, white cells are 2-3 on the FOV, single red blood cells and alkaline reactions are observed. What stones can be formed?
- A. Phosphate stones.**
 - B. Cystine stones
 - C. Uric acid stone
 - D. Oxalic stones
 - E. Alkaline urine does not affect the nature of the stones.

14. Renal colic on the right is occasionally developed in a 45-year-old patient. The discharge of stones is appeared. Oxalates are constantly found in urine tests. The development of oxalaturia contributes all proceses except:
- A. Vitamin B2 deficiency.**
 - B. Vitamin B6 deficiency.
 - C. Foods containing excess citric acid.
 - D. Chronic colitis.
 - E. Citrate preparations (blemarin, uralite-U, etc.).
15. The following anatomorphological changes in the kidneys contribute to the formation of kidney stones in a 37-year-old patient:
- A. Intrarenal pelvis.**
 - B. Chronic glomerulonephritis.
 - C. Congestion.
 - D. Extrarenal pelvis.
 - E. Renal arterial hypertension.
16. A 33-year-old patiwnnt has been sick urolithiasis for two years. Stone of the left kidney is diagnosed. A control ultrasound study was made after 8 months. The stone has increased size. What factors affect the growth of stones:
- A. High concentration of sodium and creatinine in the blood.**
 - B. Urostasis
 - C. High urine viscosity.
 - D. Absence or low level of protective colloids in the urine.
 - E. High concentration of oxalic, uric acid and calcium.
17. A 40-year-old woman has been suffering from pyelonephritis for 3 years. She was repeatedly treated. She constantly makes control tests. Pyelonephritis precedes the development of urolithiasis, it is approximately primary:
- A. In 30% cases**
 - B. In 10% cases
 - C. In 50% cases
 - D. In 80% cases
 - E. In 90% cases
18. A 20-yearsold-patient has been sick for USD for 1 year. Whaen is the ultrasound scan of the kidneys advisable?
- A. In all cases**
 - B. In renal coral stone disease
 - C. In the case of ureteral stone
 - D. In no case
 - E. In renal (urata) calyx stone

19. A 55-year-old patient has been suffering from urolithiasis for 3 years. He is examined each quarter: a blood test, urine analysis and ultrasound examination. Survey and excretory urography are performed 1 time per year. When is it advisable to carry out excretory urography for urolithiasis:
- In all cases**
 - In the case of renal coral stone (both kidneys)
 - In the case of ureteral stone
 - In the case of pelvis stone.
 - In the case of high creatinine numbers
20. A 44-year-old patient has been suffering from USD for 12 years. The stones are in both kidneys on the ultrasound. The examination was offered: Zimnitsky's test. When is reasonable to perform a test?
- In the case of renal coral stone**
 - In the case of pelvis stone with urodynamics damage
 - In renal calyx stone
 - In the case of pelvis stone without urodynamics damage
 - In the case of ureteral stone with urodynamic damage
21. A 67-year-old patient has been suffering from coral stone of the left kidney. When is the dynamic renal nephroscintigraphy needed?
- In the case of renal coral stone.**
 - In the case of pelvis stone, its size is 5|6 mm.
 - In the case of ureteral stone.
 - In the case of both ureters stones.
 - In the case of retreated ureteral stone.
22. Stone of the lower third of the left ureter of 3 mm, ureteropyelectasia (above the stone) on the left was diagnosed in an 18-year-old patient. The patient was hospitalized into a urological hospital. Specify the correct treatment method.
- Antispasmodics, water stress load**
 - Prozerin subcutaneously
 - Antispasmodics
 - UHF and electrostimulation of the ureter
 - Work therapy
23. An attack of renal colic on the right was developed in a 43-year-old patient at home. Temperature is 38.3 C. He has been suffering from chills for two days. The patient took warm baths, took pills: analgin. These were without effect. Your actions:
- Hospitalized into the urological hospital.**
 - Hospitalize into the therapeutic department.
 - Intake of antispasmodics.

- D. Measure blood pressure.
E. C) and D)
24. Urate stone of the pelvis of the right kidney was diagnosed in a 43-year-old patient. The damage of urine outflow is not observed. The size is 2.5 * 3.0cm
What treatment actions are needed the first:
A. **Litolysis**
B. Distant shock wave lithotripsy
C. Pyelolithotomy
D. Puncture nephrostomy
E. Intervention is not recommended
25. A 66-year-old patient has a stone of the pelvis of the left kidney. The size is 2.0 * 3.0 cm, it is phosphate and the flow of urine from the kidney is not disturbed. The patient has been suffering from chronic pyelonephritis for 2 years.
Prescribe a proper treatment.
A. **Distant shock wave lithotripsy**
B. Intervention is not recommended
C. Physical procedures
D. Litolysis
E. Nephrolithotomy
26. Urate stone of the renal pelvis of the right kidney of 20 * 18 mm, chronic pyelonephritis in the active phase, pedunculite, periureteritis and hydrocalycosis on the right are noted in a 23-year-old patient. What does the treatment include?
A. **Pyelolithotomy, ureterolysis.**
B. Antibiotic therapy, intervention is not indicated.
C. Litolysis.
D. Paracentetic nephrolithotomy.
E. Shock wave lithotripsy.
27. A 19-year-old patient has an oxalate stone of the right kidney of 2.5 * 3.0 cm, chronic latent pyelonephritis. What surgical treatment is indicated to the patient?
A. **Pyelolithotomy.**
B. Shock wave lithotripsy.
C. Intervention is not indicated.
D. Litolysis.
E. Paracentetic nephrolithotomy without contact lithotripsy.
28. A 40-year-old patient has oxalate stone of the right kidney. The size is 1.0 * 0.9cm. The damage of urodynamics from the right kidney is observed. What is the best treatment method in this case?
A. **Paracentetic nephrolithotomy**
B. Litolysis

- C. Pyelolithotomy
 - D. Intervention is not indicated
 - E. Sanatorium-resort therapy
29. A 40-year-old patient has a coral radiopaque stone of the right kidney. The pelvis of the right kidney is intrarenal. Urine outflow is not broken. Chronic latent pyelonephritis. What surgical intervention is shown?
- A. Intervention is not indicated**
 - B. Sectional nephrolithotomy, nephrostomy
 - C. Litolysis
 - D. Paracentetic nephrolithotomy
 - E. Pyelolithotomy, nephrostomy
30. A 62-year-old patient has left kidney stone, hydrocalycosis and chronic pyelonephritis in the active phase. What does the treatment include?
- A. Nephrolithotomy, nephrostomy**
 - B. Intervention is not indicated
 - C. Paracentetic nephrolithotomy
 - D. Shock wave lithotripsy
 - E. Litolysis
31. A 45-year-old patient has a coral radiopaque contrast of the right kidney stone. The pelvis has intrarenal type. Hydrocalycosis. Exacerbation of chronic pyelonephritis. What should be recommended for the patient?
- A. Posterior transverse pyelolithotomy, nephrostomy, ureterolysis**
 - B. Intervention is not performed
 - C. Paracentetic nephrolithotomy combined with lithotripsy
 - D. Litolysis
 - E. Sectional nephrolithotomy, nephrostomy
32. A 43-year-old patient has spongy kidneys, multiple stones in both kidneys, chronic pyelonephritis in the active phase. What should be recommended for the patient?
- A. Shock wave lithotripsy**
 - B. Antibiotic therapy without surgery
 - C. Nephrolithotomy and nephrostomy
 - D. Litolysis
 - E. Paracentetic nephrolithotomy
33. A 50-year-old patient has pyonephrosis on the right and a coral stone on the right and a small stone on the left. What should be recommended for the patient?
- A. Nephrectomy on the right**
 - B. Hemodialysis

- C. Nephrectomy on the right, pyelolithotomy and left nephrostomy simultaneously
 - D. Shock wave lithotripsy on the left
 - E. Intervention is not shown
34. A 73-year-old patient has the diagnosis of II stag of BPH. The secondary stone of the bladder is 7 cm in diameter. What does the treatment include?
- A. Cystolithotomy, adenomectomy and cystostomy**
 - B. Cystolithotomy and cystostomy
 - C. Shock wave lithotripsy
 - D. Litolysis
 - E. B Intervention is not shown
35. A stone (6x9 mm) of the juxtavesical segment of the right ureter, damage the urodynamics is found in a 55-year-old patient during the examination at the urological hospital. What should be recommended for the patient?
- A. Laser lithotripsy**
 - B. Ureterolithotomy
 - C. Ureterolitic extraction
 - D. Catheterization of the ureter
 - E. B) and C)
36. A 50-year-old patient was examined by computed tomography. A stone of 6g 9-mm of the middle tertiary ureter was found and it damages the urodynamics. Lithotripsy does not work. What should be recommended for the patient?
- A. Ureterolithotomy on the left.**
 - B. Conservative therapy.
 - C. Ureterolitic extraction.
 - D. Catheterization of the ureter.
 - E. B) and C).
37. A 30-year-old male patient has a stone in the lower third of the right ureter with 5x8 mm, it damages the urodynamics. What should be recommended for the patient?
- A. Ureterolitecrum.**
 - B. Ureterolithotomy
 - C. Conservative therapy.
 - D. Catheterization of the ureter..
 - E. B) and C).
38. A 56-year-old patient has 3-day anuria. One calculus in each ureter was revealed by CT examination. The renal pelvis of both kidneys are enlarged. What method of treatment is shown to the patient?

- A. Bilateral nephrostomy in equal measure. Intravenously large doses of lasix, infusion therapy**
- B. Catheterization of the ureters**
- C. Shock wave lithotripsy**
- D. All listed.**

Topic: Traumatic injuries of the urogenital system

Tests of the 1st level:

1. In case of renal injury are the most damaged:
 - A. **Front surface.**
 - B. Upper pole.
 - C. Lower pole.
 - D. Vascular pedicle.
 - E. Back surface.

2. When does the coagulogram normalization occur?
 - A. **On the 6th -10th day**
 - B. On the 1st -2nd day.
 - C. On the 3rd day
 - D. After 1 month
 - E. After 14 day

3. Which of the given above factors contributes to closed renal injury?
 - A. **Sharp commotio of the kidney and surrounding tissues.**
 - B. Sudden contraction of the muscles of the anterior abdominal wall.
 - C. Severe hypertensive crisis.
 - D. Obstruction with ureteral stone.
 - E. Renal thrombosis.

4. All processes can lead to renal damage, except for:
 - A. **Tuberculosis.**
 - B. Hydronephrosis.
 - C. Tumors.
 - D. Pelvic dystopia.
 - E. Nephroptosis.

5. The most common complication after renal injury is
 - A. **Common clear factors are absent.**
 - B. Pyelonephritis and hydronephrosis.
 - C. Pyelonephritis and nephrolithiasis.
 - D. Pyelonephritis and arterial hypertension.
 - E. Pyelonephritis and venous hypertension.

6. What place is occupied the closed renal damage among all injuries?
 - A. **The 3rd place.**
 - B. The 1st place.

- C. The 2nd place.
 - D. The 4th place.
 - E. The 5th place.
7. The uncharacteristic symptom of an isolated closed renal injury on the first day is:
- A. Macrohaematuria.**
 - B. Pain.
 - C. Swelling of the lumbar region.
 - D. Accelerated ESR.
 - E. Microhematuria.
8. Damage of the ureter is more common:
- A. In the upper third.**
 - B. In the middle third.
 - C. In the lower third.
 - D. In the intramural region.
 - E. In the ureteropelvic junction.
9. What helps in the case of urohematoma diagnosis in the retroperitoneal space:
- A. All given below.**
 - B. Palpation of a dense formation in the lumbar region.
 - C. Lack of contours of the outer edge of the lumbar muscle in the survey image of the kidneys and urinary tract.
 - D. Muscle tension of the anterior abdominal wall and lumbar region on the side of the affected kidney.
 - E. None of the listed signs.
10. The leading symptoms of the separation of the kidney are all of the above, except:
- A. Macrohematuria with clots.**
 - B. Shock.
 - C. Anuria.
 - D. Severe back pain.
 - E. Anemia.
11. The characteristic radiological signs of renal damage according to the survey radiographs of the urinary tract are all listed, except:
- A. Clear nephrograms with a halo of “dilution” around the shadow of the kidney.**
 - B. Smoothness of the shadow edge of the lumbar muscle.
 - C. Fracture of the transverse process of the spine and rib.
 - D. Aerocolus.
 - E. Delay of discharge of contrast material by a damaged kidney.

12. An excretory urography in case of renal injury aims at all of the listed, except:
- A. Determine the mobility of the damaged kidney.**
 - B. Identify the state of the contralateral kidney.
 - C. Eliminate the presence of concomitant kidney disease.
 - D. Establish the stage and nature of kidney damage.
 - E. Identify subcapsular hematoma.
13. What is possible to apply in the case of renal damage:
- A. All of the following.**
 - B. Retrograde ureteropyelography.
 - C. Abdominal aortography.
 - D. Selective angiography.
14. Which of the following research method is the most informative in case of renal damage:
- A. Computed tomography with magnification.**
 - B. Chromocytoscopy.
 - C. Survey radiography of the kidneys and urinary tract.
 - D. Ultrasound.
 - E. Retrograde ureteropyelography.
 - F. Abdominal aortography.
15. 1. The most informative for renal damage is:
- A. Ultrasound scan of the kidneys.**
 - B. Selective renal venography.
 - C. Laparoscopy.
 - D. Pneumoretroperitoneum.
 - E. None of the above.
16. In case of severe renal damage, the surgeon determines with palpation the presence of a contralateral kidney. Does the surgeon have the right to perform nephrectomy?
- A. The surgeon does not have right to perform nephrectomy.**
 - B. The surgeon has the right to perform nephrectomy.
 - C. The surgeon has the right to perform nephrectomy if the damaged kidney is reduced in size.
 - D. The surgeon has the right if a hematoma ia absent around a healthy kidney..
 - E. b) and c).
17. How long should the patient be at the dispensary observation concerning a renal injury:
- A. Up to 2 years.**
 - B. Up to 1 year.

- C. Up to 5 years.
 - D. Up to 10 years.
 - E. There is no need for that.
18. Nephrectomy in the case of kidney injury is indicated:
- A. In the case of the kidney detachment from the vascular pedicle.**
 - B. In young people.
 - C. With severe hematuria.
 - D. With a large retroperitoneal hematoma.
 - E. In all cases of kidney injury.
19. In the case of renal rupture and PCS damage the following operation is shown:
- A. Closure and drainage of the kidney-nephrostomy.**
 - B. Pielostomy.
 - C. Closure without nephrostomy.
 - D. Removal of hematoma.
 - E. Intubation of the ureter.
20. The cause of hypertension after a kidney injury is:
- A. Hematoma in the area of the renal gate, permeability of the fiber of the renal sinus.**
 - B. "Plastic kidney" - compression of the renal parenchyma,
 - C. Organized renal or subcapsular hematoma.
 - D. . Damage of kidney-nourishment vessels.
 - E. None of these factors
21. , The development of all of the above is possible after a kidney injury, except for:
- A. Nephroptosis.**
 - B. Nephrolithiasis.
 - C. Hydronephrosis.
 - D. Tumors.
 - E. Purulent pyelonephritis.
22. What are not typical in the case of subcapsular kidney damage:
- A. Rapidly vanishing shock.**
 - B. Pain.
 - C. Hematuria.
 - D. Retroperitoneal hematoma.
 - E. Satisfactory overall condition.
23. Acute pyelonephritis may be developed after a kidney injury. The signs of which are all listed, except for:
- A. Anemia.**
 - B. Piuria.

- C. Prolonged hyperpyrexia.
 - D. Chill.
 - E. Fever.
24. Open renal damage is more common:
- A. **In wartime.**
 - B. In peacetime.
 - C. During natural disasters.
 - D. In case of accidents on transport..
 - E. Injuries at work.
25. The severity of renal damage depends on:
- A. **the striking power of the hurting object.**
 - B. the age of the patient.
 - C. the state of the kidney at the time of injury.
 - D. the weight of the patient.
 - E. all listed factors.
26. A patient has an urinary fistula after an open kidney injury, which is associated with a wound:
- A. **The cortical layer of the kidney.**
 - B. The paranephric body.
 - C. The medullary area of the kidney and the pelvis.
 - D. Vascular kidney.
 - E. Fibrous renal capsule.
27. Organ-preserving surgery in the case of kidney injury is not shown:
- A. **In the depleted kidney.**
 - B. In the subcapsular renal rupture.
 - C. If the lower pole of the kidney is damaged.
 - D. If the upper pole of the kidney is damaged.
 - E. When the central segment of the kidney is damage.
28. What treatment should be in the case of urosepsis development in open kidney injury:
- A. **Surgical - nephrectomy.**
 - B. Conservative - detoxification and antibacterial.
 - C. Surgical – drainage of the retroperitoneal space.
 - D. Surgical – kidney decapsulation.
 - E. Drainage of the kidney and retroperitoneal space.
29. The pathognomic symptom of a complete rupture of the urethra in children is
- A. **Acute urinary retention.**
 - B. Dysuria.

- C. Hematuria.
- D. Pyuria.
- E. Proteinuria.

Tests of the 2nd level:

1. The leading symptoms in the case of kidney rupture are all of the above, except:
 - A. Macrohematuria with clots.**
 - B. Increased blood pressure.**
 - C. Diarrhea.**
 - D. Shock.
 - E. Anemia.

2. What research should be the first in the case of a kidney injury?
 - A. Ultrasound examination of the kidneys.**
 - B. Clinical laboratory diagnosis (blood test, coagulogram, biochemistry, urinalysis).**
 - C. Survey program.
 - D. Selective angiography of renal vessels.
 - E. CT.

3. What research method is necessary for a patient with suspected extraperitoneal bladder rupture:
 - A. Excretory pyelography.**
 - B. Ascending cystography.**
 - C. Zeldovich sample.**
 - D. Ultrasound of the urinary system.
 - E. Angiography of renal vessels.

4. What are the features of peritonitis in the case of bladder injury?
 - A. Slight temperature increase.**
 - B. Prolonged absence of peritoneal irritation symptoms.**
 - C. Nausea and vomiting.
 - D. Severe flatulence.
 - E. Diarrhea.
 - F. Fever.

5. What are the early complications of urethral injury:
 - A. Urinary flow of the pelvis and perineum.**
 - B. Bleeding.**
 - C. Urethral stricture.
 - D. Cystitis.

- E. Phlebitis of the pelvis and perineum, urosepsis.
6. The diagnosis “penile fracture” is based on:
- Anamnesis.**
 - Examination of the penis.**
 - Ultrasound of the cavernous bodies.
 - Urethrography.
 - The urine test.
7. The treatment of “penile fracture” includes:
- Closure of the albuginea.**
 - Cold pack on the wound area, antibiotics.**
 - Anticoagulants.
 - Observation.
 - Cystostomy.

Tests of the 3rd level:

- A 39-year-old patient suffered a kidney injury after the accident. The rupture of the capsule of the right kidney along the posterior margin and the presence of a hematoma were detected during examination on computed tomography. What are the criteria for surgical treatment?
 - In the case of progressive anemia.**
 - In the case of pyuria.
 - In the case of macrohematuria.
 - In the case of fever.
 - In the case of hypovolemic shock.
- A 45-year-old patient has a bruise of the scrotum on the right; a hematoma is up to 4.0 * 3.0cm. What is advisable to him:
 - Conservative treatment. Suspensory bandage. Intake the antibiotics for the first 5 days.**
 - Hematoma puncture
 - Surgical treatment, removal of hematoma and drainage
 - Intake the antibiotics under outpatient treatment during 14 days.
 - Adequate nutrition.
- The ureter is damaged in a 58-year-old patient during operation. It is necessary to remove urine from the kidney. What are the following methods of abduktion?
 - Nephrostomy.**
 - Ureterostomy and ureterocutaneostomy.
 - Permanent catheter.
 - . Ureterostomy
 - All are correct.

4. A 34-year-old patient was injured on the right abdomen. Microhematuria was developed in the patient. Specify the signs of kidney pathology:
- Kidney (bruise) concussion.**
 - Subcapsular kidney rupture.
 - Two-phase subcapsular rupture of the kidney (phase 1).
 - All of the above.
 - None of the above.
5. A 23-year-old patient fell from the 5th floor. The patient's condition is severe. Ps is 80 bit/min; AP is 19/50 MmHg. The skin and visible mucous membranes are pale. The abdomen is slightly swollen. A hematoma of the lumbar region on the left and a rupture of the upper pole of the left kidney are observed on the ultrasound and on the multispiral computed tomography. The patient is prepared for surgery such as lumbotomy. Urgent surgical treatment for closed kidney injury is shown in the case of:
- Anemia.**
 - Microhematuria.
 - Hight temperature.
 - Anemia and shock.
 - Pyuria.
6. A 33-year-old patient received a jolt into the stomach and into the right lumbar region. What is the patient's nosology:
- Kidney concussion (contusion).**
 - Two-phase subcapsular rupture of the kidney (phase 1).
 - Subcapsular kidney rupture.
 - All listed.
 - None of the above.
7. A 28-year-old patient was admitted to the clinic with polytrauma. The patient received a jolt into the right kidney area. The patient is in extremely difficult condition. Pulse is 106; AP is 100 / 50 MmHg. Which of the following method is the most informative in the case of damage kidney?
- Abdominal aortography on the background of the excretory urogram.**
 - Survey radiography of the kidneys and urinary tract.
 - Excretory urography.
 - Retrograde ureteropyelography.
 - Chromocytoscopy.
8. A 56-year-old patient brought to the emergency room with polytrauma. Aggravated anemia, pneumohemographyx are observed on the right. Open craniocerebral injury and kidney injury on the right are noted. In which case is the surgical treatment for kidney injury indicated?

- A. Profuse hematuria with clots in the case of growth of retroperitoneal hematoma.**
 - B. Macrohematuria.
 - C. When on excretory urogram there is no discharge of renal damaged.
 - D. Renal radiopaque substance.
 - E. Normal function of the contralateral kidney.
 - F. Increased factors of nitrogen slag.
9. A sharp drop in blood pressure and anemia are observed in the absence of hematuria in a 43-year-old patient after an isolated kidney injury which is due to damage of:
- A. Renal vessels**
 - B. . Cortical renal layer
 - C. Medullary area of the kidney and pelvis
 - D. Paranephric body
 - E. Capsules of the kidney
10. A 42-year-old patient has closed injury of the left kidney. What method of instant testing should be performed:
- A. Excretory urography and ultrasound.**
 - B. Survey urogram.
 - C. Radioisotope renography and abdominal aortography.
 - D. Chromocytoscopy.
 - E. All variants are true.
11. A 44-year-old patient was admitted to the urological hospital with suspected damage or ligation of the ureter during a gynecological surgery. What is performed to clarify the diagnosis?
- A. Excretory urography, ultrasound examination of the kidneys.**
 - B. Palpation of kidneys
 - C. Ultrasound examination of the kidneys
 - D. Chromocytoscopy
 - E. Blood chemistry value.
12. A 29-year-old patient was admitted with a trauma of the abdominal cavity (he fell from a height). The intraperitoneal rupture of the bladder is suspected. What are the symptoms of intraperitoneal bladder rupture?
- A. Absence for a long time urination and urge to it. The phenomena of peritonitis.**
 - B. Overflowing bladder is palpated over the pubic
 - C. Muscle tension of the anterior abdominal wall, swelling of the tissues of the anterior abdominal wall.
 - D. Tympanic sound above the pubic with percussion of the anterior abdominal wall.

- E. A) and B) are true.
13. A 55-year-old patient was admitted with a perineal injury (he fell on a bench). A rupture of the urethra is suspected. The main method for diagnosing of urethral injuries is:
- A. **Excretory urography**
 - B. Descending cystourethrography
 - C. Ascending urethrocytography
 - D. Pneumocystography
 - E. All of the above.
14. A 55-year-old patient was admitted to the hospital with a perineal injury. He complains of pain in the urethra and low bleeding from the urethra. What method is contraindicated in this case:
- A. **Cystoscopy.**
 - B. Excretory urography.
 - C. Descending cystourethrography.
 - D. Ascending urethrocytography.
 - E. Pneumocystography.
15. A 37-year-old patient heard a distinctly crunch in the penis during intercourse. Severe pain and swelling of the penis were noted. The penis is enlarged on examination. Pronounced swelling and uniform penile hematoma are observed. Make the diagnosis:
- A. **"Fracture" of the penis.**
 - B. Urethral rupture.
 - C. Ballonopostitis.
 - D. Urethritis.
 - E. Paraphimosis.
16. A 44-year-old patient got a car injury 12 hours ago. The rupture of the bladder is diagnosed. The surgery is performed such as suturing of a rupture of the bladder, epitsistostomy. What is necessary to carry out:
- A. **Drain the paravesical space according Buiallsky's.**
 - B. Install 2 gauze swabs into the vesicles.
 - C. Sew the wound tightly.
 - D. Install 2 rubber drains.
 - E. Install a system for drip irrigation of paravesical fiber.
17. A 28-year-old patient has bruised scrotum. It is increased in size and tense while examination. A hematoma is 8 * 6 * 9 cm observed during palpation and according to ultrasound. What is recommended?
- A. **Hematoma puncture.**

- B.** Cold pack on the scrotum.
- C.** Suspension, antibiotics.
- D.** Hematoma puncture with constant irrigation with furacillin solution.
- E.** Surgery - opening and drainage of hematoma.

Topic: Neoplasms of the urinary and male reproductive systems.

Tests of the 1st level:

1. The main symptom that determines the stage of the disease in case of Prostatic hyperplasia is:
 - A. The appearance of residual urine is more than 50ml..**
 - B. Macrohematuria.
 - C. Pyuria.
 - D. Hematuria.
 - E. Pollakiuria.

2. При генерализованном раке почки можно рекомендовать препараты:
 - A. Testosterone, oxyprogesterone, Depo-Provera.**
 - B. Oxyprogesterone capronate.
 - C. Depo Provera.
 - D. Provera.
 - E. Testosterone.

1. What drugs can be recommend drugs in the case of generalized renal cancer?
 - A. All segments of the same frequency.**
 - B. Lower segment.
 - C. Central segment.
 - D. Upper segment.
 - E. Frequency is not determined.

2. How do you determine retrograde ureteropyelography in the diagnosis of renal parenchyma tumor in a 78-year-old patient?
 - A. Optional.**
 - B. Necessary.
 - C. Generally accepted.
 - D. Safe.
 - E. Unreliable.

3. What hematuria is characteristic for renal tumors?
 - A. Total with small clots.**
 - B. Initial with worm-like clots.
 - C. Terminal (final) with shapeless clots.
 - D. Microhematuria.
 - E. Hemoglobinuria.

4. What is the most often observed in the case of renal pelvis tumors:
 - A. Pain.**
 - B. Palpable kidney
 - C. Hematuria.
 - D. Proteinuria.
 - E. Low-grade fever.

5. What tumors are benign tumors of the renal parenchyma of epithelial origin?
 - A. Adenoma.**
 - B. Fibroma.
 - C. Myxoma.
 - D. Leiomyoma.
 - E. Angioma.

6. The main symptom of prostate cancer of T2NoMo stage is:
 - A. The prostate gland is enlarged with tough-elastic content and one of the lobes is very dense, nodular, the borders of the gland are clear.**
 - B. The prostate gland has stony density without clear boundaries.
 - C. Urinary incontinence, prostate gland is enlarged and painless
 - D. The prostate gland is enlarged, painless with tough-elastic content, one of the lobes is very dense, lumpy, the borders of the gland are clear.
 - E. Pain in the sacrum.

7. What is the correct name of malignant tumor of a renal parenchyma of epithelial origin?
 - A. Cancer of the kidney.**
 - B. Renal adenoma.
 - C. Hypernephroma.
 - D. Hyperniferous cancer.
 - E. Small-cell cancer.

8. The indications for cystostomy (Stage 1) in the case of Prostatic hyperplasia are:
 - A. Adenoma and acute pyelonephritis.**
 - B. Adenoma of II stage.
 - C. Subtrigonal localization of adenoma.
 - D. Elderly patient age.
 - E. Adenoma and suspected prostate cancer.

9. What drug is used in the case of Prostatic hyperplasia treatment:
 - A. Trianol**
 - B. Flutomid**

- C. Flucin
 - D. Synestrol
 - E. Phosphestrol.
10. Tumors of the renal parenchyma occur:
- A. Men have tumors in 2 times more often than women.**
 - B. Women have tumors in 2 times more often than men.
 - C. Women have in 5 times more likely than men.
 - D. Men have tumors in 5 times more often than women.
 - E. The incidence of the disease is the same.
11. The most common classification of tumors of the renal parenchyma is the classification:
- A. TNM International Union Against Cancer (1993).**
 - B. S.P.Fedorov (1923).
 - C. M.O. Lopatkin and others (1972).
 - D. S. Petkovich (1956).
 - E. Flox and Kadetskyi (1959).
12. The greatest importance in the occurrence of renal tumors is given to:
- A. Hormonal imbalance.**
 - B. Malformations of kidney and urinary tract.
 - C. Chronic inflammatory process in the renal parenchyma.
 - D. Renal injury.
 - E. Glomerulonephritis.
13. What type of tumor is the most commonly detected among renal tumors:
- A. Epithelial**
 - B. Connective tissue.
 - C. Adrenal tissue structure.
 - D. Hemangiomas.
 - E. Hemartomas.
14. Lymphogenous metastases are the most common:
- A. In the paraaortic and paraqual lymph nodes.**
 - B. In the mediastinum.
 - C. In the iliac lymph nodes
 - D. In the cervical lymph nodes.
 - E. In supraclavicular luminal nodes.
15. When are the most often tumor clots observed in renal cancer
- A. In the renal and inferior vena cava.**
 - B. In the renal artery.
 - C. In the testicular vein.
 - D. In the paravertebral veins.

- E. In the pelvic veins.
16. What symptom is absent in the case of renal cancer?
A. Eosinophilia.
B. Polycythemia.
C. Hypertension.
D. Hyperpyrexia.
E. Anemia.
17. Hematuria in the case of renal parenchyma tumor is observed:
A. In 20 % patients.
B. In 40 % patients.
C. In 60 % patients.
D. In 90 % patients.
E. In 100 % patients.
18. Anemia in the case of renal cancer is observed approximately:
A. In 10 % patients.
B. In 20 % patients.
C. In 40 % patients.
D. In 60 % patients.
E. In all patients.
19. Weight loss in the case of renal cancer is observed approximately:
A. In 15-20 % patients.
B. In 20 % patients.
C. In 30 % patients.
D. In 50 % patients.
E. In all patients.
20. Bladder cancer is more often localized:
A. In the area of the triangle Lietho.
B. On the right side wall.
C. At the top.
D. In the neck area.
E. On the side wal.
21. Which of the benign tumors of the urethra is more common in men:
A. Condylomata acuminata.
B. Fibroma.
C. Carulcules.
D. Polyps.
E. Papillomas.

Tests of the 2nd level:

1. A 45-year-old patient has a suspicion on the left kidney tumor. He sought to the oncologic dispensary to establish the diagnosis. What are the priority methods to confirm the diagnosis:
 - A. Ultrasonography of the kidneys.**
 - B. Multispiral CT with enhancement.**
 - C. Excretory pyelography.**
 - D. Radioisotope renography.
 - E. Selective angiography of renal vessels.

2. What should be done in case of malignant tumor localization in one of the single kidney poles in young people?
 - A. Resection of the kidney.**
 - B. Embolization of the segmental artery.**
 - C. Targeted therapy.**
 - D. Patient monitoring.
 - E. Nephrectomy.

3. Pelvis cancer of the right kidney was diagnosed in a 67-year-old patient. What are the most common symptoms of this tumor?
 - A. Hematuria.**
 - B. Subfebrile temperature.**
 - C. Pain.
 - D. Palpation of the tumor.
 - E. Swollen lymph nodes.

4. A 54-year-old patient complains of the appearance of blood in the urine. The bladder papilloma was operated 3 years ago. What are the priority instrumental methods to confirm hematuria?
 - A. Cystoscopy.**
 - B. Three-glass urine test.**
 - C. Ultrasonography of the urinary system.
 - D. Survey urography.
 - E. Radioisotope renography.

5. What is characteristic of bladder cancer?
 - A. Hematuria.**
 - B. Dysuria.**
 - C. Pain.
 - D. The presence of protein in the urine.
 - E. Hyperpyrexia.

6. What are the indications for transurethral resection of the prostate:
 - A. Fibrous prostate.**

- B. Small prostate volume (40 cm).**
 - C. Subtrigonal growth.
 - D. Large adenoma.
 - E. Chronic urinary retention (300 ml or more), ureterohydronephrosis with chronic renal failure.
7. What hormone therapy is used for the treatment of prostate cancer?
- A. Androkur.**
 - B. Zoladex**
 - C. Omnadren.
 - D. Flutamide.
 - E. Prednisolone.

Tests of the 3rd level:

1. A 67-year-old patient complains of weakness and back pain. The presence of blood is observed in the urine. A suspicion of a tumor of the left kidney was detected on ultrasound examination. What is the most common symptom of renal tumor?
- A. Hematuria.**
 - B. Weight loss.
 - C. Hypertension.
 - D. Erythrocytosis.
 - E. Anemia.
2. A 32-year-old patient was admitted with complaints of pain during urination in the urethra. Urethroscopy was performed to the patient and histology was taken. The diagnosis of benign tumor of the urethra is made after further examination of the patient. What is recommended to the patient?
- A. Conservative treatment**
 - B. Electrocoagulation
 - C. Electroresection of the urethra
 - D. Radiotherapy
 - E. Dynamic observation
3. An 88-year-old patient was hospitalized into the oncologic dispensary. Ca of the right kidney (pelvis) with multiple metastases is on the CT of the kidneys. There is no change in the urine analysis. Anemia is noted in the blood tests: er. are $2.45 \cdot 10^{12}$. Hb is 109g/l. There is no other cancer pathology. What is the most common type of metastasis of pelvis tumors?
- A. Implantation**
 - B. Hematogenous
 - C. Lymphogenous
 - D. Mixed
 - E. Lack of metastasis

4. Adenoma of prostate gland of 2nd stage was diagnosed in a 77-year-old patient. The gland volume is 90 cm. The PSA level is 5 ng /ml. Prostatectomy is planned. What are the indications for simultaneous trans-vesicular adenomectomy:
- A. The presence of large adenoma of the 2nd degree.**
 - B. The presence of adenoma of the 1st degree.
 - C. The presence of ureterohydronephrosis.
 - D. The presence of bladder diverticulum.
 - E. Prostrate night pollakiuria.
5. A 52-year-old patient was admitted to the oncologic dispensary for examination. The doctor suggested a bladder tumor in the local clinic. What is a common symptom of a bladder tumor?
- A. Painless macrohematuria.**
 - B. Lower abdominal pain.
 - C. Dysuria, stranguria.
 - D. Intermittent urination.
 - E. Pyuria.
6. Prostate cancer of T4 stage was diagnosed in an 86-year-old patient. Ureterohydronephrosis and chronic renal failure of the 3-4 st. were determined. What surgical treatment should be the first?
- A. Nephrostomy on both sides**
 - B. Cystostomy
 - C. TURP.
 - D. Estrogen therapy
 - E. Use of antiandrogens.
7. Prostatopathy was diagnosed in a 60-year-old patient. What are the clinical signs of prostate cancer:
- A. Does not exist**
 - B. Hematuria
 - C. Pain in the perineum
 - D. Dysuria
 - E. Cutting during urination
8. A 48-year-old patient had the blood in the urine in the form of filamentous clots. There is a suspicion of a tumor of the renal pelvis during the examination. What is a reliable diagnostic method for tumors of the renal pelvis?
- A. Ureteropieloscopy.**
 - B. Retrograde pyelography.
 - C. Ultrasound.

- D. Dynamic Y-nephroscintigraphy.
 - E. Angiography.
9. A 56-year-old patient has a malignant tumor of the right kidney, complicated by bleeding. Weakness and pale skin are observed. P. is 88, AP is 90/50 MmHg, HB is 60 g /l. The best option of emergency care to the patient with minimal risk for his life:
- A. Selective endovascular occlusion of the vessels of the right kidney.**
 - B. The restoration of blood loss with blood and plasma.
 - C. The restoration of blood loss with blood substitutes.
 - D. Nephrectomy.
 - E. Laparotomy, ligation of tumor vessels.
10. Tissue formation of a rounded shape in 4 cm diameter is localized in a 43-year-old patient according to ultrasound of the kidney parenchyma. Other methods of examination the patient did not pass. For the differential diagnosis of malignant and benign tumors are indicated:
- A. Colour Doppler Imaging.**
 - B. Presacral pneumoretroperitoneum.
 - C. Survey, excretory urography.
 - D. Renography.
 - E. Retrograde pneumopyelography.
11. A 43-year-old patient has cancer of the right kidney. What are cystoscopic signs of a kidney tumor?
- A. Hematuria from the affected side.**
 - B. Impaired function of the affected kidney.
 - C. The presence of implantation metastases in the bladder.
 - D. Preservation of healthy kidney function.
 - E. The presence of stones in the bladder.
12. An 89-year-old patient has a complaint of lower back pain on the right. Weakness and the presence of blood in the urine are observed. Preliminary diagnosis is renal cancer. What should be done at the first?
- A. Ultrasound examination of the kidneys.**
 - B. Excretory urography.
 - C. Radioisotope renography.
 - D. Aortography.
 - E. Retrograde ureteropyelography.

13. A 54-year-old patient has a single left kidney. Tumor of the lower pole is 3 cm. Hematuria. What is the most optimal treatment method for this patient?
- A. Resection of the kidney.**
 - B. Nephrectomy.
 - C. Patient observation.
 - D. Radiation therapy.
 - E. Embolization of the renal artery.
14. A 78-year-old patient was admitted to the urological hospital with severe macrohematuria. Renal cancer, inoperable, many metastases in the lungs, liver, lymph nodes are in the the anamnesis. What is recommended in the case of if it is not possible to stop macrohematuria in a conservative manner?
- A. Embolize the renal artery.**
 - B. Produce frequent fresh blood transfusions.
 - C. Continue conservative and symptomatic ways of treatment.
 - D. Perform nephrectomy.
 - E. Applicate nephrectomy.
15. Wilms' tumour was discovered in a 5-year-old child. Nephrectomy was performed, metastases were absent. What is the histological picture of the tumor:
- A. It consists of undifferentiated embryonic tumor tissue.**
 - B. It consists of connective tissue cells.
 - C. It consists of epithelial cells.
 - D. It consists of cartilage and muscle tissue.
 - E. 1), 2), 3) and 4) are true.
16. What are the following methods of treatment used for embryonic renal tumor in a 9-year-old child?
- A. Surgical treatment, radiation therapy, drug therapy.**
 - B. Radiation therapy.
 - C. Drug therapy.
 - D. Comprehensive surgical + radiation ways of treatment.
 - E. Drug therapy.
17. A 12-year-old child will be operated concerning renal tumor. What operative process is the most convenient:
- A. Lumbar.**
 - B. Transthoracic.
 - C. Transperitoneal (median laparotomy).
 - D. Thoracoabdominal.
 - E. According to G. E. Nagamatsu.

18. A 6-year-old child has cancer of the kidney with metastases in the nearby lymph nodes. The child underwent a course of chemotherapy. When is it possible to apply radiation therapy:
- A. In the cases of lymphogenous metastases.**
 - B. In the case of tumor clots in the renal vein.
 - C. For all patients after nephrectomy.
 - D. Radiotherapy is not used at all.
 - E. In the case of total lesions of the lymphatic system.
19. A 60-year-old S. patient underwent left-sided nephroureterectomy with resection of the angle of the bladder in papillary cancer of the lower third of the ureter. Specify the treatment tactics:
- A. Case follow-up.**
 - B. Chemotherapy.
 - C. Hormone therapy.
 - D. Radiation therapy.
 - E. All given above.
20. A 56-year-old man sought to urologist with complaints about the sudden appearance of blood in the urine. Small worm-shaped blood clots were in the urine this morning. The patient has no other complaints. The most likely diagnosis is:
- A. Renal tumor.**
 - B. Bladder tumor.
 - C. Ureter tumor.
 - D. Hemorrhagic cystitis.
 - E. Urolithiasis.
21. A pain of the lower back was developed in a 67-year-old patient. The patient was examined at the surgical hospital. Renal tumor was diagnosed. What factors could predispose to this disease?
- A. Smoking, impaired immune system section.**
 - B. Disruption of the body's immune response.
 - C. Chronic inflammatory diseases.
 - D. Triple dye.
 - E. Ergasthenia.
22. A 56-year-old patient has severe pain on the right lumbar region with radiation to the right inguinal region and testicle. The urine is red during urination. Also, small clots appeared after physical exertion and a long car drive. Specify the preliminary diagnosis:
- A. Renal tumor.**
 - B. Renal stone.
 - C. Tuberculosis of the prostate gland.
 - D. Lumbodynia.

- E. Shingles.
23. A 54-year-old patient sought to the urologist. He has complaints of pain over the pubic and the area of the right kidney. Difficult urination is noted. Urine contains clots of worm-like shape. What pathology is described?
- A. **Renal cancer.**
 - B. Lumbodynia.
 - C. Acute cystitis.
 - D. Prostatitis.
 - E. USD.
24. The accumulation of a contrast agent in the arterial phase is observed on a multi-spiral computer tomography in a 55-year-old patient. What disease is described?
- A. **Renal tumor.**
 - B. Polycystosis.
 - C. Nephrosclerosis.
 - D. Renal stone.
 - E. Pyelonephritis.
25. A 66-year-old patient has renal parenchyma cancer, frequent hematuria. What type of hematuria is characteristic of this disease:
- A. **Total, sometimes with clots.**
 - B. Microhematuria.
 - C. Initial.
 - D. Macrohematuria.
 - E. Terminal.
26. Cancer of the left kidney was diagnosed in a 76-year-old I. patient. What type of tumor is possible with histological examination:
- A. **Epithelial.**
 - B. Connective tissue.
 - C. Adrenal tissue structure.
 - D. Hemangiomas.
 - E. Glandular.
27. A 56-year-old patient is undergoing treatment concerning cancer of the kidney. Where are the most common metastases for this disease located?
- A. **In the lungs.**
 - B. In the liver.
 - C. In the contralateral kidney.
 - D. In the brain.
 - E. In the adrenal gland.

28. A 45-years-old patient has cancer of the kidney and metastases are found. Where are the most common lymphogenous metastases located:
- A. In the paraaortic and paraaqual lymph nodes.**
 - B. In the mediastinum.
 - C. In the iliac lymph nodes.
 - D. In the cervical lymph nodes.
 - E. In the supraclavicular lymph nodes.
29. A 78-year-old F. patient has suffered from renal carcinoma. A tumor thrombus was detected on tomography. Where is the most often tumor thrombus of renal cancer observed:
- A. In the renal and inferior vena cava.**
 - B. In the renal artery.
 - C. In the testicular vein.
 - D. In the paravertebral veins.
 - E. In the pelvic veins.
30. A 66-year-old patient has cancer of prostate gland. Creatinine is 520 ml/l, severe anemia is noted; Hb is 78g /l. What are the causes of chronic renal failure in the case of prostate cancer?
- A. Ureterohydronephrosis**
 - B. Acute pyelonephritis
 - C. Chronic pyelonephritis
 - D. Glomerulonephritis
 - E. Metastases.
31. A 46-year-old patient has a kidney tumor. What symptoms can appear at first?
- A. Lower back pain, hematuria.**
 - B. Enlarged kidney is palpable.
 - C. Hematuria.
 - D. Anemia.
 - E. Low-grade fever.
32. BPH was diagnosed in a 66-year-old patient. What symptoms does the patient have with this pathology?
- A. Difficult urination**
 - B. Azotemia
 - C. Residual urine > 100 ml
 - D. Severe pain of the prostate gland
 - E. Pain in the perineum
33. A 56-year-old patient was admitted to the urological hospital with complaints of pain over the pubic and dysuria. Incomplete emptying of the

urinary bladder is noted. The volume of the prostate gland is 50ml during examination. Nicuturia is to 2 times. The transurethral resection of the prostate will be conducted. What are the criteria for this operation?

- A. Fibrous form.**
- B.** Adenoma and chronic renal failure.
- C.** Subtrigonal localization.
- D.** Large size adenoma.
- E.** Complicated adenoma of II stage.

34. What examination is advisable to start in the case of suspected kidney tumor in a 46-year-old woman?

- A. With ultrasonography.**
- B.** With retrograde ureteropyelography
- C.** With excretory pyelography.
- D.** With biochemical blood parameters.
- E.** With aortography.

35. A 77-year-old patient has renal tumor. Surgical treatment will be carried out. What ligation is unacceptable at first in the case of a kidney removing concerning cancer?

- A. Renal vein.**
- B.** Renal artery.
- C.** Whole renal pedicle.
- D.** Adrenal artery.
- E.** Testicular vein.

36. A 4-year-old child has complaints of weakness, bad appetite, inactive, become thin. A tumor-like formation was found in the left half of the abdominal cavity. The most common tumor of the kidney in the period of 6 months to 5 years children is:

- A. Wilms' tumor.**
- B.** Teratoma.
- C.** Clear cell cancer.
- D.** Squamous cell carcinoma.
- E.** Sarcoma.

37. Cancer of the outer leaflet of the foreskin T1-2NoMo is diagnosed after prolonged conservative treatment in a 56-year-old patient. What is recommended for him?

- A. Circumisio + radiation therapy.**
- B.** Amputation of the penis.
- C.** Chemotherapy.
- D.** Radiation therapy.

E. Circumisio.

Topic: Acute and chronic renal failure

Tests of the 1st level:

1. What is not related to azotemic intoxication:
 - A. Insomnia**
 - B. Skin itch
 - C. Polyuria, polydipsy
 - D. Loss of appetite
 - E. Nausea, vomiting.

2. What is a filter for blood cells:
 - A. Pores of the endothelial layer**
 - B. Sores of the basement membrane
 - C. Fissured membrane
 - D. Pedicles of podocyte
 - E. Brush border.

3. Number 7 diet is recommended for patients with chronic renal failure. What is best to recommend to a patient as animal protein?
 - A. Eggs.**
 - B. Beef
 - C. Cottage cheese
 - D. Poultry meat
 - E. Cheese.

4. Intake of strophanthin is recommended by a cardiologist to a patient with chronic renal failure. What blood counts should pay attention?
 - A. Potassium level**
 - B. Urea level
 - C. Sodium level
 - D. Magnesium level
 - E. All indicators.

5. Urea, creatinine glucose are filtered in the glomeruli:
 - A. Fully**
 - B. Partially
 - C. It is not filtered
 - D. Only glucose is completely filtered
 - E. Only creatinine is filtered completely.

6. Daily diuresis is 350 ml in a patient with acute renal failure as a result of the action of organophosphate. Which of the following mechanisms underlies of oliguria?
- A. The damage of the tubules.**
 - B. Increased water reabsorption.
 - C. Impaired blood circulation in the kidneys.
 - D. The damage of the glomeruli.
 - E. Difficulty of outflow of urine.
7. Where does the action of osmotic diuretics occur?
- A. In the proximal tubule**
 - B. In the ascending section of Henle's loop
 - C. In the distal tubule
 - D. Along the entire nephron
 - E. In the receiving tube.

Tests of the 2nd level:

1. What promotes the progression of chronic renal failure?
- A. Hyperparathyroidism.**
 - B. Arterial hypertension.**
 - C. Activity of the underlying disease.**
 - D. Inflammation of the intestine.
 - E. None of the above
2. What is not related to azotemic intoxication?
- A. Polyuria, polydipsia.**
 - B. Increase the weight.**
 - C. Skin itch.
 - D. Insomnia.
 - E. Vomiting.
3. What does a patient with chronic renal failure lose with prolonged diarrhea?
- A. Potassium.**
 - B. Sodium.**
 - C. Phosphorus.
 - D. Magnesium.
 - E. None of these ions.
4. A 55-year-old man complains of general weakness, decreased elimination of fluid, pain in the region of the heart of the aching nature. He has been suffering from chronic pyelonephritis for 15 years. He was treated at the hospitals. Objectively: the skin is dry with a yellowish shade. Ps is 80 and rhythmic, AP is 100 / 70 MmHg. The deaf tones, pericardial friction noise are observed during

auscultation of the heart.

Creatinine is 1.1 mmol /l, glomerular filtration is 5 ml /min. What treatment is indicated for the patient?

- A. Rheopolyglucin, hekodez, heparin**
- B. Haemodialysis.**
- C. Xylitol, sorbite
- D. Diuretic.
- E. Antibiotic.

5. What should not be prescribed for acute and chronic renal failure?

- A. Tetracyclines.**
- B. Aminoglycosides.**
- C. Penicillins.
- D. Fluoroquinolones.
- E. Nitrofurans.

Tests of the 3rd level:

1. A 42-year-old patient has been suffering from chronic pyelonephritis for 20 years. The condition worsened: the amount of urine decreased, weakness, lack of appetite and vomiting appeared in the last 6 months. Objectively: the skin is pale and dry. AP is 200/120 mmHg. In the blood: er. are $2,2 \times 10^{12}$ / l Hb is 70 g/l; creatinine is 210 μ mol/l. The accumulation of these substances in the body is most important in the pathological condition.

- A. Nitrogenous waste.**
- B. Cholesterol.
- C. Triglycerids.
- D. Bilirubin.
- E. Uric acid.

2. A 36-year-old patient complains of headache, weakness, loss of appetite, thirst, swelling of the face and legs. He was treated about diabetes with insulin 42-54 units per day from 18 years. A condition is serious. The face is gray and “puffy”, the legs are swelling. AP is 210/110 MmHg, the pulse is 110 per minute and rhythmic. Heart and lungs are without features. Liver is at the edge of the costal arch. Glycemic profile is 9-12-10 mmol/l. The urine test: specific weight is 1022, sugar is 3%, and protein is 1.32 g /l, leuk. are 3-5 in FOV. A small amount of urine is noted. What complication is developed in the patient?

- A. Diabetic glomerulosclerosis.**
- B. Amyloidosis of the kidneys.
- C. Chronic pyelonephritis.
- D. Nephrotic syndrome.
- E. Glomerulonephritis.

3. A 55-year-old man complains of general weakness, a decrease in daily diuresis, and dull pain in the heart area. He has been suffering from chronic pyelonephritis for 15 years and he has been treated in hospital for several times. Objectively: the skin is dry with yellowish shade. PS is 80 and rhythmic, BP is 100/70 Mmh, the pericardial friction is heard and muffled heart sounds are noted by auscultation. Creatinine is 1.1 mmol/l, glomerular filtration is 5 ml/min. What treatment method is chosen?
- A. Hemodialysis.
 - B. Correction of hyperglycemia.
 - C. Diet.
 - D. Peritoneal dialysis.
 - E. Antihypertensive drugs.
4. A 48-year-old patient arrived from a prison. He complains of headache, reduced vision, nausea, dry mouth and thirst. He has been suffering from chronic pyelonephritis for 20 years. The 8-year incidence of hypertension was 8 observed. Objectively: the skin and mucous membranes are pale. Pulse is 90, AP is 220/140 MmHg The liver is 3 cm below the costal arch. CVA Tenderness is weak and positive on both sides. On the ultrasound:the reducing of the kidneys size is to 80*40mm, the thinning of the parenchyma is to 9 mm. The blood test: red blood cells are $2.1 \times 10^{12} / l$, white blood cells are $9.8 \times 10^9 / l$, ESR is 48 mm/hour. Blood creatinine is 0.243 mmol/l. The urine test: S.G. is 1010-1009, protein is 0.34 g/l, er. are 0-1 in FOV, leuk. are 12-14 in FOV, hyaline cylinders are 0-1 in FOV. The most likely diagnosis is
- A. **Bilateral nephrosclerosis on the background of chronic pyelonephritis, chronic renal failure of II st.**
 - B. Chronic pyelonephritis, chronic renal failure of II st.
 - C. Renal tuberculosis, chronic renal failure of I st.
 - D. Renal amyloidosis, chronic renal failure of I st.
 - E. Nephrotic syndrome, chronic renal failure of I st.
5. A 69-year-old patient was operated concerning multiple carbuncles of both kidneys for 2 years in a row. She is hospitalized with complaints of progressive shortness of breath, palpitations, nausea, vomiting and fatigue. Objectively: the skin is dry, pale with yellow shade. The uremic odor from the mouth and nosebleeds are noted. Tachycardia is observed. P. is 92 per min., the blood pressure is 170/120 MmHg. Hb is 76 g/l, ESR is 48 mm/hour. The blood urea is 45 mmol/l, creatinine is 0,878 mmol/l. What can cause the CRF complication?
- A. **Renal scarring.**
 - B. Acute renal failure.
 - C. Cardiovascular insufficiency.
 - D. Hypertensive heart disease.
 - E. Postponed surgery.

6. A 36-year-old patient was hospitalized with complaints of nausea, vomiting, back pain, headache and reduction of urine to 300-500 ml per day. He has been sick for a week after the processing of potatoes with pesticides. Objectively: swelling of the face is detected; AP is 150/100 MmHg. In the blood test: ESR is 25 mm/h. In the urine test: specific gravity is 1022, protein is 1.47 g/l, leuk. are 12-18 in FOV, lysed erythrocytes are 20-30 FOV, single hyaline cylinders are present. What additional examination is advisable conducted at first to make the diagnosis?
- A. **Determine blood creatinine level.**
 - B. Ultrasound of the kidneys.
 - C. Excretory urography.
 - D. Bacteriological examination of urine.
 - E. Biopsy of the kidneys.
7. A 59-year-old woman was hospitalized with complaints of nausea, vomiting, back pain, headache, and shortness of breath, dizziness, diarrhea and decrease in the amount of urine. From the anamnesis: she made a processing of potatoes with toxic chemicals 3 days ago. Objectively: the face is swelling, BP is 150/105 MmHg. In the urine test: specific gravity is 1020, protein is 2.2 g/l, leuk. are 20-24 FOV, lysed erythrocytes are 12-18 in FOV, single hyaline cylinders are noted. The reason of the deterioration of the patient is
- A. **ARF.**
 - B. CRF.
 - C. Loss of fluid during vomiting.
 - D. Diarrhea.
 - E. Increased blood pressure.
8. A 37-year-old patient was admitted to the intensive care unit. The general condition is very serious. Semicoma. The skin is gray and moist. Turgor is reduced. Pulse is frequent and intense. The blood pressure is 160/110 MmHg. The muscle tone is increased. Hyperreflexia. The smell of ammonia is in the air. The preliminary diagnosis is
- A. **Uremic coma.**
 - B. Alcohol coma.
 - C. Hyperglycemic coma.
 - D. Hypoglycemic coma.
 - E. Cerebral coma.
9. A 33-year-old patient sought to the doctor with complaints of headache, loss of appetite, nausea, morning vomiting and recurrent nosebleeds. He has been suffering from severe diabetes since childhood. The "diabetic foot" was treated about a month ago. An increase in blood pressure is to 220/130 MmHg, hemorrhages are on the skin of the hands, feet, the skin and mucous membranes are pale. Which of the following biochemical parameters has a diagnostic value in this case?

- A. Creatinine of blood.**
 - B. Blood bilirubin.**
 - C. Sodium of blood.**
 - D. Uric acid.**
 - E. Fibrinogen.**
10. A 37-year-old patient was hospitalized with complaints of headache, shortness of breath, nausea, vomiting, recurrent nosebleeds and decrease in the amount of urine. He has been suffering from severe diabetes since childhood. An increase in blood pressure is to 180/110 MmHg, creatinine is 0.530 mmol/l. The hemorrhages are on the skin of the hands, feet, the skin and mucous membranes are pale. The most effective treatment for a patient with CRF is
- A. Hemodialysis.**
 - B. Correction of hyperglycemia.**
 - C. Diet.**
 - D. Peritoneal dialysis.**
 - E. Antihypertensive drugs.**
11. A 50-year-old woman who has been suffering from chronic pyelonephritis with renal scarring for 20 years, a combination of antibacterial agents was prescribed during the acute period, namely gentamicin (80 mg 3 times a day) and bisseptol (960 mg 2 times a day). The development of the following complication can lead to the appointment of such therapy.
- A. ARF.**
 - B. Glomerulosclerosis.**
 - C. Hearing loss.**
 - D. This combination of antibiotics is optimal and completely safe.**
 - E. Acute adrenal insufficiency.**
12. A 45-year-old patient was hospitalized with complaints of dry mouth, weakness, itching, nausea and shortness of breath. 20 stones have left the urinary tract during the last 15 years, the operations on the right and left kidney have been performed twice due to acute purulent pyelonephritis., The urine with a density of 1007-1008 is excreted about 2400 ml during the day. How is this symptom called? What complications of urolithiasis are described?
- A. Hypostenuria, chronic renal failure.**
 - B. Pollakiuria, urolithiasis.**
 - C. Hypostenuria, hyperparathyroidism.**
 - D. Isosenuria, diabetes insipidus.**
 - E. Polyuria, urolithiasis.**
13. A 46-year-old patient complains of fatigue, headache and general weakness. Objectively: pulse is 88 beats/min., AP is 140/100 MmHg. In the blood analysis: creatinine is 0.352 μ mol/l, urea is 19.0 mmol/l. glomerular filtration is 50 ml/min. Suggest a syndromic diagnosis

- A. Stage II CRF.**
- B. Stage IV sCRF**
- C. Stage III RF**
- D. Stage I CRF**
- E. Stage III CRF**

14. A 42-year-old man suffers from chronic pyelonephritis with arterial hypertension. Antihypertensive drugs were taken irregularly. The weakness, apathy, dries and itchy skin and nocturia are noted in recent months. The blood creatinine is 920 $\mu\text{mol/l}$, glomerular filtration rate is 10 ml/min. The reason of the serious condition of the patient is

- A. Uremia.**
- B. Acute renal failure.**
- C. Hypertensive crisis.**
- D. Stage III RF.**
- E. Stage III Chronic renal failure.**

15. A smell of ammonia from the mouth, swelling of the face and lower legs are in a 57-year-old patient. She has been observed concerning multiple myeloma about 5 years. Er are $3.5 \times 10^{12} /\text{l}$, albumin is 45 g /l, globulins are 55g /s, ESR is 75 mm/h, creatinine is 650 $\mu\text{mol} /\text{l}$. Rehberg's Test: SCF is 10 ml /min. GUT: protein is 2.5 g/l, erythrocytes are 3-4 in FOV, leukocytes are 10-15 in FOV. What complication has developed?

- A. Chronic renal failure.**
- B. Chronic pyelonephritis.**
- C. Chronic glomerulonephritis.**
- D. Cardiac failure.**
- E. Amyloidosis.**

16. A radical operation concerning uterine cancer was performed for a 58-year-old patient. Intraoperative single-stage blood loss is 1800.0 ml, after which hypotonia (80/50 MmHg) was observed for 120 minutes. Diuresis is 60 ml for the first 2 hours of surgery, 15 ml of urine are noted for three hours. Indicate the form of anuria.

- A. Prerenal anuria.**
- B. Renal**
- C. Postrenal**
- D. b) is true.**
- E. Arenal.**

17. A 56-year-old patient after an accident was operated concerni theng rupture of the spleen. 2 liters of blood was removed from the abdominal cavity. The most common complication of acute ischemia in this case will be:

- A. Acute renal failure.**
 - B. Pulmonary distress syndrome.
 - C. Chronic renal failure.
 - D. Acute myocardial insufficiency.
 - E. Disseminated intravascular coagulation syndrome.
18. A 60-year-old alcoholic was admitted to the emergency room with clinical manifestations of anuria. What will be the first step in further diagnostic examination of the patient after you have made sure that hemodynamic parameters are not impaired?
- A. Ultrasound examination of the urinary tract.**
 - B. Radioisotope renography.
 - C. Excretory urography.
 - D. Chromocytoscopy.
 - E. Catheterization of the ureters.
19. Oliguria lasted in a 35-year-old woman after blood loss during childbirth and changed by polyuria. Clinical and laboratory indicators are hypokalemia, hypotension, increased blood nitrogen levels, anemia. Specify the reason of the development of this state.
- A. Acute renal failure.**
 - B. Preeclampsia.
 - C. Endogenous intoxication.
 - D. Exogenous intoxication.
 - E. Eclampsia.
20. A 69-year-old patient underwent right-sided nephrectomy. Intraoperative blood loss was 1400.0 ml. Hypotension was observed for 40 minutes. Later anuria was developed. Specify the possible cause of anuria.
- A. Acute renal failure with underlying hypotension.**
 - B. Obturation of the urinary catheter.
 - C. Bladder tamponade.
 - D. Disseminated intravascular coagulation syndrome
 - E. Chronic renal failure.
21. A 35-year-old patient complains of headache, weakness, nausea, loss of appetite, decrease in the amount of urine in the last 24 hours. He had contact with aniline dyes 2 days ago. The skin is pale, soft heart sounds, BP is 110/70 MmHg. Blood creatinine is 0.6 mmol/l, ch. is 5.8 mmol/l. Daily diuresis is 200 ml. Preliminary diagnosis is
- A. Acute renal failure.**
 - B. Acute pyelonephritis.

- C. Acute glomerulonephritis.
- D. Renal amyloidosis.
- E. Chronic glomerulonephritis.

22. A 32-year-old pregnant woman was sent to the maternity ward with a pregnancy of 32 weeks. She has been suffering from chronic pyelonephritis.

She complains of general weakness, rapid fatigability, impaired productivity and loss of appetite. She feels the movement of the fetus well. The clinical and laboratory examination revealed the following pathological changes: slight polyuria, the difference between maximum and minimum urine density is less than 8 in the Zimnitsky's test, blood urea is 9.8 mmol /l, blood creatinine is 0.2 mmol /l, glomerular filtration is 36 ml /min, slight hyponatremia and anemia.

What complication occurred in a pregnant woman?

- A. Stage II chronic RF.**
- B. Pre-eclampsia.
- C. Endogenous intoxication.
- D. Exacerbation of chronic pyelonephritis.
- E. Eclampsia.

23. A 68-year-old patient has been suffering from chronic pyelonephritis for 15 years. He complains of inspiratory dyspnea during exercise, palpitations, intermittent pain in the region of the heart without irradiation and general weakness in the last 3 months. Objectively: acrocyanosis on the background of pale skin. Pulse is 104 beats/min, rhythmic and intense. AP is 190/110 MmHg. The left border of the heart is 2 cm to the left of the left midclavicular line, above the top I, the heart tone is weakened, systolic murmur, accent II of the aorta. On the ECG: the deviation of the electrical axis of the heart to the left, dysmetabolic changes. The blood test: Hb is 66 g /l, creatinine is 1.1 mmol /l. The relative density of urine is 1.012. The patient has arterial hypertension rather:

- A. Renoparenchymatous.**
- B. Essential.
- C. Hemodynamic.
- D. Vasorenal.
- E. Caused by incompetence of the aortic valves.

24. A 55-year-old man complains of general weakness, decreased urination and pruritus. He has been suffering from chronic pyelonephritis for 15 years. Objectively: the skin is dry with a yellowish shade. PS is 80 per minute, rhythmic, AP is 100/70 MmHg

- On auscultation: the heart sounds are dull, and the pericardial friction is heard. Blood creatinine is 1.1 mmol/l, glomerular filtration is 5 ml/min. What treatment is indicated for the patient?

- A. Hemodialysis.**

- B. Enterosorbents.
- C. Rheopolyglucin.
- D. Antibiotics.
- E. Diuretic.

25. Daily diuresis is 50 ml in a patient with acute renal failure due to ureteral calculus. What is the nature of anuria?
- A. Postrenal.**
 - B. Renal.
 - C. Prerenal.
 - D. Arenal
 - E. Mixed
26. A 28 year old woman has a transfusion of more than 8 liters of donated blood as a result of exfoliation of the placenta, massive blood loss. Reduction of diuresis is to 50 ml within 3 hours after surgery. The urine is red. What is the most likely cause of anuria?
- A. Incompatible blood transfusion.**
 - B. Drop of blood pressure during surgery.
 - C. Ligation of the ureters during surgery.
 - D. Postoperative hypotonia.
 - E. Unrestored fluid volume.
27. A 52-year-old man has received 5.8 liters of donated blood as a result of massive blood loss due to a ruptured kidney during surgery. Hemodynamics is stable for 6 hours after surgery. Diuresis is 180 ml. Urine is red, "laked". What is the most likely character of oligoauria?
- A. Renal.**
 - B. Prerenal.
 - C. Postrenal.
 - D. Arenal.
 - E. Unrestored fluid volume.
28. A 25-year-old woman has a transfusion of 6 liters of donor blood, an ectopic pregnancy, a rupture of a tube, massive blood loss and unstable hemodynamics. The blood pressure is not higher than 80/40 mmHg within 12 hours after surgery. On the background of fluid infusion diuresis does not exceed 200 ml. What is the most likely nature of oligoanuria?
- A. Prerenal.**
 - B. Renal.
 - C. Postrenal.
 - D. Mixed.

E. Arenal.

28. A 40-year-old man suffers from chronic renal failure due to polycystic slippers. Objectively: AP is 180/110 mm, serum creatinine is 180 mmol /l, ch. is 5.2 mmol/l. You should prescribe all drugs except
- A. **Long term hemodialysis.**
 - B. Low-protein diet.
 - C. Diuretic therapy.
 - D. Hyposodium and hypopotassium diet.
 - E. Antihypertensive therapy.
29. A 42-year-old woman had prolonged oliguria after blood loss during labor. She notes a general weakness of shortness of breath, an increase in the amount of urine to 3 liters for 2 weeks. Clinical and laboratory indicators are hypotension, arrhythmia, hypokalemia, increased levels of nitrogenous blood waste and anemia. Indicate the cause of cardiovascular disorders.
- A. **Hypokalaemia.**
 - B. Polyuria.
 - C. Anemia.
 - D. Hyperazotemia
 - E. Childbirth.
30. A 35-year-old patient is observed at the intensive care unit after suffering bleeding and hemorrhagic shock for the fourth day. Daily diuresis is 50 ml. The patient notes vomiting the second day and he inadequately determines his condition. CVP is 159 mm of water with auscultation in the lungs for the last 3 hours, single moist rales are observed. Pulse is 34 per min., In blood tests: residual nitrogen is 82 mmol /l, K is 7.1 mmol /l, Cl is 78 mmol /l, Na is 130 mmol /l, Ht is 0.32, Hb is 100g /l, blood creatinine is 0.9 mmol /l. What complication has most likely developed in a patient?
- A. **Acute renal failure.**
 - B. Acute heart failure.
 - C. Hypostatic pneumonia.
 - D. Dehydration due to hypovolemia.
 - E. Posthypoxic encephalopathy.
31. A 49-year-old woman has fever, dull back pain on the right and left, anuria on the 3rd day after gynecological surgery. The presence of bilateral ureterohydronephrosis was detected by ultrasound. Which of the following CT is most appropriate to determine the level of ureteral obstruction?
- A. **Dynamic scintigraphy.**
 - B. Excretory urography.
 - C. Ultrasound Doppler.

D. Radioisotope renography.

32. Massive edema, anorexia, nausea, vomiting, itching, headache, thirst, smell of ammonia from the mouth appeared in a 22-year-old patient after receiving III degree burns on the 4th day. In the blood test: urea is 4.5 mmol /l, creatinine is 0.755 mmol /l, potassium plasma is 7.9 mmol /l, erythrocytes are $2.2 \cdot 10^{12}$ /l, in the urine test: protein is 3.6 g /l , erythrocytes are 1/4 of the field of view, toxic cylinders are 4-6 in the FOV, erythrocyte is 3-4 in the FOV, wax one is 2-3 in the FOV. What complication of burn disease is developed?
- A. Acute renal failure.**
 - B. Acute glomerulonephritis.
 - C. Toxic nephropathy.
 - D. Renal apostematoz.
 - E. Acute pyelonephritis.
33. A 77-year-old patient was hospitalized for a 5-day anuria due to a block of kidney stones. Diuresis on the first day was 9.8l after recovery of diuresis by performing percutaneous nephrostomy on both sides. What disorder is the greatest threat to the life of the patient?
- A. Hypokalemia.**
 - B. Hyperazotemia.
 - C. Hyponatremia.
 - D. Hyperkalemia.
 - E. Hypoalbuminemia.
34. A patient with chronic renal failure has vomiting for 2 weeks. Urea and creatinine plasma are increased. What should be applied in this case?
- A. Intravenous infusion of 10% sodium chloride solution**
 - B. Diet correction
 - C. Hemodialysis
 - D. Intravenous infusion of 5% glucose solution
 - E. Intravenous infusion of 40% glucose solution
35. Diarrhea is observed for 5 days in a 65 year-old patient. He suffers from polycystic kidney disease. Stage 2 Chronic RF. A loss of the next trace element is in the body of the patient
- A. Potassium**
 - B. Sodium
 - C. Hydrogen
 - D. Calcium

E. All these ions

36. Potassium blood serum is 7.5 mEq / l in a 65-year-old patient with chronic renal failure. What should be recommended at first?
- A. Intravenously drugs of calcium
 - B. Infusion of sodium chloride solution
 - C. Infusion of 5% glucose solution
 - D. Infusion of 40% glucose solution with insulin
 - E. Intravenous lasix
37. A 34-year-old patient was admitted to the nephrology hospital with complaints of epigastric pain, weakness and nausea. He notes a decrease in urine per day to 120 ml. He is engaged in construction work; he painted the fence for two days before hospitalization. It is described in the case-history. What pathological process does is developed?
- A. Renal anuria.
 - B. Postrenal anuria.
 - C. Bacterial food poisoning.
 - D. Heat apoplexy
 - E. B) is true.

Topic: Rescue emergency care for diseases of the urinary and male reproductive systems.

Tests of the 1st level:

1. The leading symptoms are all those listed in the detachment of the kidney, except:
 - A. Macrohematuria with clots**
 - B. Shock
 - C. Anuria
 - D. Severe pain
 - E. Anemia.

2. Paraphimosis is:
 - A. Incarceration of the penis balanus with constricted foreskin.**
 - B. The narrowing of the opening of the urethra.
 - C. Curvature of the penis during erection.
 - D. Damage of the passage of urine from the narrowed part of the urethra.
 - E. B) and D) are true.

3. The treatment of paraphimosis includes:
 - A. If it is possible to reposition or dissect the incarceration ring.**
 - B. Complete excision of the foreskin.
 - C. Bath with a solution of manganese.
 - D. Introduction antispasmodic.
 - E. B) and D) are true.

4. What should be used for rapid diagnosis of closed kidney injury:
 - A. Excretory urography and ultrasound.**
 - B. Survey urogram
 - C. Radioisotope renography and abdominal aortography
 - D. Chromocytoscopy.
 - E. All variants are true.

5. Priapism is a prolonged erection due to:
 - A. Stress of the cavernous bodies of the penis.**
 - B. Tension of the cavernous bodies of the urethra.
 - C. Contractions of the external sphincter of the bladder.
 - D. Contractions of the pelvic muscles.
 - E. B) and C) are true.

6. Priapism is developed due to:

- A. Inadequate outflow and flow of blood into the cavernous body of the penis.**
 - B. Lymphostasis.
 - C. Damage of the viscosity and chemical composition of blood.
 - D. Spinal cord injuries.
 - E. Long-term use of narcotic drugs.
7. Anuria is within 24 hours. The discharge of urate stones and salts are described in the case-history. Choose the emergency option:
- A. Urgent catheterization of the ureters. Ultrasound. Lasix of 100 mg. Observation.**
 - B. Ultrasound.
 - C. CT of the kidney, ureter, bladder.
 - D. Detoxification therapy.
 - E. Intravenous saline solutions. Nephrostomy with both sides.
8. A patient has a Prostatic hyperplasia and acute urinary retention. Catheterization is not possible. The body temperature is 37.9 °C. It is advisable to produce:
- A. Open cystostomy.**
 - B. Trocar (puncture) cystostomy.
 - C. Puncture of the bladder with a thin needle.
 - D. Adenomectomy.
 - E. Antispasmodics, observation.
9. What is the main method of diagnosis of bladder injury in children?
- A. Cystography.**
 - B. Excretory urography.
 - C. Cystoscopy.
 - D. Catheterization of the bladder.
 - E. Chromocytoscopy.
10. What is a pathognomic symptom of a complete rupture of the urethra in children?
- A. Acute urinary retention.**
 - B. Hematuria.
 - C. Pyuria.
 - D. Dysuria.
 - E. Proteinuria.
11. Which of the following research methods is the most informative in diagnosing of urethral rupture in children?
- A. Micturating cystography.**
 - B. Excretory urography.
 - C. Cystoscopy.

- D. Uroflorometry.
 - E. Cystography.
12. Potassium serum is 7.5 mEq /l in a patient with chronic renal failure. What should be recommended at first?
- A. Intravenous drugs of calcium.**
 - B. Infusion of sodium chloride solution.
 - C. Infusion of 5% glucose solution.
 - D. Infusion of 40% glucose solution with insulin.
 - E. Intravenous lasix.

Tests of the 2nd level:

1. What are the primary methods of examination of a patient with suspected bladder rupture?
 - A. Cystography..**
 - B. Zeldovich test.**
 - C. Survey urogram.
 - D. CT of the urogenital system.
 - E. Bladder catheterization.

2. What should be used for intraperitoneal bladder rupture?
 - A. Epitostomy, suturing the bladder rupture. Drainage of paravesical fiber.**
 - B. Laparotomy. Drainage of the abdominal cavity.**
 - C. Ice on the abdominal cavity.
 - D. Urethral catheter insertion.
 - E. Broad-spectrum antibiotics.

3. What are the treatment methods for penile fracture
 - A. Closure of the tunica albuginea.**
 - B. Cold, rest, antibiotics.**
 - C. Pressure bandage on the penis.
 - D. Epicystostomy.
 - E. Observation.

4. What are the possible ways to discharge urine in the case of damaged ureter?
 - A. Nephrostomy.**
 - B. Endovesicopielostant.**
 - C. Catheterization of the ureter.
 - D. Ureterostomy.
 - E. Nephrectomy.

5. The greatest effect in the treatment of acute apostematous pyelonephritis with cefoperazone can be obtained by managing it:
- A. Intravenous.**
 - B. Endolymphatic.**
 - C. Subcutaneously.
 - D. Intramuscular.
 - E. By ureteral catheter to the kidney.

Tests of the 3rd level:

1. A 43-year-old patient fell from the 3rd floor. The condition of the patient is severe. The pulse is 80 beats /min, blood pressure is 100/50 MmHg. The skin and visible mucous membranes are pale. The abdomen is slightly swollen. On the ultrasound: a hematoma of the lumbar region on the left and a rupture of the upper pole of the left kidney are noted. The patient is prepared for surgery: lumbotomy on the left. What urgent surgical treatment for closed renal injury is shown?
- A. Anemia**
 - B. Hight temperature
 - C. Microhematuria
 - D. Anamia and shock
 - E. Pyuria
2. A 23-year-old patient was hit into the stomach and into the left lumbar region. In urine tests: red blood cells are 14-16 in FOV. What is the patient's nosology:
- A. Renal concussion (contusion).**
 - B. Subcapsular renal rupture.
 - C. Two-phase subcapsular rupture of the kidney (phase 1)
 - D. All listed.
 - E. None of the above
3. A 44-year-old patient was admitted to the clinic with diagnosis: polytrauma. He got hit into the right kidney area. The patient is in extremely difficult condition. Pulse is 106, BP is 100 / 50 MmHg. Which of the following research methods is the most informative in the case of renal damage:
- A. Abdominal aortography with underlying excretory urogram.**
 - B. Survey X-ray of the kidneys and urinary tract
 - C. Excretory urography
 - D. Retrograde ureteropyelography
 - E. Chromocytoscopy
4. A 76-year-old patient was admitted to the hospital with a diagnosis of polytrauma. Severe anemia and pneumohematoryx on the right are noted. Open craniocerebral injury and renal injury on the right are in the case-history. What surgical treatment is indicated in case of renal injury?

- A. Profuse hematuria with clots with retroperitoneal hematoma**
 - B. With macrohematuria
 - C. When there is no discharge of the damaged kidney of a radiopaque substance on the excretory urogram
 - D. with normal function of the contralateral kidney
 - E. with an increase in nitrogenous toxins indicators
5. A sharp drop in blood pressure is observed in a 43-year-old patient after an isolated injury of the kidney and anemia are in the absence of hematuria, which is associated with damage:
- A. Vessel of kidney**
 - B. Cortical kidney layer
 - C. Pelvis and renal medulla
 - D. Perirenal fiber
 - E. Renal capsules
6. A 44-year-old patient was admitted to the urological hospital with suspected damage or ligation of the ureter during gynecological surgery. What is performed to clarify the diagnosis:
- A. Extreme urography, ultrasound examination of the kidneys**
 - B. Excretory urography
 - C. Ultrasound examination of the kidneys
 - D. Chromocytoscopy
 - E. Blood biochemistry
7. A 19-year-old patient was admitted to the hospital with abdominal injury. A suspicion of intraperitoneal rupture of the bladder is noted. What are the symptoms characteristic of intraperitoneal bladder rupture?
- A. Absence of urination for a long time and urging to him. The phenomena of peritonitis.**
 - B. Tympanic sound over the pubis with percussion of the anterior abdominal wall.
 - C. Overflowing bladder is palpated over the pubis.
 - D. Muscle tension of the anterior abdominal wall, swelling of the tissues of the anterior abdominal wall..
 - E. A) and B) are true.
8. A 55-year-old patient was admitted to the hospital with a perineal injury (fell on a tree). A suspicion of rupture of the urethra is noted. The main method of diagnosis of urethral injuries is:
- A. Micturating cystourethrography.**
 - B. Excretory urography.
 - C. Ascending urethrocytography.

- D. Pneumocystography.
E. All of the above.
9. A 34-year-old patient heard a distinct crunch in the penis during intercourse. Severe pain, curvature and swelling of the penis were noted. The diagnosis of a “fracture” of the penis is made during the examination. What is the treatment of a “fracture” of the penis?
- A. Surgery - suturing of rupture of the tunica albuginea.**
B. Conservative treatment (cold, hemostatic agents, bromides).
C. Epicystostomy.
D. Suturing of the urethral defect.
E. A) and B).
10. Acute urinary retention occurred after hypothermia in a 67-year-old patient. All of the factors listed above cause an acute urinary retention during Prostatic hyperplasia, except for
- A. Bladder sphincter spasm and innervation disorders.**
B. Venous congestion in the pelvis.
C. Deformation and compression of the urethra by Prostatic hyperplasia.
D. Edema of the mucous membrane of the urethra and prostate gland.
E. Sudden decrease in detrusor tone (urinary retention).
11. A 60-year-old patient was admitted to the hospital with acute urinary retention, which arose for the first time. The urination recovered after 2-fold catheterization; however, residual urine is 300 ml. The signs of double-sided hydro-ureteronephrosis and an increase in the size of the prostate gland to 80 cm located sub-trigonally were detected by the ultrasound. The serum urea content is 21 mmol/l, thirst and dry mouth. The cardiovascular system and lungs have the age-related changes. A blood test: hemoglobin is 120 g/l, ESR is 20 mm/hour. Relative density of urine is 1.006. The remaining indicators are in the normal range. What is recommended for the patient?
- A. Percutaneous nephrostomy.**
B. Transurethral electroresection.
C. Adenomectomy.
D. Cystostomy.
E. Installation of a permanent catheter.
12. A 30-year-old woman was admitted to the clinic. 20 weeks pregnant with exacerbation of pyelonephritis are noted in the case-history. One of the following condition contributes to the effective treatment of pregnant pyelonephritis:
- A. Antibiotic therapy, restoration of urodynamics,**

antispasmodics, sanitation of purulent foci.

- B.** Intake of uroantiseptics and diuretics.
 - C.** Restoration of urodynamics.
 - D.** Sanitation of primary purulent foci.
 - E.** Antispasmodics.
13. A 23-year-old patient has 18 weeks of pregnancy. Hydronephrosis on the right of 3 degrees. In the urine test: leukocytes are thick on the entire field of view. The temperature is 40C. The drainage of the right kidney is shown. What are the indications for emergency surgery?
- A. Acute suppurative pyelonephritis.**
 - B.** High fever.
 - C.** Ureterohydronephrosis.
 - D.** Chronic renal failure.
 - E.** Oliguria.
14. The ureter is damaged on the right during the operation in a 55-year-old patient. The urine must be turned off. What are the following methods of urine discharge:
- A. Nephrostomy on the right.**
 - B.** Ureterostomy and ureterocutaneostomy.
 - C.** Permanent catheter..
 - D.** Endovesicopielostent.
 - E.** All of the above.
15. The amount of urine decreased after a cesarean section in a woman and pain appeared in the area of the right kidney. Hydronephrosis of the right kidney was diagnosed; ligation of the right ureter was made. The operation of choice on the 5th day after ligation of the ureter was complicated by acute pyelonephritis:
- A. Open nephrostomy.**
 - B.** Ureterocystanastomosis.
 - C.** Percutaneous nephrostomy.
 - D.** Pielostomy.
 - E.** Removal of ligatures.
16. The urine began to flow into the vagina after uterine extirpation after 3 weeks in a 55-year-old woman. There is a suspicion of vesicovaginal fistula. The main method of diagnosis of vesicovaginal fistula is:
- A. Excretory urography, cystoscopy, examination of the vagina in mirrors.**
 - B.** Cystoscopy.
 - C.** Cystography.
 - D.** Vaginography.
 - E.** Inspection of the vagina in the mirrors.

17. The patient was admitted to the urological hospital. The temperature was 39C and the pain was in the left kidney. Leukocytosis and weakness were observed. There is a stone in the pelvis of the left kidney and a lot of apostems on the ultrasound examination. The volume of emergency surgery includes:
- A. Decapsulation and nephrostomy.**
 - B. Posterior transverse sinus pyelolithotomy.
 - C. Decapsulation of the kidney.
 - D. Nephrostomy.
 - E. All variants are correct
18. A 35-year-old patient has a back injury 2 years ago. Neurogenic bladder and atony of the bladder are noted. Prostatitis was treated. Residual urine is 170 ml. What is performed for the patient?
- A. Conduct electrostimulate the bladder.**
 - B. Treat conservatively prostatitis (anti-inflammatory, resorbable therapy).
 - C. Perform traocaricectomy as the first step.
 - D. Conduct a bougienage of the posterior urethra.
 - E. Perform transurethral electroresection or wedge resection of the bladder neck.
19. A 44-year-old patient was injured in an accident. The bladder rupture is established. Suturing the gap and epicystostomy are performed. What type of drainage is recommended?
- A. Drain according Buialskyi.**
 - B. Install 2 gauze tampons in the near cystic space
 - C. Sew the wound tightly.
 - D. Install 2 rubber drains.
 - E. Install a system for drip irrigation of paravesical cellular tissue
20. A 30-year-old woman has a 5 cm paraurethral cyst with suppuration elements. What is recommended for the patient?
- A. Excision of the cyst. Drainage in the cyst space, antibiotics.**
 - B. Drainage of the cyst.
 - C. Electrocoagulation of the cyst.
 - D. Installation in a cyst in a permanent catheter irrigator.
 - E. D/C under the supervision of urologist, gynecologist.
21. A 34-year-old patient has a bruise of the scrotum. A hematoma 8 * 4 * 9 cm is observed by palpation and according the ultrasound. What

is recommended?

- A. Hematoma puncture.**
 - B. Cold on the scrotum.
 - C. Suspension, antibiotics.
 - D. Hematoma puncture with constant irrigation with furacillin solution.
 - E. Surgery - opening and drainage of hematoma.
22. A 35-year-old patient has a pathological erection that lasts 5 days. What is shown for the patient?
- A. Puncture cavernous anastomosis.**
 - B. Safeno-cavernous anastomosis.
 - C. Conservative treatment: heparin, cold, antispasmodics.
 - D. Presacral Novocain blockade.
 - E. Bromides and observation.
23. A 70-year-old patient has Prostatic hyperplasia and paradoxical ischuria. He was treated conservatively. There was no effect. Creatinine of blood is 160mmol /l. What is shown for the patient?
- A. Cystostomy.**
 - B. Adenectomy.
 - C. Permanent Nelaton's catheter.
 - D. Transurethral prostate gland resection.
 - E. Puncture of the bladder.
24. A 30-year-old patient has been suffering from chronic prostatitis for 7 years. A prostate abscess was transrectally revealed on the ultrasound study. What is shown for the patient?
- A. Dissection and drainage of abscess.**
 - B. Perineal puncture abscess.
 - C. Transrectal abscess dissection.
 - D. Course of anti-inflammatory treatment.
 - E. Puncture abscess.
25. A 45-year-old patient has intestinal paresis after pyelolithotomy on the 2nd day. What is recommended for the patient?
- A. Prozerin, cerclura given as a single dose and subcutaneously.**
 - B. Gastric lavage.
 - C. Platyphylline, papaverine subcutaneously.
 - D. Colonic tube.
 - E. Sitting bath.
26. Acute fibrinolysis occurred during adenectomy in a 76-year-old patient. The patient needs all of the above, except:
- A. Ligation of the internal iliac arteries.**
 - B. Tamponade of the adenoma space with a gauze pad.

- C. Direct blood transfusion.
 - D. Transfusion of fresh blood.
 - E. Cryoprecipitate.
27. A 40-year-old patient has renal cancer complicated by a tumor thrombus in the renal vein. What is recommended for the patient in this case?
- A. Nephrectomy with embolization of the inferior vena cava in the area of the renal vein.**
 - B. Nephrectomy without removing a blood clot from the renal vein.
 - C. Renal artery embolization.
 - D. All of the above.
 - E. Heparin 40 thousand given as a single dose intravenously.
28. Stage 2 of Prostatic hyperplasia was diagnosed in a 66-year-old patient. Acute urinary retention on the background of acute myocardial infarction is noted. What is recommended for the patient in this case?
- A. Bladder catheterization with an elastic catheter.**
 - B. Trocar cystostomy.
 - C. Cystostomy.
 - D. Bladder capillary puncture.
 - E. Metal catheter.
29. An abnormal development of the urinary system was diagnosed in a 55-year-old patient. Polycystic kidney disease. Chronic pyelonephritis. Suppuration of cysts of the right kidney. Stage 1 Chronic renal failure. Which option is acceptable for treatment:
- A. Puncture of cysts with suction content, antibacterial therapy..**
 - B. Puncture of cysts.
 - C. Nephrectomy.
 - D. Excision of cysts, ignipuncture.
 - E. Puncture nephrostomy.
30. A 30-year-old patient has a scrotum injury on the right. 12 hours have passed after the injury. A diagnosis was made after the examination: contusion of the scrotum of the right half and extensive hematoma. What is recommended for the patient in this case?
- A. Surgical treatment, removal of hematoma and drainage of the scrotum.**
 - B. Puncture hematoma..
 - C. Conservative treatment, suspensory bandage.
 - D. Antibiotics at the outpatient basis.
 - E. B) and C) are equivalent.

31. An iodine tincture is mistakenly introduced into the bladder.
What is advisable in this case?
- A. Installation of a permanent catheter and rinsing of the bladder with an indifferent antiseptic solution.**
 - B. Setting of cystostomy.
 - C. Instillation of 10% sodium thiosulfate solution.
 - D. Introduction to the bladder of fat emulsion.
 - E. A) and D) are correct.
32. In case of bladder burn with 96% alcohol, everything is recommended for the patient, except:
- A. Setting cystostomy.**
 - B. Installation of a permanent catheter and rinsing of the bladder with an indifferent antiseptic solution.
 - C. Introduction to the bladder of fat emulsion.
 - D. Pelvic novocaine blockade.
 - E. Irrigate the bladder cavity with 0.5% novocaine solution.
 - F. A) and D) are correct.
33. The patients are not able to work with chemical burns of the bladder:
- A. 3-4 weeks.**
 - B. 1-2 weeks.
 - C. 2,5 weeks.
 - D. 7-8 weeks.
 - E. 3 months.
34. A 67-year-old patient has stone pelvis of the right kidney with damage of the outflow of urine from the right kidney. Exacerbation of secondary pyelonephritis. Urosepsis. What is performed at the first?
- A. Percutaneous nephrostomy. Antibacterial therapy. Detoxification.**
 - B. Broad-spectrum antibiotics.
 - C. Antispasmodics.
 - D. Decoction of diuretic herbs.
 - E. Catheterization of the kidney.
35. What is characteristic of torsion of the testicle in the scrotum:
- A. Sudden onset of the disease, severe pain, swelling of the scrotum. Hyperemia.**
 - B. Gradual onset, mild pain syndrome
 - C. Sudden onset of the disease, then a light gap. Gradually increase of swelling of the scrotum, scrotal hyperemia
 - D. Moderate hyperemia and swelling of the scrotum without pain symptom
 - E. Symptoms depend on age.

36. Which of the following research methods is the most informative in the diagnosis of acute renal injury?
- A. Polyposition cystography.**
 - B. Reorenography.
 - C. Cystouterography.
 - D. Cystoscopy.
 - E. Excretory urography.

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