CONTROL AND MEASURING INSTRUMENTS

Questions of the program for midterm control 1, 2

Discipline: "The genitourinary system in pathology"
Course Code: MPSP 3216
Name and code of the OP: 6B10115 "Medicine"
Amount of study hours/credits: 150 hrs. (5 credits)
Course and semester of study: 3rd year, 6th semester

Shymkent, 2024

The control and measuring instruments have been developed in accordance with the working curriculum of the discipline (syllabus) and discussed at the department meeting

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Department of "Propaedeutics of Internal Diseases"

Midterm control №1

1. An assignment to demonstrate practical skills.

1. General examination of patients with diseases of the genitourinary system.
2. Methods and techniques for palpation of the kidneys.
3. Methods and techniques for performing kidney percussion.
4. Method and technique for determining the upper border of the urinary bladder.
5. Methods of listening to the renal arteries.
5. Questioning and general examination of patients with dysuric syndrome.
6. Questioning and general examination of patients with nephritic syndrome.
7. Questioning and general examination of patients with nephritic syndrome.
8. Features of palpation in the main syndromes of diseases of the genitourinary system. Diagnostic value.
9. Features of percussion in the main syndromes of diseases of the genitourinary system. Diagnostic value.
10. Features of interpretation of results of laboratory and instrumental research methods for leading syndromes of genitourinary system pathology.
11. Instrumental research methods for pathologies of the genitourinary system.
12. Laboratory research methods for pathologies of the genitourinary system.
13. Clinical features of nephrotic syndrome.
14. Clinical features of nephritic syndrome.
15. Clinical features of dysuric syndrome.
16. Predisposing factors and causes leading to the development of dysuric, nephrotic, nephritic syndromes.
17. Urine collection for general urine analysis, Zimnitsky, Nechiporenko, Reberg tests.

Option 1

1. The main clinical sign according to the clinical protocol of nephrotic syndrome is:
a) edema
b) increased blood pressure
c) heartbeat
d) dysuria
e) fever
2. Dysuria:
a) frequent, painful and difficult urination
b) frequent urination
c) painful urination
d) increase in daily urine output
e) decrease in daily urine output
3. Polyuria:
a) excretion of more than 2 liters of urine
b) urinates mainly at night
c) excretion of more fluid than drunk
d) painful urination
e) urine protein determination

4. Pollakiuria:
a) frequent urination
b) painful urination
c) infrequent urination
d) cessation of urination
e) urination in small portions
5. Nocturia:
a) predominance of nocturnal diuresis over daytime
b) predominance of daytime diuresis
c) frequent urination
d) painful urination
e) frequent painful urination
6. A fruity odor (or the smell of rotting apples) is characteristic of urine containing:
a) urates
b) ketone bodies
c) large amounts of protein
d) leukocytes
e) blood
7. Polyuria is typical for patients:
a) with diabetes
b) with increased sweating
c) with profuse diarrhea
d) with cardiac decompensation
e) located in a dry, hot room
8. The main cause of true leukocyturia:
a) inflammation of the renal pelvis and calyces
b) inflammatory diseases of the appendages
c) inflammation of the prostate gland
d) inflammatory diseases of the uterus
e) inflammatory diseases of the bladder
9. Hematuria is characteristic of:
a) glomerulonephritis
b) cystitis
c) pyelonephritis
d) urethritis
e) inflammatory disease of the bladder
10. The content of leukocytes in urine is not subject to counting in the following cases:
a) pyuria
b) leukocyturia
c) hyperleukocyturia
d) leukocytosis
e) cystitis
11. The place of formation of renin is:
a) juxtaglomerular apparatus of the kidneys
b) islets of Langerhans of the pancreas
c) renal tubular apparatus
d) Kupffer cells of the liver
e) adrenal glands
12. The mechanism of renal arterial hypertension is associated with:

a) hypersecretion of renin
b) hypersecretion of adrenaline
c) left ventricular hypersecretion
d) primary hyperaldosteronism
e) renin hyposecretion

13. Select the leading symptoms of nephrotic syndrome:
a) massive edema
b) hypertension
c) leukocyturia up to pyuria
d) edema
e) pain in the lumbar region

14. Indicate the main causative agent of pyelonephritis in adults:
a) escherichia coli
b) Staphylococcus aureus
c) streptococcus pyogenes
d) klebsiella pneumoniae
e) chlamydia

15. Characteristic data of general urine analysis in acute pyelonephritis:
a) leukocyturia
b) hematuria
c) proteinuria more than 3 g/day
d) no change
e) dysuria

16. Ultrasound examination of the kidneys in pyelonephritis shows:
a) dilation of the renal pelvis and calyces
b) reduction in kidney size
c) cyst formation
d) normal echostructure
e) renal capsule changes

17. Name the main complication of chronic pyelonephritis:
a) chronic renal failure
b) heart failure
c) anemia
d) urolithiasis
e) thrombocytopenia

18. Indicate the antibodies involved in the pathogenesis of glomerulonephritis:
a) IgA
b) IgE
c) IgG
d) IgM
e) IgB

19. Specify the syndrome observed in acute glomerulonephritis:
a) nephritic syndrome
b) nephrotic syndrome
c) hypernatremia
d) hypokalemia
e) hyperkalemia

20. Indicate an elevated laboratory indicator in glomerulonephritis:
a) creatinine

b) uric acid
c) glucose
d) lipids
e) cholesterol

21. Specify an informative method for diagnosing glomerulonephritis:
a) kidney biopsy
b) general urine analysis
c) Ultrasound of the kidneys
d) MRI of the kidneys
e) X-ray of the kidneys

22. Specify the form of glomerulonephritis that develops after an infection:
a) Postinfectious glomerulonephritis
b) IgA nephropathy
c) Membranous glomerulonephritis
d) amyloidosis
e) nephroptosis

23. Diet recommended for patients with glomerulonephritis:
a) low in protein and salt
b) high protein
c) low carb
d) high fat
e) low amino acid

24. Specify the mechanism of immune damage in glomerulonephritis:
a) Formation of immune complexes and their deposition in the glomeruli
b) Direct infection of the glomeruli by bacteria
c) Degradation of glomeruli by enzymes
d) Impaired blood supply to the kidneys
e) reabsorption disorder

25. A 45-year-old man was admitted with complaints of severe edema, decreased daily diuresis, headache, and shortness of breath. A biochemical blood test showed total protein 48 g/l, albumin 20 g/l, cholesterol 8.9 mmol/l. A general urine test showed protein 5.5 g/l, erythrocytes 8-10 in the field of vision, hyaline and granular casts. Blood pressure 120/80 mm Hg. Your preliminary diagnosis:
a) nephrotic syndrome
b) acute glomerulonephritis
c) systemic lupus erythematosus
d) hypertension
e) chronic pyelonephritis

26. A 42-year-old patient was admitted with complaints of severe edema, increased blood pressure, decreased urine output, and weakness. Blood pressure is 170/110 mm Hg. Blood chemistry: creatinine 620 μmol/l, urea 25 mmol/l, potassium 5.8 mmol/l. Urinalysis: red blood cells 30-40 in the field of vision, protein 4.6 g/l, granular casts. Kidney biopsy: crescents in more than 70% of glomeruli. Specify the type of glomerulonephritis in the patient:
a) rapidly progressive glomerulonephritis
b) membranoproliferative glomerulonephritis
c) minimal changes
d) FIgA nephropathy
e) focal segmental glomerulosclerosis

27. A 37-year-old man was admitted with complaints of edema and increased arterial pressure. History of a recent skin infection. Blood chemistry: creatinine 170 μmol/l, decreased complement C3.

Urinalysis: protein 3.0 g/l, erythrocytes 20-30 in the field of view. Kidney biopsy: pronounced subepithelial "humps" on electron microscopic examination. Your preliminary diagnosis:
a) Acute poststreptococcal glomerulonephritis
b) Goodpasture's syndrome
c) Lupus nephritis
d) Minimal change disease
e) Thrombotic microangiopathy
28. A 41-year-old female patient with chronic pyelonephritis complains of worsening condition: lower back pain, weakness, weight loss. Blood biochemistry: increased creatinine and urea. General urine analysis: density 1.008, leukocytes 20-30 in the field of vision, bacteriuria (+++). Ultrasound: shrinkage of one of the kidneys. Your preliminary diagnosis:
a) chronic kidney disease
b) acute renal failure
c) hydronephrosis
d) polycystic kidney disease
e) renal arterial hypertension
29. Select an elevated laboratory indicator for glomerulonephritis:
a) creatinine
b) uric acid
c) glucose
d) potassium
e) cholesterol
30. What is the purpose of the Zimnitsky test?
a) To assess the concentrating ability of the kidneys
b) To assess glomerular filtration function
c) To determine the presence of a urinary tract infection
d) For the diagnosis of diabetes mellitus
e) To detect uric acid levels

Option 2
1. Show the normal specific gravity of urine in Zimnitsky's test:
a) 1010–1025
b) 1005–1015
c) 1020–1035
d) 1035–1045
e) 1000–1050
2. Normal volume of daily urine:
a) 1000–1500 ml
b) 500-800 ml
c) 1500–2000 ml
d) 2000–2500 ml
e) More than 3000 ml
3. Name the condition in which (Zimnitsky test) the density of urine in all portions is the same:
a) isosthenuria
b) hyposthenuria
c) hypersthenuria
d) normosthenuria
e) glucosuria
4. Name the condition (Zimnitsky test) in which the specific gravity of urine decreases below 1010:

a) hyposthenuria
b) normal
c) hematuria
d) hypersthenuria
e) iozosthenuria

5. A 67-year-old man came to the clinic complaining of decreased appetite, itchy skin, frequent urge to urinate at night, and weakness. In the last two weeks, he has noted an increase in blood pressure (up to 180/110 mm Hg). History: hypertension for more than 15 years. General urine analysis: proteinuria 2.6 g / day, isosthenuria, microhematuria. Biochemical blood test: creatinine - 440 μmol / l, urea - 16 mmol / l, potassium - 5.6 mmol / l. Your preliminary diagnosis:
a) chronic renal failure
b) acute glomerulonephritis
c) nephrotic syndrome
d) acute tubulointerstitial nephritis
e) polycystic kidney disease

6. Specify the condition accompanied by polyuria and low specific gravity of urine:
a) diabetes insipidus
b) chronic heart failure
c) diabetes mellitus
d) acute renal failure
e) urinary tract infection

7. Select the pathology (Zimnitsky test) accompanied by low specific gravity of urine in all portions:
a) chronic renal failure
b) acute pyelonephritis
c) diabetes mellitus
d) chronic glomerulonephritis
e) urolithiasis

8. A 60-year-old man complains of severe weakness, loss of appetite, itchy skin, and frequent urge to urinate at night. Over the past two weeks, he has noted an increase in blood pressure (up to 180/110 mm Hg). History: hypertension for over 15 years. General urine analysis: proteinuria 2.6 g/day, isosthenuria, microhematuria. Blood biochemistry: creatinine - 450 μmol/l, urea - 18 mmol/l, potassium - 5.6 mmol/l.
a) chronic renal failure
b) acute glomerulonephritis
c) nephrotic syndrome
d) acute tubulointerstitial nephritis
e) polycystic kidney disease

9. Specify the main indicator for assessing the concentration function of the kidneys:
a) urine specific gravity
b) urine protein level
c) volume of each portion of urine
d) presence of glucose
e) leukocytes in urine

10. A 30-year-old female patient complained of pain in the lumbar region, fever up to 38.5 °C, weakness, frequent and painful urination. Urine analysis showed leukocytes 5-6 p/z, traces of protein, bacteria++. What is your preliminary diagnosis?
a) acute pyelonephritis
b) glomerulonephritis
c) cystitis

d) urolithiasis
e) acute appendicitis

11. A 45-year-old woman with chronic pyelonephritis presents with complaints of recurrent lumbar pain and fatigue. Select an examination to assess the state of renal function:
a) renal scintigraphy
b) cystoscopy
c) Urinalysis according to Nechiporenko
d) complete blood count
e) excretory urography

12. A 32-year-old female patient was admitted with complaints of pain in the lumbar region, high temperature (up to 39°C), chills, frequent painful urination. In the general urine analysis: leukocytes cover the entire field of vision, bacteria (+++), protein 0.5 g/l. Specify the necessary examination to clarify the cause of pyelonephritis:
a) urine culture
b) urine analysis according to Zimnitsky
c) complete blood count
d) MRI of the lumbar spine
e) urine analysis according to Reberg

13. A 40-year-old woman was admitted with complaints of pain in the lumbar region, high temperature and chills. The doctor made a preliminary diagnosis of acute pyelonephritis. Indicate the elevated laboratory parameters in the general blood test in this case:
a) leukocytes and ESR
b) platelets
c) hemoglobin
d) creatinine and urea
e) amylase

14. A 45-year-old patient complains of general weakness, headaches, and edema. The Rehberg test was performed to assess renal function, which yielded a creatinine clearance of 85 ml/min. What conclusion is drawn based on these indicators:
a) normal kidney function
b) signs of acute kidney injury
c) mild stage of chronic renal failure
d) middle stage chronic renal failure
e) end stage renal failure

15. A 55-year-old patient complains of lower back pain, difficulty urinating, and blood in the urine. A number of studies were prescribed for diagnosis, including excretory urography. Specify the changes in excretory urography in the presence of urolithiasis:
a) uneven contrast, shadow defects in the kidney area
b) increased contrast of the kidneys
c) the appearance of darkening against the background of normal contrast
d) symmetrical filling of the kidneys with contrast
e) exacerbation of chronic pyelonephritis without changes in the image

16. A 60-year-old man presented with abdominal pain and difficulty urinating. He has been suffering from chronic cystitis and hypertension for many years. Excretory urography is performed for diagnosis. Determine the change in excretory urography in the presence of urinary tract obstruction:
a) dilation of the renal pelvis and calyces
b) increased contrast in the bladder area
c) lack of contrast in the kidney area
d) severe narrowing of the ureters

e) symmetrical filling of the kidneys with contrast without changes

17. A 45-year-old patient complains of frequent lower back pain accompanied by edema. Excretory urography revealed an increase in the size of the kidneys with moderate dilation of the renal pelvis. Specify the main cause of these changes:
a) chronic pyelonephritis
b) urolithiasis
c) polycystic kidney disease
d) urethritis
e) kidney cancer

18. A 35-year-old patient complains of lower back pain and difficulty urinating. When palpating the kidneys, the doctor feels enlarged, painful kidneys. Your preliminary diagnosis:
a) Acute pyelonephritis
b) Chronic pyelonephritis
c) Urolithiasis
d) Glomerulonephritis
e) Polycystic kidney disease

19. Palpation of the kidneys of a patient with chronic kidney disease revealed enlargement of both kidneys, which are dense and painful. Select a study to clarify the diagnosis:
a) ultrasound examination of the kidneys
b) X-ray of the kidneys
c) kidney biopsy
d) Zimnitsky test
e) Nechiporenko test

20. A 45-year-old patient, upon palpation of the kidneys of a patient suffering from chronic pyelonephritis, the doctor discovers pain and enlargement of the right kidney. Your preliminary diagnosis:
a) chronic pyelonephritis
b) Acute renal failure
c) Urolithiasis
d) Polycystic kidney disease
e) Glomerulonephritis

21. A 25-year-old patient complains of pain in the lumbar region, changes in urine color, and general weakness. When palpating the kidneys, the doctor determines pain, but no enlargement is observed. Select additional symptoms confirming the diagnosis of acute pyelonephritis:
a) fever and chills
b) facial swelling
c) nausea, vomiting
d) skin hydration
e) tachycardia

22. A 65-year-old patient complains of difficulty urinating, frequent urges, and a feeling of incomplete bladder emptying. Palpation reveals a painful, enlarged, elastic area in the lower abdomen. Your preliminary diagnosis:
a) acute urinary retention
b) cystitis
c) infectious and inflammatory process in the kidneys
d) urolithiasis
e) prostatitis

23. A 55-year-old patient complains of pain in the lower abdomen and difficulty urinating. Upon palpation of the lower abdomen, the physician detects a hard, painful area that cannot be moved. Your preliminary diagnosis:
a) urolithiasis
b) acute cystitis
c) glomerulonephritis
d) renal amyloidosis
e) hidronephrosis
24. When percussing the kidneys of a patient suffering from lower back pain and edema, the doctor detects increased dullness in the kidney area on both sides. Your preliminary diagnosis:
a) Chronic pyelonephritis
b) Acute renal failure
c) Urolithiasis
d) Glomerulonephritis
e) hydronephrosis
25. A 40-year-old patient complains of pain in the lumbar region, fever, and general weakness. Percussion of the kidney area on the right side reveals pain and dullness. Your preliminary diagnosis:
a) acute pyelonephritis
b) urolithiasis
c) chronic glomerulonephritis
d) kidney cancer
e) renal amyloidosis
26. A 45-year-old patient complains of edema, high blood pressure, and fatigue. On examination, moderate abdominal enlargement, edema in the legs, and pale skin are noted. Your preliminary diagnosis:
a) glomerulonephritis
b) chronic pyelonephritis
c) acute renal failure
d) urolithiasis
e) polycystic kidney disease
27. When examining a patient suffering from kidney disease, the doctor discovers pronounced swelling of the face, which is especially noticeable in the morning. The patient also complains of headache and nausea. Identify the characteristic symptoms indicating kidney disease:
a) swelling and headache
b) nausea and thirst
c) upper abdominal pain and fever
d) dry skin and brittle nails
e) skin hydration and loss of appetite
28. A 50-year-old patient complains of fatigue, headaches, swelling, and loss of appetite. On examination, the patient looks pale, with brittle nails. A complete blood count shows: hemoglobin 100 g/l, erythrocytes 3.5 x 10^{12}/l, leukocytes 9.5 x × 10^{9}/l, platelets 440 x 10^{9}, ETF 30 mm/sag. A biochemical blood test shows: urea - 9.4 mmol/l, creatinine - 188 μmol/l, Na+ - 131 mmol/l, K+ - 6.7 mmol/l. Identify the characteristic symptoms indicating kidney disease:
a) swelling, pale skin, brittle nails.
b) fever, vomiting, headache
c) thirst, weight gain, night sweats
d) fatigue, dizziness, apathy
e) abdominal pain, loss of appetite

29. When examining a patient suffering from chronic pyelonephritis, the doctor notes the presence of edema in the eye area and on the legs. Indicate the changes in the urine tests confirming the diagnosis:
a) leukocyturia and bacteriuria
b) proteinuria and hematuria
c) elevated creatinine levels
d) elevated urea levels
e) elevated potassium levels
30. A 67-year-old patient complains of frequent urge to urinate and pain in the lower abdomen. Examination reveals swelling in the legs and high blood pressure. Select the necessary examination for diagnosis:
a) ultrasound examination of the kidneys and urine analysis
b) X-ray of the kidneys
c) magnetic resonance imaging
d) kidney biopsy
e) echoencephalography

2. Completing and defending a medical history report.
The form to be filled out is attached to the library collection of the department and the academy.

Midterm control №1

1. Task to demonstrate practical skills.
1. Predisposing factors and causes leading to the development of hypertensive syndrome.
2. Predisposing factors and causes leading to the development of renal failure.
3. Clinical and diagnostic features of hypertensive syndrome.
4. Clinical and diagnostic features.
5. Methods and techniques for palpation of the kidneys.
6. Methodology and technique of performing kidney percussion.
7. Methodology and technique for determining the upper border of the urinary bladder.
8. Technique for listening to the renal arteries.
9. Instrumental research methods in renal failure.
10. Laboratory research methods in renal failure.
11. Instrumental research methods in hypertensive syndrome.
12. Laboratory research methods for hypertensive syndrome.

1. Task to demonstrate practical skills.

Option 1
1. Select the main clinical symptom characteristic of nephritic syndrome:
a) arterial hypertension
b) hyperlipidemia
c) hyperglycemia
d) hypoglycemia
e) icturia
2. Indicate the elevated laboratory indicator in nephritic syndrome:
a) creatinine and urea
b) albumen
c) glucose

d) sodium
e) potassium

3. Specify the complication developing with nephritic syndrome:
a) chronic renal failure
b) urolithiasis
c) kidney cancer
d) anemia
e) jaundice

4. Indicate laboratory changes indicating progression of renal failure:
a) increased levels of creatinine and urea in the blood
b) increase in the number of red blood cells in the urine
c) increased blood glucose levels
d) decreased blood electrolyte levels
e) decrease in white blood cells

5. Nocturia:
a) predominance of nocturnal diuresis over daytime
b) no urination
c) frequent urge to urinate during the day
d) painful urination
e) decreased electrolytes

6. Specify the syndrome observed in acute glomerulonephritis:
a) nephritic
b) nephrotic
c) hyperthyroidism
d) hyperglycemia
e) hypoglycemia

7. Select an elevated laboratory indicator for glomerulonephritis:
a) creatinine
b) uric acid
c) glucose
d) potassium
e) cholesterol

8. What is the purpose of the Zimnitsky test?
a) To assess the concentrating ability of the kidneys
b) To assess glomerular filtration function
c) To determine the presence of a urinary tract infection
d) For the diagnosis of diabetes mellitus
e) To detect uric acid levels

9. A 42-year-old woman complains of headaches and high blood pressure (180/100 mm Hg). The blood creatinine level is 130 μmol/l, urea is 10 mmol/l. Kidney ultrasound: both kidneys are normal in size, without pathologies. Specify the mechanism of hypertension in the patient:
a) primary arterial hypertension
b) renovascular hypertension
c) hypertension due to stress
d) renal reabsorption disorder
e) thyroid dysfunction

10. A 45-year-old patient complains of general weakness, headaches, and edema. The Reberg test was performed to assess renal function, which yielded a creatinine clearance of 85 ml/min. What conclusion is drawn based on these indicators:
a) normal kidney function
b) signs of acute kidney injury
c) mild stage of chronic renal failure
d) middle stage chronic renal failure
e) end stage renal failure
11. A 55-year-old patient complains of lower back pain, difficulty urinating, and blood in the urine. A number of studies were prescribed for diagnosis, including excretory urography. Specify the changes in excretory urography in the presence of urolithiasis:
a) uneven contrast, shadow defects in the kidney area
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a) dilation of the renal pelvis and calyces
b) increased contrast in the bladder area
c) lack of contrast in the kidney area
d) severe narrowing of the ureters
e) symmetrical filling of the kidneys with contrast without changes
13. A 45-year-old patient complains of frequent lower back pain accompanied by edema. Excretory urography revealed an increase in the size of the kidneys with moderate dilation of the renal pelvis. Specify the main cause of these changes:
a) chronic pyelonephritis
b) urolithiasis
c) polycystic kidney disease
d) urethritis
e) kidney cancer
14. A 50-year-old male patient complains of persistent low back pain and recurrent urinary tract infections. He has had hypertension for the past 5 years. Excretory urography reveals decreased function of one kidney. Your preliminary diagnosis:
a) Chronic renal failure
b) Acute pyelonephritis
c) Kidney cancer
d) Urolithiasis
e) Renal artery stenosis
15. A 45-year-old female patient with chronic pyelonephritis came to us complaining of worsening condition: lower back pain, weakness, weight loss. Blood test: creatinine -140 μmol/l, urea-15. μmol/l, Urine test: density 1.008, leukocytes 30-40 in the field of vision, bacteriuria (++). Ultrasound: shrinkage of one of the kidneys. Your preliminary diagnosis:
a) chronic kidney disease

b) acute renal failure
c) hydronephrosis
d) polycystic kidney disease
e) renal arterial hypertension

16. Palpation of the kidneys of a patient with chronic kidney disease revealed enlargement of both kidneys, which are dense and painful. Select a study to clarify the diagnosis:
a) ultrasound examination of the kidneys
b) X-ray of the kidneys
c) kidney biopsy
d) Zimnitsky test
e) Nechiporenko test

17. A 25-year-old patient complains of pain in the lumbar region, changes in urine color, and general weakness. When palpating the kidneys, the doctor determines pain, but no increase is observed. Select additional symptoms confirming the diagnosis of acute pyelonephritis:
a) fever and chills
b) facial swelling
c) nausea, vomiting
d) skin hydration
e) tachycardia

18. A 65-year-old patient complains of difficulty urinating, frequent urges, and a feeling of incomplete bladder emptying. Palpation reveals a painful, enlarged, elastic area in the lower abdomen. Your preliminary diagnosis:
a) acute urinary retention
b) cystitis
c) infectious and inflammatory process in the kidneys
d) urolithiasis
e) prostatitis

19. A 55-year-old patient complains of pain in the lower abdomen and difficulty urinating. Upon palpation of the lower abdomen, the physician detects a hard, painful area that cannot be moved. Your preliminary diagnosis:
a) urolithiasis
b) acute cystitis
c) glomerulonephritis
d) renal amyloidosis
e) hydronephrosis

20. When percussing the kidneys of a patient suffering from lower back pain and edema, the doctor detects increased dullness in the kidney area on both sides. Your preliminary diagnosis:
a) Chronic pyelonephritis
b) Acute renal failure
c) Urolithiasis
d) Glomerulonephritis
e) hydronephrosis

21. A 40-year-old patient complains of pain in the lumbar region, fever, and general weakness. Percussion of the kidney area on the right side reveals pain and dullness. Your preliminary diagnosis:
a) acute pyelonephritis
b) urolithiasis

c) chronic glomerulonephritis
d) kidney cancer
e) renal amyloidosis

22. A 64-year-old patient has suffered from hypertension for many years and complains of heaviness in the lower back, decreased appetite, edema, and weakness. Percussion of the kidneys on both sides reveals increased dullness. Your preliminary diagnosis:
a) chronic renal failure
b) acute urinary retention
c) polycystic kidney disease
d) Kidney cancer
e) Urolithiasis

23. A 45-year-old patient complains of lower back pain and loss of appetite, increased body temperature, weakness. He attributes this to hypothermia. He has not taken any treatment. Percussion of the kidneys reveals painful dullness on both sides. Your preliminary diagnosis:
a) exacerbation of pyelonephritis
b) urolithiasis
c) polycystic kidney disease
d) acute urinary retention
e) chronic renal failure

24. When examining a patient suffering from kidney disease, the doctor discovers pronounced swelling of the face, which is especially noticeable in the morning. The patient also complains of headache and nausea. Identify the characteristic symptoms indicating kidney disease:
a) swelling and headache
b) nausea and thirst
c) upper abdominal pain and fever
d) dry skin and brittle nails
e) skin hydration and loss of appetite

25. A 50-year-old patient complains of fatigue, headaches, swelling, and loss of appetite. On examination, the patient looks pale, with brittle nails. A complete blood count shows: hemoglobin 100 g/l, erythrocytes 3.5 x 10^{12}/l, leukocytes 9.5 x × 10^{9}/l, platelets 440 × 10^{9}, ETF 30 mm/sag. A biochemical blood test shows: urea - 9.4 mmol/l, creatinine - 188 μmol/l, Na+ - 131 mmol/l, K+ - 6.7 mmol/l. Identify the characteristic symptoms indicating kidney disease:
a) swelling, pale skin, brittle nails.
b) fever, vomiting, headache
c) thirst, weight gain, night sweats
d) fatigue, dizziness, apathy
e) abdominal pain, loss of appetite

26. When examining a patient suffering from chronic pyelonephritis, the doctor notes the presence of edema in the eye area and on the legs. Indicate the changes in the urine tests confirming the diagnosis:
a) leukocyturia and bacteriuria
b) proteinuria and hematuria
c) elevated creatinine levels
d) elevated urea levels
e) elevated potassium levels

27. A 67-year-old patient complains of frequent urination and pain in the lower abdomen. Examination reveals swelling in the legs and high blood pressure. Select the necessary examination for diagnosis:

a) ultrasound examination of the kidneys and urine analysis
b) X-ray of the kidneys
c) magnetic resonance imaging
d) kidney biopsy
e) echoencephalography

28. A 28-year-old man complains of paroxysmal pain in the lumbar region, urinary retention, and facial swelling at a doctor's appointment. A positive Pasternatsky's symptom occurs with:
a) urolithiasis
b) diabetic nephropathy
c) urethritis
d) cystitis
e) prostatitis

29. According to the Zimnitsky test, the following results were revealed: daily diuresis 2500 ml, daytime diuresis - 1720 ml, nighttime diuresis -780 ml. The maximum and minimum values of the relative density of urine in different portions are within the range of 1.005 - 1.012. Indicate which conclusion is correct:
a) polyuria, hyposthenuria
b) hypoisosthenuria, nocturia
c) polyuria, pollakiuria
d) isosthenuria, nocturia
e) polyuria, nocturia

30. A 38-year-old man was delivered to the clinic by an ambulance team with complaints of nausea, vomiting, lack of urine, muscle twitching. From the anamnesis: he was in a traffic accident, severe kidney damage. In blood tests, urea is 9.3 mmol / l, creatinine is 188 μmol / l, Na - 131 mmol / l, K + - 6.8 mmol / l. Specify the syndrome developing in this situation:
a) acute renal failure syndrome
b) chronic renal failure syndrome
c) renal arterial hypertension syndrome
d) nephrotic syndrome
e) nephritic syndrome

Option 2

1. A 52-year-old man visited his local physician complaining of headaches, tinnitus, and urine the color of "meat slops." Further examination revealed facial swelling and increased blood pressure to 160/105 mm Hg. Specify the cause of this condition:
a) acute glomerulitis
b) increase in oncotic pressure of blood plasma
c) decrease in oncotic pressure of blood plasma
d) increased fluid intake
e) renal pelvis injury

2. A 32-year-old man consulted his local doctor complaining of decreased urine output and slight weakness. He did not limit his fluid intake. Upon examination, the patient's skin was pale and his eyelids were swollen. When performing the Aldrich wheal test, resorption occurred within 60 minutes. Specify the cause of the patient's condition:
a) impaired renal concentrating ability

b) increased excretion of osmotically active substances in urine
c) decreased nitrogen excretory function of the kidneys
d) increased physical activity
e) accumulation of hidden edema

3. The following data were revealed during the Zimnitsky test: daily diuresis 1600 ml, night diuresis 720 ml. Fluctuations in the relative density of urine within the range of 1.008 - 1.013. Indicate the conclusion that is correct for this test:
a) hypoisosthenuria with nocturia
b) hyperisosthenuria with nicutria
c) polyuria with pollakiuria
d) polyuria with hyposthenuria
e) polyuria with nocturia

4. A 53-year-old man has a biochemical blood test showing urea content of 11.5 mmol/l and creatinine of 185.2 μmol/l. The Reberg test revealed glomerular filtration of 75 ml/min and tubular reabsorption of 90%. The patient requires the following informative testing:
a) excretory urography
b) computed tomography
c) radioisotope renography
d) kidney biopsy
e) nephroangiography

5. A patient complaining of poor urine flow reveals a small bulge in the suprapubic area upon examination. Specify the cause of this condition:
a) enlargement of the prostate gland
b) massive water load
c) restriction of fluid intake
d) taking saluretics
e) taking antibiotics

6. The following data were revealed during the Zimnitsky test: daytime diuresis 1400 ml, nighttime diuresis 920 ml. Select the correct conclusion for this test:
a) polyuria with nocturia
b) polyuria with hyposthenuria
c) polyuria with pollakiuria
d) oliguria with nocturia
e) nocturia

7. A 56-year-old woman came to the clinic complaining of swelling of the face and eyelids, especially in the morning, decreased urine output, and rapid fatigue. History: frequent colds. Blood biochemistry: total protein - 57 g/l, glucose - 6.6 mmol/l; general urine analysis: protein 1.05 g/l. Specify the characteristic syndrome in this clinical case:
a) nephrotic syndrome
b) chronic renal failure syndrome
c) acute renal failure syndrome
d) renal arterial hypertension syndrome
e) nephritic syndrome

8. A 60-year-old woman complains of headaches, tinnitus, facial swelling, and urine the color of “meat slops.” Her blood pressure has increased to 170/100 mm Hg. Specify the cause of this condition:
a) acute glomerulitis

b) increased fluid intake
c) increase in oncotic pressure of blood plasma
d) decrease in oncotic pressure of blood plasma
e) increase in hydrostatic pressure of blood plasma

9. The patient has symptoms - weakness, drowsiness, nausea, vomiting, daily diuresis of 360 ml, blood urea content of 11.2 mmol/l, creatinine - 205 μmol/l, residual nitrogen 36.2 mmol/l. Specify the characteristic syndrome in this clinical case:
a) chronic renal failure syndrome
b) acute nephritic syndrome
c) chronic nephritic syndrome
d) nephrotic syndrome
e) acute renal failure syndrome

10. A patient's blood biochemistry analysis showed urea content of 11.5 mmol/l, creatinine content of 185.2 μmol/l. The Reberg test revealed: glomerular filtration rate of 75 ml/min, tubular reabsorption of 90%. Specify additional informative research:
a) excretory urography
b) nephroangiography
c) computed tomography
d) radioisotope renography
e) kidney biopsy

11. A 35-year-old woman works as a cashier and went to see her local doctor complaining of pain in the right lumbar region, slight swelling of the eyelids in the morning, frequent urination, headaches, and general weakness. From the anamnesis: she is registered with a diagnosis of chronic pyelonephritis. The patient is recommended to undergo additional examination. Specify the characteristic data in the general urine analysis:
a) turbid urine, specific gravity 1012, leukocyturia
b) turbid urine, specific gravity 1025, cylindruria
c) cloudy urine, specific gravity 1010, proteinuria
d) microhematuria, severe proteinuria
e) leukocyturia, severe proteinuria

12. A 44-year-old man came to the emergency room of the clinic complaining of slight swelling of the eyelids in the morning, a decrease in the amount of urine excreted, and urine colored like "meat slops." Blood pressure is 140/100 mm Hg. In the general urine analysis, protein is 0.099%, red blood cells are 25-35 in the field of view, and white blood cells are 10-12 in the field of view. Indicate the cause of the swelling in the patient:
a) hyperaldosteronemia, hypoproteinemia,
b) hyperproteinemia, hyperaldosteronemia
c) hyperaldosteronemia, decreased potassium levels
d) hypoaldosteronemia, increased sodium levels
e) decreased protein synthesis, increased potassium levels

13. A 40-year-old woman fell ill with a sore throat. On the 5th day of illness, swelling appeared, urine became the color of “meat slops,” and blood pressure increased to 180/100 mm Hg. Your preliminary diagnosis:
a) exacerbation of chronic glomerulonephritis
b) acute pyelonephritis
c) renal amyloidosis

d) apostematous nephritis
e) polycystic kidney disease

14. A 55-year-old man consulted a doctor complaining of severe weakness, swelling of the face and lower extremities, increased blood pressure to 170/100 mm Hg, and decreased urine output. His medical history includes several episodes of tonsillitis over the past year. Laboratory examination reveals: Urine analysis: proteinuria (3 g/day), microhematuria, cylindruria. Ultrasound examination: kidneys are normal in size, without obvious structural changes. Your preliminary diagnosis:
a) Glomerulonephritis
b) Acute pyelonephritis
c) Urolithiasis
d) Polycystic kidney disease
e) Chronic renal failure

15. A 53-year-old patient complains of swelling of the face and extremities, increased blood pressure to 180/100 mm Hg, and fatigue. On examination, moderate abdominal enlargement, swelling of the legs, and pale skin are noted. Your preliminary diagnosis:
a) Glomerulonephritis
b) Chronic pyelonephritis
c) Acute renal failure
d) Urolithiasis
e) Polycystic kidney disease

16. A 65-year-old patient complains of lower back pain, frequent urge to urinate, and swelling of the lower extremities. Examination of the abdomen revealed moderate enlargement, pale skin, and brittle nails. Blood chemistry: creatinine 250 μmol/l, urea 15 μmol/l, glomerular filtration rate 60 ml/min, potassium 5.5 mmol/l, sodium 135 mmol/l. Total urine analysis: protein 3.5 g/l, erythrocytes 8-10 p/z, leukocytes 4-5 p/z, density 1010, granular cylinders. Your preliminary diagnosis:
a) chronic renal failure
b) acute renal failure
c) exacerbation of chronic pyelonephritis
d) kidney stones
e) polycystic kidney disease

17. A 42-year-old woman was admitted to hospital complaining of dull pain in the lower back, fever up to 37.8°C, general weakness, frequent and painful urination. History of chronic tonsillitis, episodes of pyelonephritis in youth. On examination: body temperature - 37.5°C. Blood pressure - 130/85 mm Hg. General urine analysis: leukocyturia, bacteriuria, proteinuria (0.5 g / day). Blood biochemistry: creatinine - 115 μmol / l, urea - 7.5 mmol / l. Kidney ultrasound: deformation of the renal pelvis and calyceal system. Your preliminary diagnosis:
a) chronic pyelonephritis
b) acute pyelonephritis
c) glomerulonephritis
d) polycystic kidney disease
e) urolithiasis

18. A 58-year-old man complains of severe weakness, loss of appetite, itchy skin, and frequent urge to urinate at night. In recent months, he has noted an increase in blood pressure (up to 170/110 mm Hg) and episodes of nosebleeds. History: hypertension for more than 15 years, type 2 diabetes mellitus, long-term use of NSAIDs for chronic joint pain. General urine analysis: proteinuria 2.8 g / day, isosthenuria, microhematuria. Biochemical blood test: creatinine - 400 μmol / l, urea - 18 mmol / l,

potassium - 5.8 mmol / l. Ultrasound of the kidneys: a decrease in the size of both kidneys, thinning of the cortex. Your preliminary diagnosis:
a) diabetic nephropathy with chronic renal failure
b) acute glomerulonephritis
c) nephrotic syndrome
d) acute tubulointerstitial nephritis
e) polycystic kidney disease
19. Symptoms characteristic of the clinical picture of renal eclampsia:
a) paroxysms of headaches, palpitations, increased blood pressure, convulsions against the background of edema
b) headache, visual impairment, retinal detachment, increased blood pressure
c) headache, dizziness, vomiting, decreased blood pressure
d) speech and vision impairment, memory loss
e) persistent increase in blood pressure, without any particular disturbances in the central nervous system
20. A 32-year-old woman was admitted with complaints of severe lower back pain, fever up to 39°C, frequent and painful urination. In the general urine analysis: leukocytes 50–60 in the field of vision, bacteria (++). Your preliminary diagnosis:
a) Acute pyelonephritis
b) Glomerulonephritis
c) Cystitis
d) urolithiasis
e) Peritonitis
21. A 36-year-old patient was admitted with complaints of blood in the urine, decreased urine output, and weakness. The patient has a history of tonsillitis 2 weeks ago. A general urine analysis shows macrohematuria and proteinuria. Your preliminary diagnosis:
a) acute glomerulonephritis
b) chronic pyelonephritis
c) polycystic kidney disease
d) renal failure
e) nephrotic syndrome
22. Specify the amount of urine collected for the Zimnitsky test:
a) 8
b) 6
c) 10
d) 12
e) 24
23. Specify the time interval between collection of urine portions in Zimnitsky's test:
a) 3 hours
b) 1 hour
c) 2 hours
d) 4 hours
e) 6 hours
24. Select the indicators to be assessed in Zimnitsky’s test:
a) Specific gravity of urine, volume of each portion
b) Protein in urine

c) Leukocytes in urine
d) Glucose in urine
e) Bacteria in urine

25. A 56-year-old woman consulted a doctor with complaints of facial swelling, especially in the morning, decreased urine output, and rapid fatigue. History: frequent colds. On examination: the patient's face is pale, puffy, her eyelids are swollen, and her eye slits are narrowed. Indicate the correct characteristic based on the examination data:
a) nephritis facies
b) febrile facies
c) mitralis facies
d) facies basedovica
e) Facies of Hyppocracy

26. A 48-year-old woman came to the clinic complaining of facial swelling, especially in the morning, decreased urine output, urine that is the color of "meat slops", palpitations, and fatigue. History: a month ago, after hypothermia, she had tonsillitis and bronchitis, after which she was periodically bothered by aching pain in the lower back. Objectively: the patient's face is pale, puffy, and her eyelids are swollen. Blood pressure is 150/110 mm Hg. In the general urine analysis, protein is 0.099%, red blood cells are 45-50 in the field of view. Specify the reason for the appearance of "meat slops" in the urine:
a) decreased permeability of glomerular capillaries
b) inflammation of the ureters
c) ureteral damage by a stone
d) increase in the number of red blood cells in the blood
e) decreased levels of blood clotting factors

27. A 45-year-old patient complains of general weakness, headaches, and edema. The Reberg test was performed to assess renal function, which yielded a creatinine clearance of 85 ml/min. What conclusion is drawn based on these indicators:
a) normal kidney function
b) signs of acute kidney injury
c) mild stage of chronic renal failure
d) middle stage chronic renal failure
e) end stage renal failure

28. A 55-year-old patient complains of lower back pain, difficulty urinating, and blood in the urine. A number of studies were prescribed for diagnosis, including excretory urography. Specify the changes in excretory urography in the presence of urolithiasis:
a) uneven contrast, shadow defects in the kidney area
b) increased contrast of the kidneys
c) the appearance of darkening against the background of normal contrast
d) symmetrical filling of the kidneys with contrast
e) exacerbation of chronic pyelonephritis without changes in the image

29. A 60-year-old man presented with abdominal pain and difficulty urinating. He has been suffering from chronic cystitis and hypertension for many years. Excretory urography is performed for diagnosis. Determine the change in excretory urography in the presence of urinary tract obstruction:
a) dilation of the renal pelvis and calyces
b) increased contrast in the bladder area
c) lack of contrast in the kidney area

d) severe narrowing of the ureters
e) symmetrical filling of the kidneys with contrast without changes

30. A 45-year-old patient complains of frequent lower back pain accompanied by edema. Excretory urography revealed an increase in the size of the kidneys with moderate dilation of the renal pelvis. Specify the main cause of these changes:
a) chronic pyelonephritis
b) urolithiasis
c) polycystic kidney disease
d) urethritis
e) kidney cancer

2. Completing and defending a medical history report.

The form to be filled out is attached to the library collection of the department and the academy.