Control and measuring equipment for the discipline "Genitourinary system in pathology"

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# CONTROL AND MEASURING INSTRUMENTS

# Questions of the program for midterm control 1, 2

Name disciplines: "Genitourinary system in pathology"

Course Code: GSP 3222

Name and code of the EP: 6B10115 "Medicine" Amount of study hours/credits: 30 hours 1 credit

Course and semester of study: 3rd year, 6th semester

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The contril and measuring tools were developed in accordance with the working curriculum of the discipline (sillabus) and discussed at a department meeting.

Protocol: № 11 « 26» 06, 2025y.

Head of department, d.m.s., professor Bekmurzaeva E.K. Seng-

#### Midterm control №1:

# 1. Tasks to demonstrate practical skills.

- 1. Questioning patients with diseases of the genitourinary system.
- 2. General inspection patients with diseases of the genitourinary system.
- 3. Methodology and technique of palpation of the kidneys.
- 4. Methodology and technique of percussion of the kidneys.
- 5. Methodology and technique for determining the upper border of the urinary bladder.
- 6. Technique for listening to the renal arteries.
- 7. The purpose of conducting the Zimnitsky, Nechiporenko urine test.

- 1. What types of edema are most typical for kidney diseases?
- A. Dense, appearing in the evening, on the shins
- B. Soft, doughy, mainly in the morning, on the face
- C. Localized only in the feet area
- D. Swelling of the extremities after exercise
- E. Dense swelling in the abdominal area
- 2. A positive Pasternatsky symptom indicates:
- A. Hepatitis
- B. Pancreatitis
- C. Pyelonephritis or urolithiasis
- D. Pleurisy
- E. Appendicitis
- 3. Where are the renal arteries heard during auscultation?
- A. Above the womb
- B. Along the midaxillary line
- C. In projection 2–3 cm above and lateral to the navel
- D. At the xiphoid process
- E. On the lateral surface of the chest
- 4. The following technique is used for palpation of the kidneys:
- A. Kurlova
- B. Obraztsova-Strazhesko
- C. Wasserman
- D. Goldflam
- E. Rovsinga
- 5. An increase in the level of percussion dullness over the pubis most often indicates:
- A. Ascites
- B. Intestinal obstruction
- C. Enlargement of the urinary bladder (urinary retention)
- D. Hepatomegaly
- E. Pneumothorax
- 6. What types of edema are most typical for kidney diseases?
- A. Dense, evening
- B. Soft, morning on the face

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- C. Hard on the shins
- D. Local on the hands
- E. Post-traumatic
- 7. Typical pain in renal colic:
- A. Obtuse constant
- B. Acute, wave-like, radiating
- C. Burning pain behind the sternum
- D. Stabbing pain in the side
- E. Cramping in the epigastrium
- 8. What are the characteristics of dysuria?
- A. Frequent urination
- B. Painful urination
- C. Night urination
- D. Incontinence
- E. Polyuria
- 9. Where is renal edema most often localized?
- A. On the shins
- B. On the face and eyelids
- C. On the brushes
- D. On the feet
- E. In the abdominal area
- 10. What symptom indicates kidney inflammation?
- A. Ortner's sign
- B. Pasternatsky's Symptom
- C. Babinski's sign
- D. Murphy's sign
- E. Rovsing's symptom
- 11. When examining the lumbar region, the following is revealed:
- A. Skin pigmentation
- B. Chest deformities
- C. Asymmetry, swelling
- D. Varicose veins
- E. Trembling of the wings of the nose
- 12. What method is used to palpate the kidneys?
- A. Sdokhina-Tymoshenko
- B. Obraztsova-Strazhesko
- C. Wasserman
- D. Kurlova
- E. Cherny
- 13. Nephrotic syndrome is characterized by:
- A. Arterial hypertension
- B. Severe edema
- C. Abdominal pain
- D. Vomiting
- E. Constipation
- 14. Nocturia is:
- A. Increased daytime urination
- B. Predominance of nocturnal diuresis

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- C. Painful urination
- D. Incontinence
- E. Urinary retention
- 15. What change in urine is most characteristic of glomerulonephritis?
- A. Pus
- B. Salts
- C. Blood
- D. Sand
- E. Oxalates
- 16. A positive Pasternatsky symptom is more common in:
- A. Hepatitis
- B. Pancreatitis
- C. Pyelonephritis
- D. Pleurisy
- E. Colitis
- 17. Normally, the upper border of the bladder is determined by:
- A. Above the navel
- B. At the xiphoid process
- C. At the level of the pubic symphysis
- D. In the right hypochondrium
- E. In the right iliac region
- 18. What can cause an enlarged bladder?
- A. Polydipsia
- B. Ascites
- C. Urinary retention
- D. Diarrhea
- E. Flatulence
- 19. The main method of auscultation of the renal arteries:
- A. Intercostal auscultation
- B. At the apex of the heart
- C. At a point 2–3 cm above and lateral to the navel
- D. Along the axillary line
- E. In the supraclavicular region
- 20. What symptom is characteristic of ARF (acute renal failure)?
- A. Polyuria
- B. Anuria
- C. Pollakiuria
- D. Incontinence
- E. Hematuria

- 1. The earliest symptom of nephroptosis:
- A. Hematuria
- B. Lower back pain when standing
- C. Vomiting
- D. Fever
- E. Shortness of breath
- 2. Edema in renal pathology usually:

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- A. Solids
- B. Local
- C. Easily movable
- D. Soft
- E. Hot
- 3. What are dysuric disorders?
- A. Alloguria
- B. Oliguria
- C. Nocturia
- D. Anuria
- E. Polyuria
- 4. Pain in cystitis is localized:
- A. In the right hypochondrium
- B. In the suprapubic region
- C. In the left hypochondrium
- D. In the epigastrium
- E. In the armpit area
- 5. Palpation of the kidneys is performed:
- A. Standing
- B. Sitting
- C. Lying on your back
- D. Lying on your side
- E. In a vertical position
- 6. When examining the face of a patient with pyelonephritis, the following is revealed:
- A. Hyperemia
- B. Synocardia
- C. Pallor
- D. Jaundice
- E. Cyanosis of the lips
- 7. What is characteristic of renal colic?
- A. Reduction of pain at rest
- B. Increased pain with movement
- C. Absence of irradiation
- D. Constant pain without attacks
- E. The pain intensifies when coughing.
- 8. The kidneys are best palpated:
- A. On inhalation
- B. On exhalation
- C. When holding your breath
- D. After eating
- E. In a vertical position
- 9. A decrease in urine output below 500 ml/day is:
- A. Anuria
- B. Polyuria
- C. Oliguria D. Pollakiuria E. Nocturia
- 10. The main symptom of cystitis:
- A. Polydipsia
- B. Dysuria

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- C. Pollakiuria at night
- D. Anuria
- E. Urinary incontinence
- 11. What does percussion over the pubis determine?
- A. Liver size
- B. Presence of fluid in the abdomen
- C. Fullness of the bladder
- D. Condition of the spleen
- E. Gas in the intestines
- 12. What kind of pain is typical for pyelonephritis?
- A. Sharp cutting
- B. Colicky
- C. Aching in the lower back
- D. Cramping in the lower abdomen
- E. Cutting in the urethra
- 13. What symptom is typical for glomerulonephritis?
- A. Polyuria
- B. Hypertension
- C. Incontinence
- D. Rank thirst
- E. Nausea
- 14. Where are the hands placed during bimanual palpation?
- A. Both on the stomach
- B. One on the stomach, the other under the lower back
- C. Both on the back
- D. On the chest
- E. On the lateral surfaces of the abdomen
- 15. The tapping symptom determines:
- A. Bladder sensitivity
- B. Pain in the urethra
- C. Kidney damage
- D. Liver pathology
- E. Inflammation of the intestines
- 16. Pasternatsky's symptom is tested by blows:
- A. With a fist
- B. With the palm
- C. With the edge of the palm
- D. Elbow
- E. Brush from top to bottom
- 17. Blood in the urine is called:
- A. Pyuria
- B. Hematuria
- C. Oliguria
- D. Pollakiuria
- E. Dysuria
- 18. Urinary tract infection most often manifests itself:
- A. Pain in the right side
- B. Dysuria

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- C. Vomiting
- D. Swollen feet
- E. Headache
- 19. Chronic renal failure is characterized by:
- A. Hypotension
- B. Anemia
- C. Increased red blood cells
- D. Overhydration
- E. Bradycardia
- 20. The most informative for diagnosing nephroptosis:
- A. Palpation while lying down
- B. Palpation while standing
- C. Percussion
- D. Auscultation
- E. Skin examination

- 1. What is characteristic of nephritic syndrome?
- A. Polyuria
- B. Hypotension
- C. Arterial hypertension
- D. Absence of protein in urine
- E. Tachycardia
- 2. Paresthesia and itching of the skin occur with:
- A. Nephrolithiasis
- B. Uremia
- C. Cystitis
- D. Pielite
- E. Glomerulonephritis
- 3. Pyelonephritis is most often accompanied by:
- A. Diarrhea
- B. Fever
- C. Constipation
- D. Shortness of breath
- E. Increased thirst
- 4. The method of auscultation of the renal arteries allows us to identify:
- A. Stones
- B. Stenosis
- C. Cysts
- D. Tumor
- E. Hydronephrosis
- 5. The main symptom of urinary retention:
- A. Diarrhea
- B. Incontinence
- C. Overflow of the bladder
- D. Hematuria
- E. Vomiting
- 6. Polyuria is:

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- A. < 100 ml of urine
- B. 100-300 ml of urine
- C. > 21 of urine/day
- D. Pain when urinating
- E. No urination
- 7. Bimanual palpation is most convenient for:
- A. Thin patients
- B. Complete
- C. Vysokikh
- D. Pregnant women
- E. Elderly
- 8. Nephrotic edema:
- A. Dense
- B. Painful
- C. Soft
- D. Limited
- E. Hot
- 9. Sharp pain in the lower back radiating to the groin is typical for:
- A. Gastritis
- B. Jade
- C. Renal colic
- D. Pancreatitis
- E. Cystitis
- 10. Percussion over the bladder reveals:
- A. Presence of gas
- B. Presence of fluid
- C. Bubble boundaries
- D. Presence of stones
- E. Muscle tone
- 11. What is considered normal percussion in a healthy person?
- A. Marked dullness over the pubis
- B. Tympanitis above the pubis
- C. Absolute silence
- D. Ringing sound
- E. Metallic sound
- 12. Pasternatsky's method is used for:
- A. Suspected cirrhosis
- B. Suspected pyelonephritis
- C. Suspected ulcer
- D. Suspected pneumonia
- E. Suspected hepatitis
- 13. Auscultation of the renal arteries is performed to assess:
- A. Pulsation of veins
- B. Conditions of the heart valves
- C. Blood flow
- D. Lymphatic drainage
- E. Gas exchange
- 14. What is NOT characteristic of renal colic?

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- A. Anxiety
- B. Lack of a pain-relieving position
- C. Increase the temperature to  $40^{\circ}$
- D. Radiation to the groin
- E. Cramping pain
- 15. In nephritic syndrome, urine is usually:
- A. Transparent
- B. Dark (the color of "meat slops")
- C. Lemon Yellow
- D. Bright red
- E. With the smell of acetone
- 16. Pale skin in a patient with kidney disease is associated with:
- A. Hypoglycemia
- B. Anemia
- C. Purulent infection
- D. Dehydration
- E. Bradycardia
- 17. The tapping symptom reveals:
- A. Bladder tumor
- B. Nephrolithiasis
- C. Hepatomegaly
- D. Appendicitis
- E. Intestinal spasm
- 18. When examining the lumbar region, the following can be identified:
- A. Stiffness of the neck muscles
- B. Ascites
- C. Enlarged kidney
- D. Jaundice
- E. Swelling of the feet
- 19. Where is the noise most often heard best in renal artery stenosis?
- A. Above the navel
- B. In the supraclavicular region
- C. Above and lateral to the umbilicus
- D. In the epigastrium
- E. Above the bladder
- 20.Pasternatsky's method is used for:
- A. Suspected cirrhosis
- B. Suspected pyelonephritis
- C. Suspected ulcer
- D. Suspected pneumonia
- E. Suspected hepatitis

#### 2. Defense of the educational medical history.

The form for completion and defense is attached to the library collection of the department and the academy.

### Midterm control №2:

# 1. Task to demonstrate practical skills.

- 1. Questioning and general examination of patients with dysuric syndrome.
- 2. Questioning and general examination of patients with nephritic syndrome.
- 3. Questioning and general examination of patients with nephrotic syndrome.
- 4. Features of palpation in the main syndromes of diseases of the genitourinary system. Diagnostic value
- 5. Features of percussion in the main syndromes of diseases of the genitourinary system. Diagnostic value.
- 6. Features of interpretation of results of laboratory and instrumental research methods for leading syndromes of genitourinary system pathology.
- 7. Instrumental research methods for pathologies of the genitourinary system.
- 8. Laboratory research methods for pathologies of the genitourinary system.
- 9. Clinical features of nephrotic syndrome.
- 10. Clinical features of nephritic syndrome.
- 11. Clinical features of dysuric syndrome.
- 12. Methodology and technique of palpation of the kidneys.
- 13. Methodology and technique of percussion of the kidneys.

- 1. The main clinical sign according to the clinical protocol of nephrotic syndrome is:
- a) swelling
- 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 the daily amount of urine
- 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) determination of protein in urine
- 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

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- 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 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 site of renin formation 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) swelling

- 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:

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- a) leukocyturia
- b) hematuria
- c) proteinuria more than 3 g/day
- d) no changes
- e) dysuria
- 16. Ultrasound examination of the kidneys in pyelonephritis shows:
- a) dilation of the renal pelvis
- b) decrease in kidney size
- c) cyst formation
- d) normal echostructure
- e) changes in the kidney capsule
- 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. Indicate 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

- 1. Show the normal specific gravity of urine in Zimnitsky's test:
- a) 1010-1025
- b) 1005-1015

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- 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 loss of appetite, itchy skin, frequent urination at night, and weakness. Over the past two weeks, he has noted an increase in blood pressure (up to 180/110 mmHg). His medical history includes hypertension for over 15 years. Urinalysis reveals proteinuria 2.6 g/day, isosthenuria, and microhematuria. Blood chemistry: 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. Indicate 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 urination at night. Over the past two weeks, he has noted an increase in blood pressure (up to 180/110 mmHg). His medical history includes hypertension for over 15 years. Urinalysis reveals proteinuria 2.6 g/day, isosthenuria, and microhematuria. Blood chemistry: 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:

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- a) specific gravity of urine
- 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 presented with complaints of lumbar pain, a fever of 38.5°C, weakness, and frequent and painful urination. Urinalysis revealed 5-6 white blood cells (WBCs), traces of protein, and 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 a test to assess 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 presented with complaints of lumbar pain, high fever (up to 39°C), chills, and frequent, painful urination. Urinalysis revealed white blood cells covering the entire visual field, bacteria (+++), and protein 0.5 g/L. Specify the necessary tests to determine the cause of pyelonephritis:
- a) urine culture
- b) Zimnitsky's urine analysis
- c) complete blood count
- d) MRI of the lumbar spine
- e) Rehberg's urine test
- 13. A 40-year-old woman was admitted with complaints of lumbar pain, fever, and chills. The doctor made a preliminary diagnosis of acute pyelonephritis. Indicate the elevated laboratory values in the complete blood count 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. A Rehberg test was performed to assess renal function, which yielded a creatinine clearance of 85 ml/min. Based on these results, what is the conclusion?
- a) normal kidney function
- b) signs of acute kidney injury

- c) mild stage of chronic renal failure
- d) middle stage of 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 series of diagnostic tests were ordered, including excretory urography. Indicate the changes in excretory urography associated with urolithiasis:
- a) uneven contrast enhancement, 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 suffered from chronic cystitis and hypertension for many years. An excretory urogram is performed for diagnosis. Determine the changes in the excretory urogram 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) sharp 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 enlarged kidneys with moderate dilation of the renal pelvis. Indicate the primary 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. Upon palpation of the kidneys, the physician feels enlarged and 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 reveals enlargement of both kidneys, which are firm and painful. Select a test 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 palpating the kidneys of a patient suffering from chronic pyelonephritis, discovers tenderness and enlargement of the right kidney. Your preliminary diagnosis:
- a) chronic pyelonephritis
- b) Acute renal failure
- c) Urolithiasis
- d) Polycystic kidney disease
- e) Glomerulonephritis

АО «Южно-Казахстанская медицинская академия»

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- 1. A 35-year-old woman, a cashier, consulted her primary care physician complaining of pain in the right lumbar region, slight morning eyelid swelling, frequent urination, headaches, and general weakness. Her medical history includes a diagnosis of chronic pyelonephritis. Further testing is recommended. Please provide the following characteristic findings in your urinalysis:
- a) turbid urine, specific gravity 1012, leukocyturia
- b) turbid urine, specific gravity 1025, cylindruria
- c) turbid urine, specific gravity 1010, proteinuria
- d) microhematuria, pronounced proteinuria
- e) leukocyturia, pronounced proteinuria
- 2. A 44-year-old man presented to the emergency room complaining of slight eyelid swelling in the morning, decreased urine output, and urine discolored like "meat slop." Blood pressure was 140/100 mmHg. Urinalysis revealed protein of 0.099%, red blood cells of 25-35 per field of view, and white blood cells of 10-12 per field of view. What is the cause of the swelling?
- a) hyperaldosteronemia, hypoproteinemia,
- b) hyperproteinemia, hyperaldosteronemia
- c) hyperaldosteronemia, decreased potassium levels
- d) hypoaldosteronemia, increased sodium levels
- e) decreased protein synthesis, increased potassium levels
- 3. A 40-year-old woman developed 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 mmHg. Your preliminary diagnosis:
- a) exacerbation of chronic glomerulonephritis
- b) acute pyelonephritis
- c) renal amyloidosis
- d) apostematous nephritis
- e) polycystic kidney disease
- 4. A 55-year-old man consulted a doctor complaining of severe weakness, swelling of the face and lower extremities, high blood pressure (170/100 mmHg), and decreased urine output. He has a history of several episodes of tonsillitis over the past year. Laboratory examination revealed proteinuria (3 g/day), microhematuria, and cylindruria. Ultrasound revealed normal-sized kidneys with no obvious structural changes. Your preliminary diagnosis:
- a) Glomerulonephritis
- b) Acute pyelonephritis
- c) Urolithiasis
- d) Polycystic kidney disease
- e) Chronic renal failure
- 5. A 53-year-old patient complains of swelling of the face and extremities, increased blood pressure to 180/100 mmHg, and fatigue. On examination, moderate abdominal distension, 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

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- 6. A 65-year-old patient complains of lower back pain, frequent urination, and swelling of the lower extremities. Examination reveals moderate abdominal enlargement, pale skin, and brittle nails. Blood biochemistry: creatinine 250 µmol/L, urea 15 µmol/L, glomerular filtration rate 60 ml/min, potassium 5.5 mmol/L, sodium 135 mmol/L. Urine analysis: protein 3.5 g/L, erythrocytes 8-10 fields of view, leukocytes 4-5 fields of view, density 1010, granular casts. Your preliminary diagnosis:
- a) chronic renal failure
- b) acute renal failure
- c) exacerbation of chronic pyelonephritis
- d) kidney stones
- e) polycystic kidney disease
- 7. A 42-year-old woman was admitted to the hospital complaining of dull lower back pain, fever up to 37.8°C, general weakness, and frequent and painful urination. Her medical history includes chronic tonsillitis and episodes of pyelonephritis in her youth. On examination: body temperature is 37.5°C. Blood pressure is 130/85 mmHg. Urinalysis: leukocyturia, bacteriuria, proteinuria (0.5 g/day). Blood biochemistry: creatinine is 115 µmol/L, urea is 7.5 mmol/L. Renal ultrasound: deformity of the renal pelvis and calyceal system. Your preliminary diagnosis:
- a) chronic pyelonephritis
- b) acute pyelonephritis
- c) glomerulonephritis
- d) polycystic kidney disease
- e) urolithiasis
- 8. A 58-year-old man complains of severe weakness, loss of appetite, itchy skin, and frequent urination at night. In recent months, he has noted an increase in blood pressure (up to 170/110 mm Hg) and episodes of nosebleeds. Medical history: hypertension for over 15 years, type 2 diabetes mellitus, longterm use of NSAIDs for chronic joint pain. Urinalysis: proteinuria 2.8 g/day, isosthenuria, microhematuria. Blood biochemistry: creatinine - 400 umol/l, urea - 18 mmol/l, potassium - 5.8 mmol/l. Kidney ultrasound: decreased 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
- 9. 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
- 10. A 32-year-old woman presented with severe lower back pain, fever up to 39°C, and frequent and painful urination. Urinalysis revealed 50–60 leukocytes per high-power field, bacteria (++). Your preliminary diagnosis:
- a) Acute pyelonephritis
- b) Glomerulonephritis

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- c) Cystitis
- d) urolithiasis
- e) Peritonitis
- 11. A 36-year-old patient was admitted with complaints of blood in the urine, decreased urine output, and weakness. His medical history includes a sore throat two weeks ago. Urinalysis revealed macrohematuria and proteinuria. Your preliminary diagnosis:
- a) acute glomerulonephritis
- b) chronic pyelonephritis
- c) polycystic kidney disease
- d) renal failure
- e) nephrotic syndrome
- 12. Specify the amount of urine collected for the Zimnitsky test:
- a) 8
- b) 6
- c) 10
- d) 12
- e) 24
- 13. 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
- 14. 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
- 15. A 56-year-old woman consulted a doctor complaining of facial swelling, especially in the morning, decreased urine output, and fatigue. Her medical history included frequent colds. On examination, the patient's face was pale and puffy, her eyelids were swollen, and her palpebral fissures were narrowed. Which of the following findings is correct?
- a) facies nephritica
- b) facies febrilis
- c) facies mitralis
- d) facies basedovica
- e) facies Hyppocratica
- 16. A 48-year-old woman presented to the clinic with complaints of facial swelling, especially in the morning, decreased urine output, urine discolored the color of "meat slops," palpitations, and fatigue. Past medical history: a month ago, after hypothermia, she suffered from tonsillitis and bronchitis, after which she periodically experienced aching pain in the lower back. Objectively: the patient's face is pale, puffy, and her eyelids are swollen. Blood pressure is 150/110 mmHg. A general urine analysis shows protein 0.099%, red blood cells 45-50 in the field of view. Indicate the cause of the "meat slops"-colored urine:
- a) decreased permeability of glomerular capillaries

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- b) inflammation of the ureters
- c) ureteral damage by a stone
- d) an increase in the number of red blood cells in the blood
- e) decreased levels of blood clotting factors
- 17. A 45-year-old patient complains of general weakness, headaches, and edema. A Rehberg test was performed to assess renal function, which yielded a creatinine clearance of 85 ml/min. Based on these results, what is the conclusion?
- a) normal kidney function
- b) signs of acute kidney injury
- c) mild stage of chronic renal failure
- d) middle stage of chronic renal failure
- e) end-stage renal failure
- 18. A 55-year-old patient complains of lower back pain, difficulty urinating, and blood in the urine. A series of diagnostic tests were ordered, including excretory urography. Indicate the changes in excretory urography associated with urolithiasis:
- a) uneven contrast enhancement, 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
- 19. A 60-year-old man presented with abdominal pain and difficulty urinating. He has suffered from chronic cystitis and hypertension for many years. Excretory urography is performed for diagnosis. Determine the changes 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) sharp narrowing of the ureters
- e) symmetrical filling of the kidneys with contrast without changes
- 20. A 45-year-old patient complains of frequent lower back pain accompanied by edema. Excretory urography revealed enlarged kidneys with moderate dilation of the renal pelvis. Indicate the primary cause of these changes:
- a) chronic pyelonephritis
- b) urolithiasis
- c) polycystic kidney disease
- d) urethritis
- e) kidney cancer

# 2. Protection and completion of the educational medical history.

The form for completion and defense is attached to the library collection of the department and the academy.