

MINISTRY OF HEALTH OF UKRAINE
ZAPOROZHYE STATE MEDICAL UNIVERSITY
THE DEPARTMENT OF INTERNAL DISEASES 3

Test “KROK-2” Tasks in

NEPHROLOGY

Zaporizhzhya

2021

UDC: 616.61(075.8)

T-41

*Approved by the Central Methodical Council of ZSMU
(protocol № ____ from " ____ " _____ 2021)
and recommended for use in the educational process*

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T 41 **Test "KROK-2" tasks in nephrology:** a collection of test tasks in the discipline "Internal Medicine" for students of the 6th year of medical faculty, specialty "Medical business", "Pediatrics" / Dotsenko S.YA., Rekalov D.H., Chorna I.V. [et al.]. – Zaporizhzhya, 2021. – 64 p.

Збірник тестових завдань "Тестові завдання КРОК-2 з нефрології " - для підготовки до практичних занять з дисципліни "Внутрішня медицина" іноземним студентам 6-го курсу медичного факультету, які навчаються англійською мовою за спеціальністю "Лікувальна справа".

УДК: 616.61(075.8)

INTRODUCTION

The collection of test tasks “Test “KROK-2” Tasks in NEPHROLOGY” is designed to improve the quality of training of future general practitioners, including general practitioners / family doctors, since in recent decades there has been a significant spread and growth of the pathology of internal organs, especially nephrological diseases.

In the presented collection of test questions, questions are considered that will be useful in practical work of therapists and will provide substantial assistance to students, interns, general practitioners, family doctors in mastering the problems of diagnosis and differential diagnosis of nephrological diseases.

The collection of test tasks is built on the basis of the curriculum for the discipline "Internal Medicine", contains a sufficient number of test tasks that reveal the general provisions and a special part of the pathological states in nephrology. The workshop includes test tasks from recent years from the Testing Center at the Ministry of Health of Ukraine.

The presented collection of test tasks is a rather relevant form of teaching students in higher educational institutions of III-IV accreditation levels from the standpoint of the Bologna process, including preparation for the "KROK-2" licensing exam.

1. At the 18-years-old youth in 2 weeks after a cold edema of face, moderate pain in loin appeared. At the inspection: AP 180/105, proteinuria - 2,0 g/l, microhematuria, hyaline and erythrocyte cylinders – 5-10 in eyeshot. About what disease it follows to think:

- A. Acute glomerulonephritis
- B. Chronic glomerulonephritis
- C. Acute pyelonephritis
- D. Chronic pyelonephritis
- E. Urolithiasis

2. At the 46-years-old woman after supercooling great pain in loin on the right, increase of body temperature to 38C, dysuria appeared. In urine: leukocyturia, bacteriuria; in blood: Hb - 100 g/l, leukocytosis with change to the left, blood sedimentation - 40 mm/h, urea of blood - 6,0 mmol/l. The most reliable diagnosis is:

- A. Acute pyelonephritis
- B. Chronic pyelonephritis
- C. Acute glomerulonephritis.
- D. Chronic glomerulonephritis
- E. Urolithiasis

3. The 28-years-old woman is ill on systemic lupus erythematosus with the damage of kidneys (nephrotic syndrome) and joints, in this connection takes prednisolone 60 mg a day during 3 weeks. What from the resulted changes is the most reliable complication of the appointed therapy:

- A. Hyperglycemia
- B. Erythema on cheeks
- C. Reyno syndrome
- D. Thrombocytopenia
- E. Decline of albumin in blood

4. The 68-years-old woman is hospitalized for an inspection in connection with macrohematuria, increase of body temperature to 38C. What examination is the most substantial for determination of the diagnosis:

- A. Zimnicky sample

- B. Cystoscopy
- C. Excretory urography
- D. Biopsy of kidney
- E. US research of kidneys and urinary bladder

5. The sick L., 25 years old, complains on headache, dizziness. In the anamnesis: quinsy 3 weeks ago. Objectively: moderate edema of face, shins, heart rate 90, AP 180/105. Analysis of urine: protein - 1,68 g/l, L - 8-10, E - 50-60 in eyeshot. What treatment it follows to appoint first:

- A. Antibiotics
- B. Diuretics, calcium antagonists
- C. Cyclophosphamide
- D. Prednisolone
- E. Plasma intravenous

6. At the 28-years-old woman high AP is determined during 6 months, increase of body temperature to 37,5C. Objectively: noise on the left from nawel and on carotids. The most reliable diagnosis is:

- A. Chronic glomerulonephritis
- B. Polyarteritis nodosa
- C. Systemic lupus erythematosus
- D. Unspecific aortoarteritis
- E. Fibro-muscular dysplasia of renal artery

7. At the 45-years-old patient, locksmith, hypertrophy of parotid glands, Dupuytren`s contracture, proteinuria (2,5 g/l), microhematuria, increase of IgA are found out. The most reliable diagnosis is:

- A. Idiopathic IgA-nephropathy
- B. Glomerulonephritis at hemorrhagic vasculitis
- C. Glomerulonephritis of alcoholic etiology
- D. Chronic pyelonephritis
- E. Lupus glomerulonephritis

8. The sick, 20 years old, with a 12 weeks pregnancy, complains on nausea, vomit, headache. She felt ill 2 weeks ago after a viral infection. At the examination: edema of shins, AP 170/105. In urine: proteinuria - 3,3 g/l, microhematuria, erythrocyte

cylinders. What is the most reliable diagnosis:

- A. Early pregnancy toxemia
- B. Gestational pyelonephritis
- C. Acute glomerulonephritis
- D. Hypertonic disease
- E. Chronic glomerulonephritis

9. The sick I., 35 years old, complains on pain in the lower part of abdomen, frequent sickly urinations, which appeared after supercooling. In urine – pyuria. Application of what preparations is the most expedient:

- A. Ciprofloxacin
- B. Biseptol
- C. Ampicillin
- D. Cefazolin
- E. Macropen

10. The sick, 45 years old, during 8 years treats oneself concerning fibrocavernous tuberculosis. Edema of lower extremities, diarrhea 2 months ago appeared. In the analysis of urine: proteinuria - 3,5 g/l, leukocyturia - 10-12, microhematuria, hyaline cylinders - 3-4 in eyeshot. What is the most reliable diagnosis:

- A. Renal amyloidosis
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Renal tuberculosis
- E. Acute pyelonephritis

11. The sick F., 32 years old, complains on aching pain in loin on the right, increase of body temperature to subfebrile numbers. In the anamnesis: there was pain in the right half of loin with chill, acute increase of body temperature 10 years ago during pregnancy and after births; there is an increase of AP during last 5 years. In the analysis of urine: protein - 0,99 g/l, L - 30-40, E - 2-4 in eyeshot, creatinine of blood serum - 102 $\mu\text{mol/l}$. What is the most reliable diagnosis:

- A. Renal tuberculosis
- B. Chronic glomerulonephritis
- C. Chronic pyelonephritis

D. Renal amyloidosis E. Hypertonic disease

12. The patient P., 40 years old, complains on edema of face, shins. The diagnosis of rheumatoid arthritis was set four years ago. Objectively: anasarca, AP 120/70. In blood test: Hb - 115 g/l, blood sedimentation - 30 mm/h; in the general analysis of urine: protein - 4,2 g/l, L - 6-8, hyaline and granular cylinders - 5-6 in eyeshot.

- A. Secondary amyloidosis with damage of kidneys
- B. Chronic glomerulonephritis
- C. Tuberculosis of kidneys
- D. Myelomic nephropathy
- E. Chronic pyelonephritis

13. At the patient, 18 years old, pain in lumbar area appeared after intensive physical loading, there was proteinuria 0,47 g/l in the analysis of urine. At the repeated research of urine in 2 days pathology was not discovered. Specify the most credible state:

- A. Salt diathesis
- B. Physiological proteinuria
- C. Acute glomerulonephritis
- D. Acute pyelonephritis
- E. Nephroptosis

14. The patient, 23 years old, with the 10 weeks term of pregnancy during one week edema of face and shins determined. At the examination: AP 170/100. In the analysis of urine: proteinuria - 1,8 g/l, microhematuria, erythrocyte cylinders - 3-4 in eyeshot. Specify the most credible diagnosis:

- A. Early pregnancy toxemia
- B. Nephropathy of pregnant
- C. Acute pyelonephritis
- D. Acute glomerulonephritis
- E. Systemic lupus erythematosus with damage of kidneys

15. The 40-years-old man has chronic renal failure, as a result of chronic glomerulonephritis. At the inspection: creatinine of blood serum – 800 $\mu\text{mol/l}$, potassium of blood - 6,2 mmol/l. In this case it follows to appoint everything, except for:

- A. Loop diuretics
- B. Dietotherapy
- C. Sorbents
- D. Prednisolone
- E. Programming hemodialysis

16. The 45-years-old sick suffers on chronic renal failure as a result of polycystosis of kidneys. At the inspection: AP - 180/120, creatinine of blood - 770 $\mu\text{mol/l}$, speed of glomerular filtration - 5 ml/min., potassium of blood - 6,8 mmol/l. What medical tactic is indicated for this sick:

- A. Sorbents
- B. Hemodialysis
- C. Hemosorption
- D. Plasmapheresis
- E. Preparations of Ca

17. The patient F., 30 years old, suffers on chronic glomerulonephritis during 10 years. At the inspection: AP - 160/100, creatinine of blood serum - 180 $\mu\text{mol/l}$, potassium of blood - 4,2 mmol/l. In this case it follows to appoint everything, except for:

- A. Diet with diminishing of protein
- B. Diuretics
- C. Diet with diminishing of Na and K
- D. Programming hemodialysis
- E. Antihypertensive therapy

18. At the patient, 22 years old, anasarca with accumulation of liquid in pleura and abdomen, diminishing of urine to 300 ml/day, proteinuria (8 g/day). What syndrome developed at this patient:

- A. Urinary
- B. Nephrotic
- C. Nephritic
- D. Heart failure
- E. Acute renal failure

19. At the youth, 16 years old, which suffers on rapidly progressive glomerulonephritis, pulmonary bleeding appeared. What is the most credible diagnosis:

- A. Systemic lupus erythematosus
- B. Gudpascher`s syndrome
- C. Pulmonary edema
- D. Pulmonary infarction
- E. Pneumonia

20. At the sick, 72 years old, at the inspection: moderate normochromic anemia, blood sedimentation – 70 mm/h, proteinuria, creatinine of blood - 450 mcmmol/l. A doctor suspected multiple myeloma. What method of inspection is contra-indicated:

- A. Biopsy of kidneys
- B. Excretory urography
- C. US research of kidneys
- D. Survey urography
- E. Sternal puncture

21. At the patient, 64 years old, with high and resistant AP (210/130) at the conducting of Doppler scanning stenosis of renal arteries was diagnosed, at the laboratory research: speed of glomerular filtration - 50 ml/min. Appointment of what hypotensive mean is inadvisable:

- A. Amlodipin
- B. Enalapril
- C. Bisoprolol
- D. Moxonidin
- E. Indapamid

22. The patient, 35 years old, with chronic glomerulonephritis, terminal stage of renal failure gets treatment - programming hemodialysis. Hemoglobin is 65 g/l. What method of correction of anemia is the most expedient:

- A. Blood transfusion
- B. Transfusion of fresh-frozen plasma
- C. Introduction of erythropoietin
- D. Introduction of androgens
- E. Plasmapheresis

23. At the patient, 36 years old, with chronic glomerulonephritis take place: diuresis - 500 ml, hemoglobin - 72 g/l, creatinine of blood - 720 $\mu\text{mol/l}$, potassium of blood - 6,2 mmol/l. Name the possible factors of hyperkalemia:

- A. Chronic renal failure
- B. Taking ACE inhibitors
- C. Taking torasemid
- D. Violation of diet
- E. All answers are true

24. At the sick, 64 years old, on chronic obstructive pulmonary disease with bronchiectasis edema, moderate increase of liver and spleen, high proteinuria appeared. What method is the most informative for clarification of the diagnosis of kidney damage:

- A. US research of kidneys
- B. Excretory urography
- C. Scintigraphy
- D. Nephrobiopsy
- E. Angiography of kidneys

25. At the youth, 16 years old, after vaccination against diphtheria clinical signs of acute glomerulonephritis as a nephritic syndrome appeared. Specify the most reliable mechanism of kidney damage:

- A. Allergic reaction of immediate type
- B. Allergic reaction of slow type
- C. Toxic influence of vaccine on capillaries of renal glomeruli
- D. Action of specific antibodies on renal channels
- E. Action of complexes antigen/antibody on basal membrane of glomeruli

26. The patient, 19 years, has clinic-laboratory signs of rapidly progressive glomerulonephritis. What method of research is needed for confirmation of the diagnosis:

- A. US research of kidneys
- B. Excretory urography
- C. Nephrobiopsy

- D. Computed tomography
- E. Computed tomography and nephrobiopsy

27. The patient, 20 years old, has clinical signs of acute glomerulonephritis with nephritic syndrome. What research will be the most informative in this case:

- A. Biochemical blood test
- B. General blood test
- C. General analysis of urine
- D. Eye fundus examination
- E. X – rays of the chest

28. The patient, 32 years old, has signs of chronic glomerulonephritis with nephrotic syndrome. What changes of laboratory indexes is possible to expect in this case:

- A. Dyselectrolytemia
- B. Hypercholesterinemia
- C. Bacteriuria
- D. Hypocoagulation
- E. Hyperproteinemia

29. The sick G., 22 years old, complains on increase of body temperature to 38C, pain in joints, edema of face, feet, papular rash on cheeks. Laboratory researches: Hb – 96 g/l, blood sedimentation – 55 mm/h; proteinuria – 3,5 g/l, microhematuria. What can confirm the diagnosis:

- A. Increase of circulating immune complexes
- B. Antibodies to twochain DNA
- C. Decrease of maintenance of IgM
- D. Decrease of amount of B-lymphocytes
- E. Increase of blood sedimentation

30. At the patient I., 23 years old, moderate proteinuria, microhematuria, high arterial pressure appeared in a week after viral infection. What research must be conducted for confirmation of the diagnosis:

- A. Biopsy of kidneys
- B. Analysis of urine by Nechiporenco
- C. Urea, creatinine of blood

- D. US research of kidneys
- E. E. Excretory urography

31. At the patient Y., 23 years old, edema of face, shins, increase of AP to 180/100, proteinuria - 0,99 g/l, erythrocyturia - 60-80 in eyeshot appeared in 2 weeks after quinsy. Name the most reliable diagnosis:

- A. Cancer of kidneys
- B. Acute glomerulonephritis
- C. Gudpascher`s syndrome
- D. Chronic glomerulonephritis
- E. E. Acute pyelonephritis

32. At the sick, 54 years old, on rheumatoid arthritis edema, high proteinuria, decline of AP to 90/60 appeared. What type of damage of kidneys at this sick:

- A. Glomerulonephritis
- B. Pyelonephritis
- C. Secondary amyloidosis of kidneys
- D. Chronic tubulointerstitial nephritis
- E. Gouty nephropathy

33. At the patient with quinsy in 4 days after taking clarithromycin body temperature rose again, polyuria, nausea, proteinuria - 0,33 g/l, increase of creatinine in blood to 420 mcmol/l appeared. Formulate the previous diagnosis:

- A. Acute glomerulonephritis
- B. Acute tubulointerstitial nephritis
- C. Rapidly progressive glomerulonephritis
- D. Acute pyelonephritis
- E. Acute renal failure

34. The sick F., 67 years old, complains on pain in bones, decline of appetite, weight loss. At the inspection: normochromic anemia, blood sedimentation – 55 mm/h, general protein - 130 g/l, proteinuria - 3 g/l. What is the most credible reason of such state :

- A. Chronic glomerulonephritis
- B. Chronic pyelonephritis

- C. Cancer of kidneys
- D. Myelomic nephropathy
- E. Renal tuberculosis

35. The patient, 38 years old, complains on thirst, nausea, polyuria. For many years takes analgetics concerning migraine. At the inspection: moderate normochromic anemia, proteinuria - 0,33 g/l, creatinine of blood – 300 $\mu\text{mol/l}$. Name the credible disease:

- A. Chronic glomerulonephritis
- B. Chronic tubulointerstitial nephritis
- C. Chronic pyelonephritis
- D. Renal tuberculosis
- E. Myelomic nephropathy

36. The patient T., 42 years old, after significant and protracted physical loading felt pain in lumbar area, appearance of "brown" urine. At the patient's father – polyarthritis, nephrolithiasis. Name the credible disease:

- A. Acute glomerulonephritis
- B. Acute pyelonephritis
- C. Cancer of kidneys
- D. Renal tuberculosis
- E. Acute uricacid nephropathy

37. At the patient, 43 years old, there are relapses of arthritis of I left metatarsophalangeal joint of toe, in urine: low proteinuria, microhematuria. What laboratory research must be conducted for clarification of the diagnosis:

- A. Determination of creatinine of blood
- B. Determination of uric acid of blood
- C. Determination of C-reactive protein of blood
- D. Determination of proteinogram of blood
- E. Determination of rheumatoid factor of blood

38. The patient, 37 years old, complains on periodic pain in I right metatarsophalangeal joint of toe and left ankle joint, renal colic, which recidivate. The level of uric acid of blood is 0,68 mmol/l . What preparation is expedient to appoint:

- A. Movalis
- B. Diclophenak
- C. Prednisolone
- D. Allopurinol
- E. Delagil

39. At the sick, 25 years old, with polyuria (2,5 l/day), increase of creatinine (300 $\mu\text{mol/l}$), doctor suspected development of acute tubulointerstitial nephritis after taking panadol concerning acute viral infection. What tactic of conducting of the sick:

- A. Removal of the drug
- B. Appointment of loratidin
- C. Appointment of dimedrol
- D. Conducting of plasmapheresis
- E. Hemodialysis

40. The patient, 59 years old, for half-year marks pain in pelvic bones, hip joints. At the inspection: normochromic anemia, creatinine of blood – 450 $\mu\text{mol/l}$, calcium of blood 2,9 mmol/l , phosphorus of blood - 2,1 mmol/l , general protein - 100 g/l , proteinuria - to 9,0 g/l . What is the reason of such state:

- A. Systemic lupus erythematosus
- B. Chronic glomerulonephritis
- C. Multiple myeloma
- D. Gudpascher`s syndrome
- E. Chronic tubulointerstitial nephritis

41. The sick, 58 years old, marks thirst, polyuria, decline of appetite. Daily takes unsteroid antiinflammatory preparations concerning osteoarthritis of knee joint. At the inspection: moderate normochromic anemia, proteinuria - 0,66 g/l , creatinine of blood - 300 $\mu\text{mol/l}$. Name the credible disease:

- A. Secondary amyloidosis of kidneys
- B. Chronic glomerulonephritis
- C. Chronic tubulointerstitial nephritis
- D. Chronic pyelonephritis
- E. Cancer of kidneys

42. The patient T., 24 years old, had signs of rapidly progressive glomerulonephritis. For 8 weeks of disease he had such laboratory changes: normochromic anemia, blood sedimentation - 60 mm/h, proteinuria - 2,3 g/l, microhematuria, waxy cylinders. What methods of treatment can be used:

- A. Methylprednisolone pulse therapy
- B. Preparations of cytotoxic action
- C. Plasmapheresis
- D. Hemodialysis
- E. All answers are true

43. The patient, 24 years old, complains on symmetric hemorrhagic rash on the skin of lower extremities. He felt ill after taking aspirin concerning headache. In the analysis of urine: proteinuria - 0,5 g/l, microhematuria. Specify the most credible reason of origin of hematuria:

- A. Acute glomerulonephritis
- B. Autoimmune thrombocytopenia
- C. Hemorrhagic vasculitis with damage of kidneys
- D. Hemophilia
- E. Acute pyelonephritis

44. The 26-years-old patient complains on massive edema, diminishing of urine amount. Felt ill within a week after supercooling. Day's amount of urine is 400 ml, blood sedimentation - 35 mm/h., proteinuria - 4,3 g/l, microhematuria. What changes of laboratory indexes it is possible to expect:

- A. Hypoproteinemia
- B. Increase of cholesterol of blood
- C. Decrease of general protein
- D. Erythrocyte cylinders in urine
- E. All answers are true

45. At the 20-years-old patient with acute glomerulonephritis with nephritic syndrome there were cramps. What principal reason of their development:

- A. Hypokalemia
- B. Hyponatremia
- C. Liquid retention and increase of intracranial pressure

- D. Increase of concentration of urea
- E. Metabolic changes of myocardium

46. The 40-years-old patient is ill on secondary amyloidosis of kidneys with nephrotic syndrome on the background of osteomyelitis. What is the most frequent end of amyloidosis:

- A. Malignant hypertension
- B. Chronic renal failure
- C. Heart failure
- D. Hemorrhagic stroke
- E. Myocardial infarction

47. At the 75-years-old patient, who complains on weight loss, general weakness, at the inspection cancer of thick intestine is diagnosed. In blood test: hypochromic anemia, in urine - proteinuria to 3,5 g/day, microhematuria. What is the most credible reason of development of kidney pathology:

- A. Chronic pyelonephritis
- B. Paraneoplastic nephropathy
- C. Urolithiasis
- D. Renal tuberculosis
- E. Myelomic nephropathy

48. At the 42-years-old patient, who was ill on I type diabetes, severe course for 10 years, moderate proteinuria, AH were registered during last two years. Specify the most credible reason of the state:

- A. Hypertonic disease
- B. Heart failure
- C. Chronic glomerulonephritis
- D. Diabetic glomerulosclerosis
- E. Amyloidosis of kidneys

49. At the patient on the background of flu with high fever at the research of urine proteinuria - 0,066 g/l is found out. In a week in the analysis of urine pathological changes are not discovered. What is the credible reason of transient proteinuria:

- A. Acute glomerulonephritis

- B. Feverish proteinuria
- C. Acute pyelonephritis
- D. Acute tubulointerstitial nephritis
- E. Diabetic nephropathy

50. At the sick, 26 years old, with anasarca, chronic glomerulonephritis with nephrotic syndrome was diagnosed. The diagnosis was verified by biopsy of kidneys. Damage of what structure of kidneys is primary in this case:

- A. Glomerulus
- B. Tubules
- C. Renal arteries
- D. Interstitial tissue
- E. Calyx and pelvis

51. At the sick L., 24 years old, in 2 weeks after quinsy edema of face, shins, increase of AP - 170/100, proteinuria - 0,99 g/l, microhematuria appeared. Proteinuria in this case is:

- A. Functional
- B. Extrarenal
- C. Glomerular
- D. Tubular
- E. Proteinuria of “overflow”

52. At the patient, 23 years old, in a week after viral infection moderate edema of extremities, arterial hypertension, proteinuria (2 g/day), microhematuria, appeared. What caused this proteinuria:

- A. Increase of “pore” sizes of glomerular capillaries endothelium
- B. Increase of permeability of glomerular basal membrane
- C. Loss of negative charge of basal membrane
- D. Correctly A, B
- E. Correctly A, B, C

53. The sick N., 69 years old, complains on osalgia, decline of appetite, subfebrile body temperature. At the inspection: normochromic anemia, blood sedimentation - 65 mm/h, proteinuria - 3,3 g/l, general protein - 105 g/l. Reason of proteinuria of “overflow” is:

- A. Increase of permeability of glomerular basal membrane
- B. Inability of renal tubules to reabsorb protein
- C. Increase of maintenance of low molecular weight protein in blood plasma
- D. Increase of “pore” sizes of glomerular capillaries endothelium
- E. Loss of negative charge of basal membrane

54. The patient I., 30 years old, suffers on chronic glomerulonephritis during 5 years. At the inspection: AP - 160/100, proteinuria - 0,66 g/l, microhematuria, creatinine of blood serum - 120 mcmmol/l, speed of glomerular filtration - 75 ml/min., potassium of blood - 4,2 mmol/l. Proteinuria in this case is caused by:

- A. Increase of protein filtration in kidney glomeruli as a result of permeability increase of renal membrane
- B. Decrease of protein reabsorption in proximal renal tubules
- C. Increase of low molecular weight protein filtration in unchanged glomeruli, an amount of which is increased in blood plasma
- D. Disintegration of erythrocytes
- E. Disintegration of leukocytes

55. At the patient A., 36 years old, on chronic glomerulonephritis take place: thirst, nausea, vomit, cramps, hemoglobin 70 g/l, creatinine of blood - 820 mcmmol/l, potassium of blood - 6,6 mmol/l, diuresis - 500 ml. Name the most credible factor of cramps:

- A. Hyperkalemia
- B. Encephalopathy
- C. Hypernitrogenemia
- D. Hypocalcemia
- E. E. Hypercalcemia

56. The 20-years-old student in 2 weeks after quinsy felt ill on acute glomerulonephritis with nephritic syndrome. What infection plays the main role in development of the disease:

- A. Virus
- B. Streptococcus
- C. Staphylococcus
- D. Pneumococcus

E. Meningococcus

57. At the patient, 35 years old, with acute renal failure as a result of protracted compression syndrome was discovered: respiration rate - 28, at the ECG -ventricular extrasystole, high waves T; central venous pressure - 159; potassium of blood - 7,2 mmol/l, creatinine of blood - 0,9 mmol/l. The most expedient application will be:

- A. Ultrafiltration
- B. Hemodialysis
- C. Hemosorption
- D. Diuretics
- E. Diuretics, sorbents

58. At the sick, 19 years old, who suffers on chronic glomerulonephritis and gets treatment - medrol in day's dose 48 mg, pain in pyloroduodenal area, heartburn appeared. After conducting of FGDS erosions of duodenum bulb are diagnosed. Your subsequent action:

- A. Increase of prednisolone doses
- B. Decrease of prednisolone doses
- C. Transfer on parenteral introduction of medrol with gradual abolition
- D. Complete abolition of medrol
- E. All answers are not true

59. At the 38-years-old armenin from teens episodes of stomach-ache with rise of body temperature, which passed independently in a day were marked. Last year in the analysis of urine proteinuria to 1,5 g/l appeared. Father of the patient died from kidney disease. Specify the most credible reason of the state:

- A. Chronic glomerulonephritis
- B. Periodic disease, amyloidosis of kidneys
- C. Chronic pyelonephritis
- D. Rapidly progressive glomerulonephritis
- E. That information is not enough for setting of the diagnosis

60. The patient, 24 years old, complains on presence of microspotal symmetric hemorrhagic rash in the area of lower extremities and trunk. He is ill within a week. In the analysis of urine: protein - 0,5 g/l, leukocytes – 6-8, erythrocytes – 35-40 in eyeshot. Specify the most credible reason of origin of microhematuria:

- A. Acute glomerulonephritis
- B. Hemorrhagic vasculitis
- C. Thrombocytopenic purpura
- D. Hemophilia
- E. Acute pyelonephritis

61. At the patient, 29 years old, at the inspection discoid pouring out is discovered in the area of cheeks, polyarthrititis of joints of brushes, bilateral pleurisy, AG. In the analysis of urine is protein - 1,2 g/l, erythrocytes – 15-20, leukocytes – 4-5 in eyeshot. Specify the most credible reason of origin of urinary syndrome:

- A. Acute glomerulonephritis
- B. Amyloidosis of kidneys
- C. Acute pyelonephritis
- D. Renal tuberculosis
- E. Lupus glomerulonephritis

62. At the youth, 20 years old, there are edema of all body, general protein of blood - 54 g/l. Albumin - 25%, globulins - 75%, cholesterol - 9,8 mmol/l. The given clinic – laboratory research allows to assert about presence at the patient:

- A. Dysproteinemia
- B. Hyperalbuminemia
- C. Hyperproteinemia
- D. Hypoglobulinemia
- E. Hypocholesterinemia

63. The sick, 39 years old, complains on headache, decline of appetite, nausea, vomit in the morning, periodic nasal bleeding. He is ill on chronic tonsillitis, from 15 years - pathology in the analyses of urine. At the inspection: pallor of skin, traces of scratching on skin, AP - 200/140. In the analysis of urine: protein - 0,99 g/l, L - 3-5, E - 8-10, erythrocyte cylinders - 3-4 in eyeshot. What from the biochemical indexes is the most informative for estimation of the state:

- A. Creatinine of blood serum
- B. Sodium of blood plasma
- C. Uric acid of blood
- D. Fibrinogen of blood

E. Bilirubin of blood

64. The patient, 48 years old, who arrived from the places of imprisonment, complains on headache, decline of vision, nausea, thirst. During 8 years AP is promoted. At the examination: skin is pale, pulse – 90, AP - 220/140, liver - on 3 sm below the edge of a costal arc. Blood test: E - $2,1 \times 10^{12}/l$, L - $7,8 \times 10^9/l$, blood sedimentation - 48 mm/h, in the analysis of urine: specific weight - 1007; protein - 1,65 g/l, E - 10-12, L - 3-4, hyaline cylinders - 4-5 in eyeshot, creatinine of blood - 0,243 mmol/l. Your previous diagnosis:

- A. Chronic pyelonephritis
- B. Chronic glomerulonephritis
- C. Hypertonic disease
- D. Amyloidosis of kidneys
- E. Renal tuberculosis

65. At the patient with acute renal failure on the background of expressed hyperkalemia paroxysmal ventricular tachycardia appeared. What medical measure, directed on a fight against hyperkalemia, must be used in this situation:

- A. Hemodialysis
- B. Intravenous introduction of sodium bicarbonate
- C. Intravenous introduction of glucose and insulin
- D. Use of cationexchange resins
- E. Introduction of calcium preparations

66. The student, 23 years old, complains on pain in knee-joints, increase of body temperature. In the anamnesis: quinsy 10 days ago. Objectively: t - $37,8^{\circ}\text{C}$, knee-joints swollen, hemorrhagic rash on shins, heart rate – 82, AT - 110/70. In blood test: L - $8,4 \times 10^9/l$, T - $150,0 \times 10^9/l$, blood sedimentation - 32 mm/h., in the analysis of urine by Nechiporenko: L - $2,0 \times 10^6/l$, E - $5,0 \times 10^6/l$. What is the most reliable diagnosis:

- A. Autoimmune thrombocytopenia
- B. Hemorrhagic vasculitis
- C. Rheumatic vasculitis
- D. Systemic lupus erythematosus
- E. Polyarteritis nodosa

67. The man, 23 years old, complains on edema of face, headache, dizzinesses, oliguria, brown color of urine. Those complaints appeared after pharyngitis. Objectively: edema of face, cardiac tones are muffled, accent of II tone above aorta, heart rate - 86, AP - 170/110. In the general analysis of urine will be:

- A. Erythrocyturia, leukocyturia, leukocyte cylinders
- B. Leukocyturia, proteinuria, hyaline cylinders
- C. Erythrocyturia, oxaluria, waxy cylinders
- D. Erythrocyturia, proteinuria, erythrocyte cylinders
- E. Hemoglobinuria, bilirubinuria, granular cylinders

68. At the 35-years-old patient with chronic glomerulonephritis, who treats oneself with programming hemodialysis for half-year, recently interruptions in the heart work, low blood pressure, shortness of breath appeared. The day before the patient ate a lot of tomatoes and apricots. At the ECG: bradycardia, atrioventricular block I st., high sharp waves T. What biochemical change is the most credible reason of the clinical picture:

- A. Hyperhydration
- B. Hyperkalemia
- C. Hypokalemia
- D. Hypernatremia
- E. Hypocalcemia

69. The sick T., 25 years old, entered clinic with anasarca, oliguria. After clinic - laboratory inspection the diagnosis of acute glomerulonephritis was set. What laboratory test at this disease is the indication for therapy with glucocorticoid hormones:

- A. Increase of blood creatinine
- B. Daily proteinuria less than 3,5 g
- C. Daily proteinuria more than 3,5 g
- D. Macrohematuria
- E. Anemia

70. The 48-years-old man with mitral stenosis began to feel attacks of interruptions in the heart work, dyspnea. In 3 days suddenly after rising from bed there was acute pain in right lumbar area, which was accompanied with appearance of red color

urine. How is it possible to explain the attacks of pain at the patient:

- A. Acute glomerulonephritis
- B. Attack of renal colic
- C. Thromboembolism of renal veins
- D. Thromboembolism of renal arteries
- E. Thromboembolism of mesenterial artery branches

71. The patient, 16 years old, complains on massive edema, diminishing of urine amount. He is ill during two weeks. Daily amount of urine - 400,0 ml. In blood test: blood sedimentation - 25 mm/h, in the analysis of urine: protein - 4,0 g/l, erythrocytes – 10-15, leukocytes – 2-3 in eyeshot, erythrocyte cylinders - 1-2 in eyeshot. Name changes in the analysis of urine:

- A. Macrohematuria
- B. Leukocyturia
- C. Low proteinuria
- D. Pyuria
- E. Proteinuria of nephrotic level

72. The 36-years-old patient complains on headache, appetite loss. From 18 years gets insulin concerning diabetes mellitus. Objectively: edema of face and feet, pulse - 110, rhythmic, AP - 210/110. The day's amount of urine – 800 ml. Glycemic profile: 9 - 12 - 10 mmol/l, in the analysis of urine: specific weight - 1022, sugar - 3%, protein - 1,32 g/l, L - 3-5 in eyeshot. What complication developed at the patient:

- A. Chronic glomerulonephritis
- B. Amyloidosis of kidneys
- C. Chronic pyelonephritis
- D. Renal tuberculosis
- E. Diabetic glomerulosclerosis

73. At the 19-years-old patient with quinsy in 3 days from the beginning of treatment by cefazolin unpleasant feeling in lumbar area, nausea appeared. At the examination: AP - 140/80. Blood test: E - $3,12 \times 10^{12}/l$, Hb - 120 g/l, L - $10 \times 10^9/l$, blood sedimentation - 28 mm/h; in the analysis of urine: specific weight - 1010, protein - 0,66 g/l; creatinine of blood - 0,380 mmol/l. Your diagnosis:

- A. Chronic glomerulonephritis
- B. Acute glomerulonephritis
- C. Acute tubulointerstitial nephritis
- D. Rapidly progressive glomerulonephritis
- E. Acute pyelonephritis

74. At the sick, 22 years old, after supercooling pain in lumbar area, muddy urine, increase of body temperatures to 38,8°C appeared. In blood: L - $13,2 \times 10^9/l$, change of leukocytaric formula to the left, in urine: protein - 0,33 g/l, leukocytes cover all eyeshot. Choose the empirical antibacterial therapy:

- A. Simple penicillin
- B. Semisynthetic penicillin
- C. Tetracyclin
- D. Fluoroquinolons of II-III generation
- E. Macrolid

75. At the 26-years-old patient after conducting of pathogenic therapy concerning chronic glomerulonephritis with nephrotic syndrome remission came. What sanatorium- resort treatment can be recommended:

- A. Mirgorod
- B. It is not recommended
- C. Morshin
- D. South coast of Crimea
- E. Truskavec

76. At the 40-years-old man, who is ill on chronic glomerulonephritis for 15 years, headache, dyspnea at walking, bad appetite, nausea appeared few months ago. What laboratory index will be the most informative for diagnostics of the state:

- A. Creatinine of blood - 0,36 mmol/l
- B. Urea nitrogen - 20-40% of residual nitrogen
- C. Potassium of blood - 5,2 mmol/l
- D. Urea of blood - 9,3 mmol/l
- E. Sodium of blood - 130 mmol/l

77. The sick L., 37 years old, is hospitalized to reanimation unit in severe condition. At the examination: sopor, smell of ammonia in air, skin of grey - yellow color,

turgor is reduced, pulse is frequent, tense, AP - 160/110, tone of muscles is increased, hyperreflexia. Formulate the previous diagnosis:

- A. Alcoholic coma
- B. Uremic coma
- C. Diabetic coma
- D. Hypoglycemic coma
- E. Cerebral coma

78. At the woman, 54 years old, who was ill on osteomyelitis of thigh-bone over 20 years, during last half-year edema appeared and gradually increased on lower extremities. Protein of urine - 6,6 g/day. In blood: hypoalbuminemia, increase of g-globulins, blood sedimentation - 50 mm/h. What diagnosis is correct:

- A. Secondary amyloidosis of kidneys
- B. Chronic glomerulonephritis
- C. Multiple myeloma
- D. Chronic pyelonephritis
- E. Systemic lupus erythematosus

79. The patient S., 46 years old, noticed edema, heavy feeling in the right subcostum. In the anamnesis: rheumatoid arthritis during 20 years. Liver is increased and spleen has dense consistency. In blood: creatinine - 0,23 mmol/l, general protein - 68 g/l, cholesterol - 4,2 mmol/l; in urine: specific weight - 1010, proteinuria - 0,33 g/l, E - 5-6, L - 5-6 in eyeshot. What is the most reliable complication:

- A. Chronic glomerulonephritis
- B. Amyloidosis of kidneys
- C. Acute glomerulonephritis
- D. Heart failure
- E. Chronic pyelonephritis

80. The patient D., 20 years old, who is observed concerning changes in the global analysis of urine, which were found out a year ago. There are no complaints. Objectively: pulse - 80, AP - 130/80, beating symptom is negative, blood test – without pathology; in the analysis of urine: protein - 0,99 g/l, L - 4-6, E - 8-10, erythrocyte cylinders - 3-5 in eyeshot. Your previous diagnosis:

- A. Acute glomerulonephritis

- B. Chronic glomerulonephritis
- C. Chronic tubulointerstitial nephritis
- D. Chronic pyelonephritis
- E. Renal tuberculosis

81. The woman, 26 years old, was hospitalized with complaints on edema of all body, pain in lumbar area, headache, which first appeared 2 weeks ago after pneumonia. Objectively: edema of face, AP - 150/90. In blood: blood sedimentation - 25 mm/h., in urine: protein - 1,47 g/l, E - 80-100, single hyaline and granular cylinders in eyeshot. What additional research is expedient to conduct above all for determination of the functional state of kidneys:

- A. Creatinine of blood
- B. US research of kidneys
- C. Excretory urography
- D. Bacteriological research of urine
- E. Biopsy of kidney

82. At the 42-years-old patient, who is ill on diabetes I type, severe course for 10 years, moderate proteinuria, AH appeared during last year. What drug is the most expedient in treatment of arterial hypertension:

- A. Amlodipin
- B. Enalapril
- C. Bisoprolol
- D. Klophelin
- E. Furosemid

83. At the woman, 54 years old, who was ill on osteomyelitis of thigh-bone over 20 years, during last half-year edema appeared and gradually increased on lower extremities. Protein of urine - 6,6 g/day. In blood: hypoalbuminemia, increase of g-globulins, blood sedimentation - 50 mm/h. Appoint treatment to the sick:

- A. Kolchicin
- B. Prednisolone
- C. Fraxiparin
- D. Pentoxyfillin
- E. Antibiotics

84. At the woman, 38 years old, after surecooling pain in muscles, increase of body temperatures to 39°C, headache, dysuria, positive beating symptom appeared. Analysis of urine: leukocyturia, bacteriuria. In blood test: Hb - 103 g/l, leukocytosis with change to the left, blood sedimentation - 32 mm/h., urea of blood - 6,0 mmol/l. The most reliable diagnosis:

- A. Urolithiasis
- B. Renal tuberculosis
- C. Acute glomerulonephritis
- D. Acute pyelonephritis
- E. E. Acute cystitis

85. The sick F., 58 years old, complains on periodic headache, dizziness and noise in ears. In the anamnesis: diabetes during 15 years. At the examination: heart tones are rhythmic, heart rate - 76/min., accent of II tone above aorta, AP - 170/100. Day's loss of protein with urine - 0,99 g/l. Preparation of choice for treatment of arterial hypertension at this patient will be:

- A. Alpha-blocator
- B. Beta-blocator
- C. Calcium channels antagonist
- D. Thiazide diuretics
- E. ACE inhibitor

86. The 25-years-old patient complains on periodic pain of dull character in loin, insignificant edema of face in the morning and shins in the evening. He is ill for half- year. In the general analysis of urine: protein - 1,47 g/l, L - 2-3, E - 10-15, single hyaline and erythrocyte cylinders. Set the most reliable diagnosis:

- A. Amyloidosis of kidneys
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Chronic pyelonephritis
- E. Myelomic kidney

87. At the 19-years-old patient with quinsy in 3 days after the beginning of treatment by cefazolin unpleasant feeling in lumbar area, dizziness, nausea appeared. At the examination: AP - 140/80. Blood test: E - $3,12 \times 10^{12}/l$, Hb - 120 g/l, L - $10 \times 10^9/l$, blood sedimentation - 28 mm/h, in the analysis of urine: specific weight - 1010,

protein - 0,99 g/l. Day's amount of urine - 3,2 l. Creatinine of blood - 0,380 mmol/l.
What is primary in treatment of the patient:

- A. Prednisolone
- B. Hemodialysis
- C. Abolition of antibiotic
- D. Antihistaminic preparations
- E. Sorbents

88. The sick L., 37 years old, is hospitalized to reanimation unit in severe condition. At the examination: sopor, smell of ammonia in air, skin of grey - yellow color, turgor is reduced, pulse is frequent, tense, AP - 160/110, tone of muscles is increased, hyperreflexia. Appoint treatment:

- A. Hemodialysis
- B. Detoxification
- C. Hemosorption
- D. Bicarbonate of sodium intravenous
- E. C. Diuretics

89. The patient S., 46 years old, noticed edema, heavy feeling in the right subcostum. In the anamnesis: rheumatoid arthritis during 20 years. Liver is increased and spleen has dense consistency. In blood: creatinine - 0,23 mmol/l, general protein - 68 g/l, cholesterol - 4,2 mmol/l; in urine: specific weight - 1010, proteinuria - 0,33 g/l, E - 5-6, L - 5-6 in eyeshot. What additional research must be conducted for diagnostics of the disease:

- A. Biopsy of kidneys
- B. Proteinogram of blood
- C. Proteinogram of urine
- D. US research of liver and spleen
- E. US research of kidneys

90. The patient, 42 years old, after physical loading felt pain in lumbar area, appearance of "brown" urine. At the patient's father – polyarthritis, nephrolithiasis. What research must be conducted for clarification of the diagnosis:

- A. Creatinine of blood
- B. Uric acid of blood

- C. C-reactive protein of blood
- D. US research of kidneys
- E. E. Rheumatoid factor

91. The sick, 39 years old, appealed to doctor with complaints on headache, decline of appetite, nausea, morning vomit, periodic nasal bleedings. In 20-years-old age after cooling there were edema of face, lower extremities, changes in the analyses of urine. At the examination: pallor of skin, AP - 220/130. What biochemical indexes have diagnostic meaningfulness in this case:

- A. Sodium of blood
- B. Bilirubin of blood
- C. Creatinine of blood
- D. Uric acid of blood
- E. Fibrinogen of blood

92. The pregnant (30 weeks) complains on headache, diminishing of urine amount a day, edema, increase of AP to 170/95. Day's proteinuria - 3 g/l. In blood: creatinine - 100 $\mu\text{mol/l}$, hematocrit - 42%. The most credible diagnosis is:

- A. Acute glomerulonephritis
- B. Late gestosis
- C. Pyelonephritis of pregnant
- D. Tubulointerstitial nephritis
- E. Hypertonic disease

93. The woman, 19 years old, pregnancy 27 weeks, entered gynaecological unit with complaints on frequent, painful urination. Body temperature is normal. In blood test: without pathology. In the analysis of urine - leukocytes cover all eyeshot, proteinuria - 0,033 g/l. A gynaecologist at the examination found out purulent cervicitis. What microorganism caused the disease more credible:

- A. Candida
- B. Chlamydia
- C. Mycobacterium tuberculosis
- D. E. coli
- E. Trichomonads

94. The patient A., 44 years old, is on a clinical account concerning chronic glomerulonephritis. Because of resistant and protracted remission of disease and

absence of contra-indications, resort sanatorium treatment is recommended. On what resorts:

- A. Mud resort
- B. Sulfide resort
- C. Southern climatic resorts of seashores
- D. Radon resort
- E. Mining resorts

95. At the patient with acute glomerulonephritis anorexia, vomit, stomach-ache suddenly appeared. At the examination: body temperature - 38C, anasarca, on the skin of trunk and thighs - erythematous rash, pulse - 90, heart tones are rhythmic, AP - 150/95. Abdomen is soft, liver is increased on 2 sm. Protein of urine - 6,0 g/day, protein of blood - 22 g/l. What is the reason of this state:

- A. Acute myocarditis
- B. Hypertonic crisis
- C. Nephrotic crisis
- D. "Acute abdomen"
- E. Erysipelas

96. The 25-years-old man got heavy trauma of lumbar area. A doctor of admission unit suspected bilateral thrombosis of renal veins. What clinical displays are characteristic for this state:

- A. Pain syndrome
- B. Oliguria
- C. Nephrotic syndrome
- D. Macrohematuria
- E. Answers A, B, C are true.

97. The patient, 30 years old, entered nephrological unit with the diagnosis - acute glomerulonephritis, nephritic syndrome, macrohematuria. At the examination: anasarca, AP - 160/110. Define prognosis of the patient:

- A. Unfavorable prognosis
- B. Complete convalescence
- C. Transformation in chronic glomerulonephritis
- D. Development of chronic renal failure

E. Development of heavy posthemorrhagic anemia

98. The patient, 64 years old, complains on chill, increase of body temperature to 38°C, frequent urination, pain in lumbar area. Sugar of blood - 11,2 mmol/l. In the analysis of urine: specific weight - 1022, protein - 0,1 g/l, positive reaction on acetone, pyuria, E - 3-4 in eyeshot. What is the most credible complication of diabetes, developed at the patient:

- A. Diabetic glomerulosclerosis
- B. Acute glomerulonephritis
- C. Infarction of kidney
- D. Acute pyelonephritis
- E. Chronic renal failure

99. The patient with chronic glomerulonephritis, diagnosed 7 years ago, complains on making progress dyspnea, palpitation, nausea, vomit, nasal bleeding. Objectively: skin is dry, pale with yellow tint, smell of ammonia from mouth, pulse - 120, AP - 170/120. Blood test: Hb - 76 g/l, blood sedimentation - 48 mm/h., urea - 31 mmol/l, creatinine - 0,678 mmol/l. What complication of basic disease arose up:

- A. Acute renal failure
- B. Chronic renal failure
- C. Cardiovascular failure
- D. Toxic pneumonia
- E. Hypertonic crisis

100. The patient F., 58 years old, complains on edema, dyspnea, periodic diarrhea. During many years he is ill on chronic obstructive pulmonary disease with selection of purulent sputum during acuteening. Objectively: spread edema, skin is pale, dry, heart rate - 80, AP - 90/60. At the research of urine: proteinuria (2,5g/l), cylindruria (hyaline). Specify the most reliable diagnosis:

- A. Amyloidosis of kidneys
- B. Chronic glomerulonephritis
- C. Myxedema
- D. Interstitial nephritis
- E. Myelomic nephropathy

101. The 37-years-old man is ill on chronic glomerulonephritis during 3 years. Two weeks ago after viral infection edema of face, loin, feet, dyspnea at night, itch of skin, appetite loss appeared. Objectively: dryness of skin, pericardal friction sound, AP - 200/120. In blood: Hb - 86 g/l; creatinine - 1,03 mmol/l. What preparation is contraindicated to the patient:

- A. Calcium gluconate
- B. Anabolic hormones
- C. Glucocorticosteroids
- D. Calcium antagonists
- E. Furosemid

102. At the man, 47 years old, who got treatment concerning pulmonary tuberculosis during 10 years, spread edema appeared. Objectively: face is puffy, edema of feet, loin, AP - 130/80. Blood test: E - $3,0 \times 10^{12}/l$, L - $4,5 \times 10^9/l$, blood sedimentation – 50 mm/h; general protein – 60 g/l, albumin - 25%, globulins - 75%, cholesterol - 7,2 mmol/l, in the global analysis of urine: specific weight - 1020, protein - 3,5 g/day, E - 1-2, L - 4-5, hyaline cylinders 2-4 in eyeshot. What is the most credible diagnosis:

- A. Thrombosis of renal veins
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Secondary amyloidosis of kidneys
- E. Chronic pyelonephritis

103. At the girl, 19 years old, suddenly arose up high temperature, arthralgia, headache, nausea, vomit, pain and tension of muscles in lumbar area. At the examination: acutely positive beating symptom on the right. In urine - bacteriuria, pyuria. What is the most credible diagnosis:

- A. Acute glomerulonephritis
- B. Acute renal failure
- C. Acute pyelonephritis
- D. Paranephral abscess
- E. Cystitis

104. To the 50-years-old woman, who is ill on chronic pyelonephritis, in the period of exacerbation combination of antibacterial preparations was appointed -

hentamycin (80 mg 3 times per day) and biseptol (960 mg 2 times per day). Such combination of preparations can lead to:

- A. Acute renal failure
- B. Acute glomerulonephritis
- C. Chronic renal failure
- D. Such combination is of optimal and fully safe
- E. Dysbacteriosis

105. The patient, 54 years old, complains on frequent painful urination, chill, increase of body temperature to 38°C. In the analysis of urine: protein - 0,33 g/l, L - cover all eyeshot, E - 3-5, gramnegative sticks. What antibacterial preparation is the best in this case:

- A. Cyprofloxacin
- B. Oxacillin
- C. Erythromycin
- D. Tetracyclin
- E. Cefazolin

106. The woman, 28 years old, is ill on chronic glomerulonephritis during 12 years. During last half-year dyspnea, decline of appetite, nausea, headache, edema of lower extremities appeared. At the inspection: significant anemia, urea in blood - 24,5 mmol/l, creatinine - 0,766 mmol/l, hyperkalemia. Reason of appearance of edema:

- A. Nephrotic syndrome
- B. Hypernatremia
- C. Heart failure
- D. Hypocalcemia
- E. Hyperkalemia

107. The 19-years-old woman, pregnancy 27 weeks, entered gynaecological unit with complaints on frequent, painful urination. Body temperature is normal. Blood test is without pathology. In the analysis of urine: proteinuria - 0,033 g/l, leukocytes cover all eyeshot. A gynaecologist at the examination found out mucopurulent cervicitis. What antibacterial drug you will appoint:

- A. Amoxicillin
- B. Tetracyclin

- C. Cyprofloxacin
- D. Metronidazol
- E. Monural

108. The woman, 37 years old, complains on weight loss, decline of appetite, headache. There was an episode of acute nephritic syndrome in youth, since 30 years AH is marked. Did not treat oneself systematic. During examination signs of chronic renal failure (creatinine of blood - 0,23 mmol/l) were found out. What dietary recommendations are needed:

- A. Diminishing of liquid amount
- B. Limitation of fat
- C. Limitation of carbohydrates
- D. Increase of albumen
- E. Limitation of albumen

109. The woman, 42 years old, is ill on glomerulonephritis during 12 years. Lately complaints on violation of sleep, nausea, itch of skin appeared. Objectively: inhibition, pallor of skin, edema of lower extremities, moist wheezes in lower areas, heart tones are rhythmic, pericardial friction sound, heart rate - 110/min., AP - 180/120. Biochemical research: creatinine of blood - 0,980 mmol/l. What stage of chronic kidney disease developed at the sick:

- A. V stage
- B. III stage
- C. II stage
- D. I stage
- E. IV stage

110. The woman, 58 years old, is hospitalized for an inspection in connection with macrohematuria, increase of body temperature to 38°C. What examination is the most substantial for determination of the diagnosis:

- A. Zimnicky sample
- B. Cystoscopy
- C. Excretory urography
- D. Biopsy of kidney
- E. US research of kidneys and urinary bladder

111. The sick, 36 years old, complains on high body temperature, chill, profuse sweating, dull pain in loin, unpleasant feelings at urination. Objectively: muscular tension of lumbar area, positive beating symptom on both sides. In blood: leukocytosis to $12 \times 10^9/l$ with toxic granularity of neutrophiles, in urine: protein 0,6 g/l, L - on all eyeshot. Your previous diagnosis:

- A. Acute pyelonephritis
- B. Renal tuberculosis
- C. Acute glomerulonephritis
- D. Acute cystitis
- E. Urolithiasis

112. The 69-years-old man complains on pain in lumbar area, pelvic bones for a year. At the inspection normochromic anemia, in urine proteinuria - 6,6 g/l, creatinine of blood - 550 $\mu\text{mol/l}$, general calcium - 2,9 mmol/l, phosphorus - 2,1 mmol/l, general protein - 95 g/l are found out. What research method is the most important for setting of the correct diagnosis:

- A. Biopsy of kidneys
- B. Anamnesis of the sick
- C. Intravenous urography
- D. US research of kidneys
- E. Urine culture with the definition of microflora sensitivity

113. The 20-years-old woman with a 12-week pregnancy complains on nausea, vomit, headache. At the examination: edema of shins, AP - 170/105. In urine: protein - 3,3 g/l, E - 10-15, L - 6-8, hyaline cylinders - 5-6 in eyeshot. What is the most credible diagnosis:

- A. Eclampsia of pregnant
- B. Early pregnancy toxemia
- C. Gestational pyelonephritis
- D. Chronic glomerulonephritis
- E. Hypertonic disease

114. The patient, 36 years old, has no complaints, during passing baseline medical examination before employment passed urine on the general analysis. The results: specific weight - 1018; pH - 6,5, protein - 0,6 g/l, E - 18-20, changed; L - 2-3, granular cylinders - 2-3 in eyeshot. Specify the most credible diagnosis:

- A. Chronic glomerulonephritis
- B. Acute glomerulonephritis
- C. Chronic pyelonephritis
- D. Amyloidosis of kidneys
- E. Urolithiasis

115. The woman, 28 years old, is ill on chronic glomerulonephritis during 12 years. During last half-year general weakness, decline of appetite, nausea, headache, pain in joints appeared. At the inspection: anemia, maintenance of urea in blood - 24,5 mmol/l, creatinine - 0,766 mmol/l, hyperkalemia. What complication developed:

- A. Acute renal failure
- B. Chronic renal failure
- C. B12 deficient anemia
- D. Amyloidosis of kidneys
- E. Gouty nephropathy

116. At the patient, 18 years old, with acute glomerulonephritis the state sharply worsened: headache increased, vision acuity went down, fibril twitching of face muscles, tonic cramps of skeletal muscles, loss of consciousness, AP - 240/140 appeared. Name the complication:

- A. Angiospasm
- B. Brain edema
- C. Brain hemorrhage
- D. Acute renal failure
- E. Paresis of cerebral arteries

117. The patient, 35 years old, with chronic glomerulonephritis, terminal renal failure gets treatment – programming hemodialysis. Hemoglobin is 65 g/l, concerning what he takes preparations of iron per os during two months. What is the credible reason of uneffectiveness of therapy by preparations of iron:

- A. Underdose
- B. Intravenous introduction is needed
- C. Combination of per os and intravenous introduction is needed
- D. Deficit of erythropoietin
- E. Development of B12 deficient anemia

118. The patient, 17 years old, complains on expressed edema of face and extremities, which appeared 3 weeks ago. In the anamnesis: treatment of infectious hepatitis B in infectious unit half-year ago. Objectively: skin is pale, face is puffy, edema of shins, liver is not increased. Day's diuresis - 0,6 l. In the analysis of urine: specific weight - 1020, protein - 4,4 g/l, E - 8-10 in eyeshot; general protein of blood - 52 g/l. What is the most credible mechanism of development of edema:

- A. Hypoproteinemia is connected with violation of albumin synthesis
- B. Hypoproteinemia is connected with protein loss
- C. Hyperaldosteronism
- D. All answers are true
- E. All answers are not true

119. In nephrological unit you examine possibility of diagnostic biopsy of kidney at the patient with high proteinuria. Specify absolute contra-indications for realization of biopsy:

- A. A patient has one kidney
- B. Violation of blood coagulation
- C. Thrombosis of renal veins
- D. Polycystosis of kidneys
- E. All answers are true

120. The patient, 56 years old, complains on high body temperature, chill, dull pains in loin. Objectively: muscular tension of lumbar area, positive beating symptom on both sides. In blood test: leukocytosis to $12 \times 10^9/l$ with toxic granularity of neutrophiles, in the analysis of urine: protein - 0,6 g/l, L - on all eyeshot. What tactic is wrong:

- A. Hospitalization in therapeutic unit and intravenous introduction of antibiotics are needed
- B. Conducing of retrograde pyelography for exception of urinary ways anomaly is needed
- C. Conducing of US research for exception of urolithiasis is needed
- D. At men older than 50 years research of prostate gland is needed
- E. Research of urine on microflora

121. The patient, 42 years old, complains on dryness in mouth, weakness,

diminishing of day's urine amount. He is ill on glomerulonephritis for 11 years. In blood: Hb - 90 g/l, protein of urine - 1,2 g/day, calcium - 1,9 mmol/l, creatinine - 500 mcmmol/l, speed of glomerular filtration - 14 ml/min. What stage of chronic kidney disease at the patient:

- A. IV stage
- B. V stage
- C. III stage
- D. I stage
- E. II stage

122. The pregnant (30 weeks) complains on headache, diminishing of day's urine amount, edema of lower extremities, increase of AP to 170/95. Day's proteinuria - 3 g/l. In blood: creatinine - 100 mcmmol/l, hematocrit - 42%. The most credible syndrome is:

- A. Isolated urinary syndrome
- B. Nephrotic syndrome
- C. Nephritic syndrome
- D. Acute renal failure
- E. Gudpascher`s syndrome

123. The 72-years-old man entered nephrological unit with complaints on pain in right lumbar area, increase of temperature to 38C, rapid urination, especially at night. He is ill for two years. This is the third flare of chronic pyelonephritis for last half-year. What is the most substantial reason of flare of pyelonephritis:

- A. Violation of urodynamics
- B. Incorrect use of antibiotics
- C. Age of the patient
- D. Chronic infection
- E. All answers are true

124. The 60-years-old man took ceftriaxon concerning pneumonia. In three days from the beginning of therapy the patient marked polyuria, low proteinuria, microhematuria, decline of speed of glomerular filtration, increase of creatinine of blood. A doctor suspected acute tubulointerstitial nephritis. What from the symptoms is not the sign of acute tubulointerstitial nephritis:

- A. Erythrocyte cylinders in urine
- B. Eosinophiluria
- C. Fever and arthralgia
- D. Resumption of renal function after stopping of drug introduction
- E. Improvement of renal function after appointment of prednisolone

125. The patient, 66 years old, complains on high body temperature, chill, dull pains in loin. Objectively: muscular tension of lumbar area, positive beating symptom on both sides. In the global analysis of blood: leukocytosis to $13 \times 10^9/l$ with change to the left, low proteinuria in the global analysis of urine, pyuria. What microorganism causes the infection of urinary ways:

- A. Aurococcus
- B. E. coli
- C. Hemolytic streptococcus
- D. Pseudomonas aeruginosa
- E. Chlamydia

126. The sick, 26 years old, complains on chill, profuse sweating, dull pains in loin, unpleasant feelings at urination. Objectively: body temperature $38,8C$, right kidney is lowered, painful at the palpation. In blood test: leukocytosis - $11 \times 10^9/l$, r/n neutrophiles 9%, in the analysis of urine: protein 0,33 g/l, L - on all eyeshot. Specify the criterion, which will allow you to differentiate the infection of lower from the infection of upper urinary ways:

- A. Pyuria
- B. Bacteria colonies more than 100 thousand of microbial bodies in 1 ml
- C. Frequent, painful urination
- D. Body temperature higher than $38C$
- E. Painful palpation of kidney

127. The 59-years-old man complains on pain in lumbar area, pelvic bones during half- year. At the inspection normochromic anemia, proteinuria - 9,9 g/l, creatinine of blood - 450 mcmol/l , alkaline phosphatase - 9200 mmol/l , general calcium - $2,9 \text{ mmol/l}$, phosphorus - $2,1 \text{ mmol/l}$, general protein - 90 g/l are found out. Specify the most credible reason of this state:

- A. Systemic lupus erythematosus
- B. Chronic glomerulonephritis with chronic renal failure

- C. Multiple myeloma
- D. Gudpascher`s syndrome
- E. Chronic tubulointerstitial nephritis

128. The patient, 62 years old, complains on weight loss - 10 kg for 2 months, pain in lumbar area, which increased lately, absence of appetite, subfebrile temperature. At the examination: dense formation in the left subcostum. In blood test: Hb - 90 g/l, E - $2,8 \times 10^{12}/l$, L - $8,8 \times 10^9/l$, blood sedimentation - 42 mm/h., in urine: specific weight - 1018, protein - 0,06 g/l, E - on all eyeshot. Your previous diagnosis:

- A. Urolithiasis
- B. Nephroptosis
- C. Renal tuberculosis
- D. Polycystosis of kidneys
- E. Tumor of kidney

129. The patient D., 55 years old, suffers on hypertonic disease during 10 years. Lately dyspnea, headaches, dizzinesses appeared. Low proteinuria is registered during half- year. At the inspection: no edema, above lungs vesicular breathing, heart rate 68, AP 190/120, liver is not increased. At the ECG: scar of anterior - septal region, speed of glomerular filtration - 60 ml/h. What complication of basic disease arose up:

- A. Hypertonic nephropathy
- B. Chronic glomerulonephritis
- C. Chronic renal failure
- D. Chronic heart failure
- E. Congestive kidney

130. The 32-years-old woman is directed to nephrologist for the estimation of hematuria, which was discovered in three analyses of urine and accompanied with proteinuria to 1 g/day. What approach will you choose for the estimation of hematuria at the sick:

- A. US research of kidneys
- B. Accurate anamnesis of the disease
- C. Determination of electrolyte concentrations, creatinine of blood
- D. Biopsy of kidney
- E. All answers are true

131. The 27-years-old woman has clinical signs of systemic lupus erythematosus with damage of kidneys. What inspections must be conducted for confirmation of the diagnosis:

- A. General blood test
- B. Determination of urea and creatinine of blood
- C. Anti - nuclear antibodies
- D. Daily proteinuria
- E. All answers are true

132. The patient, 36 years old, with chronic glomerulonephritis has signs of chronic renal failure (potassium - 5,1mmol/l, sodium - 128 mmol/l, calcium - 1,9 mmol/l, magnesium - 1,2 mmol/l, chlorine - 102 mmol/l, bicarbonate - 20mmol/l). What electrolyte exchange violation is marked:

- A. Potassium
- B. Sodium
- C. Calcium
- D. Magnesium
- E. Chlorine

133. The woman, 35 years old, complains on pain in the area of heart, arthralgia, myalgia and photosensitization. At the examination: tachycardia, pericardial friction sound. In the analyses of urine – high proteinuria, hematuria. Reliable reason:

- A. Multiple myeloma
- B. Systemic lupus erythematosus
- C. Acute rheumatic fever
- D. Acquired immunodeficiency syndrome
- E. Rheumatoid arthritis

134. The patient with chronic glomerulonephritis and signs of chronic renal failure has a low level of hemoglobin - 65 g/l. What method of correction of anemia is the most expedient:

- A. Blood transfusion
- B. Transfusion of fresh-frozen plasma
- C. Introduction of erythropoietin

D. Introduction of androgens

E. Plasmapheresis

135. The patient, 45 years old, hospitalized with complaints on dryness in mouth, weakness, itch of skin, nausea, dyspnea. During last 15 years there were recidivous renal colic with discharge of concretions from urinary ways, operations were executed twice. Day's diuresis - 1400 ml with specific weight - 1007-1008. What is the name of this symptom and what complication of urolithiasis it testifies about:

- A. Hyposthenuria, chronic renal failure
- B. Hypersthenuria, diabetes mellitus
- C. Hypersthenuria, hyperparathyroidism
- D. Isosthenuria, diabetes insipidus
- E. Polacyuria, acute cystitis

136. At the sick, 57 years old, smell of ammonia from mouth is felt, there is edema of face, shins. He was observed concerning multiple myeloma during 3 years. In blood: E - $3,5 \times 10^{12}/l$, blood sedimentation - 75 mm/h; in urine: protein - 2,5 g/l, E - 3-4, L - 10-15 in eyeshot; creatinine of blood - 650 $\mu\text{mol}/l$, speed of glomerular filtration - 10 ml/min. What complication of the disease developed:

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

137. The patient T., 58 years old, complains on general weakness, weight loss 10 kg during 1,5 month, dull pain in loin on the right, subfebrile temperature. At the examination: AP 220/160, in the right subcostum formation with a hilly surface and insignificant mobile is palpated, expansion of seminal rope and scrotum veins. In blood test: anemia, high blood sedimentation. In urine: specific weight - 1020, protein - 0,99 g/l, E - on all eyeshot. Your previous diagnosis:

- A. Tumor of kidney
- B. Hydronephrosis
- C. Renal tuberculosis
- D. Polycystosis of kidneys

E. Nephroptosis

138. The sick G., 48 years old, complains on periodic attacks of pain in loin, with selection of brown color urine after the attack. At the US research: plenty of minor echopositive includings in renal pelves. In the global analysis of urine: specific weight - 1016, protein - 0,099 g/l, erythrocytes cover all eyeshot, plenty of uric acid crystals. Specify the primary research, which is expedient to conduct:

- A. Excretory urography
- B. Uric acid of blood
- C. Urea of blood
- D. Nechiporenco sample
- E. Zimnicky sample

139. The patient, 69 years old, marked arterial hypertension during 2 years. Monotherapy with ACE inhibitors was appointed. The increase of creatinine level took place on the background of treatment. How can it be explained:

- A. Stenosis of renal arteries
- B. Aortic stenosis
- C. Stenosis of celiac trunk
- D. Decline of AP
- E. Hyperkalemia

140. The woman, 23 years old, complains on frequent, painful urination, dull pains in the lower part of abdomen, which diminish after application of heat, subfebrile body temperature. Felt ill 3 days ago after supercooling. In the global analysis of urine: leukocytes cover 1/3 of eyeshot, single fresh erythrocytes. Basic preparations in treatment of the sick:

- A. Uroseptic
- B. Physiotherapy
- C. Antibiotics
- D. Glucocorticoids
- E. Curantil

141. The patient, 40 years old, suffers on diabetes I type, severe form during 15 years. At the examination: expressed edema of feet, skin is pale, AP - 210/140, diuresis - 3 l. In the global analysis of urine: specific weight - 1024, protein - 6,6 g/l,

L - 1/4 of eyeshot, E – 3-4; urea of plasma - 7,9 mmol/l. What syndrome takes place at the patient:

- A. Nephrotic
- B. Urinary
- C. Nephritic
- D. Acute renal failure
- E. Chronic renal failure

142. The patient, 45 years old, suffers on chronic glomerulonephritis during 8 years. AP 180/120, creatinine of blood serum - 770 $\mu\text{mol/l}$, urea of blood - 28 mmol/l, speed of glomerular filtration - 5 ml/min. Medical tactic:

- A. Enterosorption
- B. Hemodialysis
- C. Hemosorption
- D. Plasmapheresis
- E. Reosorbilakt intravenous

143. The woman, 42 years old, complains on appearance of edema on face, extremities. In the anamnesis: rheumatoid arthritis over 15 years. Objectively: heart rate - 64, AP - 105/60, liver +3 sm, dense, unpainful. Blood test: E - $2,4 \times 10^{12}/\text{l}$, Hb - 92 g/l, blood sedimentation - 54 mm/h., creatinine - 0,128 mmol/l, CRP (+++). In the analysis of urine: specific weight - 1015, protein - 3,8 g/l. What is the most reliable complication, developed at the sick:

- A. Heart failure
- B. Secondary amyloidosis of kidneys
- C. Hypothyroidism
- D. Hepatic-cellular failure
- E. Chronic renal failure

144. The sick D., 36 years old, complains on attacks of pain in lumbar area, which radiate to the lower part of abdomen. On ultrasound sonogram there are increased kidneys and plural cysts. What instrumental research can also help to finish setting of the diagnose:

- A. Angiography of renal arteries

- B. Computed tomography
- C. Isotope scanning
- D. Doppler of renal arteries
- E. All answers are true

145. At the patient, 35 years old, who gets vicarious renal therapy (programming hemodialysis) in connection with chronic glomerulonephritis, interruptions in the heart work, growing weakness, dyspnea appeared. At the ECG: bradycardia, atrioventricular block and high sharp waves T. The day before there was violation of the dietary mode. What biochemical change is the most credible reason of such state:

- A. Hyperhydration
- B. Hyperkalemia
- C. Hypokalemia
- D. Hyponatremia
- E. Hypocalciemia

146. The patient T., 46 years old, complains on promoted fatigueability, general weakness. Objectively: edema of shins, pulse - 88, AP - 140/80. In blood test: creatinine - 0,23 mmol/l, urea - 11,0 mmol/l, speed of glomerular filtration - 42 ml/min. Define the stage of chronic kidney disease:

- A. Chronic kidney disease I stage
- B. Chronic kidney disease II stage
- C. Chronic kidney disease III stage
- D. Chronic kidney disease V stage
- E. Chronic kidney disease IV stage

147. The patient I., complains on headache, dizzinesses, nausea, vomit. Changes in the analysis of urine were discovered 10 years ago, a year ago by chance – increased AP. Smoking, alcohol abuse. At the examination: pallor, face is puffy, there are tracks of scratching on the skin of trunk, language is dry, AP - 210/130. In urine test: protein - 1,5 g/l, E - 10-12, L - 3-6 in eyeshot. Your previous diagnosis:

- A. Secondary amyloidosis of kidneys
- B. Renal tuberculosis
- C. Diabetic glomerulosclerosis
- D. Chronic glomerulonephritis

E. Chronic pyelonephritis

148. The patient, 23 years old, with the term 10 weeks of the first pregnancy, complains on pain in loin, edema of face, shins. In the anamnesis: acute purulent otitis 3 weeks ago. Objectively: AP - 155/95, heart rate - 94/min., diuresis - 400 ml/day. In urine test: specific weight - 1030, proteinuria - 1,5 g/l, E - 100-120, hyaline cylinders - 8-10, granular - 2-3 in eyeshot. What diagnosis is the most credible:

- A. Acute glomerulonephritis
- B. Acute pyelonephritis
- C. Chronic glomerulonephritis
- D. Systemic lupus erythematosus with damage of kidneys
- E. Early pregnancy toxemia

149. The man, 22 years old, is ill on acute glomerulonephritis. Objectively: anasarca, AP - 150/90. In blood: blood sedimentation - 36 mm/h., in urine: daily proteinuria - 5,6, general protein - 55 g/l, albumin - 25 g/l, cholesterol - 9,6 mmol/l. What pathogenic treatment is needed:

- A. Antibiotics
- B. Glucocorticoids
- C. Membrane stabilizers
- D. Diuretic
- E. Antihypertensive

150. The man, 23 years old, complains on presence of edema on face, headache, dizzinesses, diminishing of urine selection, macrohematuria. Those complaints appeared after pharyngitis. Objectively: edema on face, skin is pale, cardiac tones are muffled, accent of II tone above aorta, heart rate - 86, AP - 170/110. In the general analysis of urine it will be observed more credible:

- A. Erythrocyturia, leukocyturia, leukocyte cylinders
- B. Leukocyturia, proteinuria, epithelial cylinders
- C. Erythrocyturia, oksaluria, erythrocyte cylinders
- D. Erythrocyturia, proteinuria, hyaline cylinders
- E. Hemoglobinuria, bilirubinuria, granular cylinders

151. At the 40-years-old man, who is ill on chronic glomerulonephritis for 18 years,

the disease was complicated with chronic renal failure. What laboratory index will be the most informative in this case:

- A. Creatinine of blood - 0,36 mmol/l
- B. Nitrogen of urea - 20-40 % of residual nitrogen
- C. Potassium of blood - 5,2 mmol/l
- D. Urea of blood - 8,3 mmol/l
- E. Sodium of blood - 130 mmol/l

152. The sick K., 74 years old, complains on fever to 39,9C, not removed with taking antipyretic drugs, dull, aching pain in the lumbar area on the right, recrudescence hematuria during 2 months, sometimes with vermiform blood clots. Formation of elastic consistency, not mobile, painful is palpated in the lumbar area on the right. Your previous diagnosis:

- A. Tumor of kidney
- B. Polycystosis of kidneys
- C. Carbuncle of kidney
- D. Hydronephrosis
- E. Necrotic papillitis

153. The man, who suffers on multiple myeloma with damage of kidneys, felt ill - flu with high fever, on the background diuresis went down to 200 ml, level of creatinine rose to 0,400 mmol/l. Calcium of blood - 1,8mmol/l, general protein - 110 g/l. What factor is the main in genesis of acute renal failure:

- A. Obstruction of tubules by Bence-Jones protein
- B. Hypocalcemia
- C. Increase of blood viscosity
- D. Hypercholesterinemia
- E. High general protein

154. The 18-years-old sick complains on periodic pain in lumbar area, which increases after protracted static position, physical loading, supercooling. At the examination: kidneys are palpated, increased, painful. At the US research plural cysts of both kidneys were found out. Cysts of what organs are possible to discover at the sick:

- A. Lungs

- B. Pancreas
- C. Ovary
- D. Liver
- E. All answers are true

155. At the sick, 75 years old, who suffers on hypertonic disease over 20 years and complains on nocturia and polacyuria, at the medical examination proteinuria - 1,2 g/l, microhematuria, moderate decline of excretory and secretory kidney function at the renography were found out. Your supposition:

- A. Acute glomerulonephritis
- B. Flare of chronic glomerulonephritis
- C. Hypertensive nephropathy
- D. Tumor of kidney
- E. Senile kidney

156. At the sick, 58 years old, who suffers on rheumatism, decompensated mitral stenosis on the background of heart failure (there are dyspnea, increased liver, edema of feet). In the analyses of urine proteinuria (1,5 g/l), erythrocyturia (10-15), cylindruria (hyaline 3-5) in eyeshot were found out. What laboratory test will help in differential diagnostics between a congestive kidney and activity of rheumatism (joining of glomerulonephritis):

- A. Daily protein loss
- B. Glomerular filtration
- C. Indexes of immunological activity
- D. Leukocytosis
- E. Levels of creatinine, urea of blood

157. At the patient, 70 years old, atrial fibrillation during two years is marked, edema of feet, dyspnea at night, liver +2 sm, decline of EF to 45%, day's proteinuria - 0,33, increase of creatinine to 0,200 mmol/l. About what state is it necessary to think:

- A. Chronic glomerulonephritis
- B. Senile kidney
- C. Acute tubulointerstitial nephritis
- D. Acute pre-renal kidney failure
- E. Acute renal kidney failure

158. At the woman, 75 years old, who is ill on hypertonic disease over 30 years, considerable increase of AP is marked during last 2 years, which is badly corrected with antihypertensive preparations. At the scintigraphy of kidneys renal blood circulation on the left is reduced. What state you think about:

- A. Stenosis of left renal artery
- B. Atherosclerosis of cerebral vessels with central violation of blood pressure regulation
- C. Aortic insufficiency
- D. Senile kidney
- E. All answers are true

159. The patient, 57 years old, was hospitalized in therapeutic unit with symptoms of uremia, as a result of polycystosis of kidneys. What violation of electrolyte exchange is the most credible:

- A. Hyperkalemia
- B. Hypocalciemia
- C. Hypercalciemia
- D. Hypophosphatemia
- E. Hyponatremia

160. At the sick, 54 years old, who suffers on rheumatoid arthritis, there are clinic-laboratory signs of secondary amyloidosis. What preparation is the mean of pathogenic treatment at this damage of kidneys:

- A. Glucocorticoids
- B. Antibiotics
- C. Diuretic
- D. Cytostatic
- E. Colchicine

161. The patient, 52 years old, was hospitalized with symptoms of uremia, as a result of chronic glomerulonephritis. What diuretic is the preparation of choice in this clinical case:

- A. Hypotiaside
- B. Veroshpiron
- C. Furosemid
- D. Uregit

E. Manitol

162. The patient has clinic-laboratory signs of Gudpascher`s syndrome during 28 years. What immune mechanism of damage of kidneys is in this case:

- A. Aggression of antibodies to the basal membrane
- B. Deposition of immune complexes
- C. Reaction of hypersensitiveness of immediate type
- D. Aggression of antinuclear antibodies
- E. All answers are true

163. The sick D., 46 years old, complains on protracted pain in lumbar area, which radiates to the lower part of abdomen, chill. At the examination: kidneys are increased, painful at the palpation. The patient`s mother and grandmother died from uremia. About what disease is needed to think:

- A. Urolithiasis
- B. Hydronephrosis of kidneys
- C. Tumor of kidneys
- D. Polycystosis of kidneys
- E. Not enough information

164. At the 42-years-old patient urolithiasis was diagnosed in 30 years. The patient was operated for three times concerning hydronephrosis (lithotomy). At the examination: kidneys are increased, painful at the palpation. At the US research coralloid stones are discovered in both kidneys. About dysfunction of what endocrine gland is needed to think:

- A. Thyroid gland
- B. Parathyroid glands
- S. Hypophysis
- D. Pancreas
- E. All answers are true

165. The sick K., 44 years old, complains on protracted pain in lumbar area, which radiates to the front surface of abdomen, chill, thirst, nocturia. At the examination: kidneys are increased, painful at the palpation. The patient`s mother and grandmother died from uremia. What primary research is needed to conduct for clarification of the diagnosis:

- A. US research of kidneys
- B. Excretory urography
- C. Cystoscopy
- D. Angiography
- E. Computed tomography

166. At the patient, 20 years old, anasarca, macrohematuria, diminishing of daily urine to 300 ml after angina developed. Day's proteinuria – 2,0. What syndrome developed at the patient:

- A. Urinary
- B. Nephrotic
- C. Nephritic
- D. Heart failure
- E. Acute renal failure

167. The sick, 67 years old, complains on pain in bones, decline of appetite, weight loss. At the inspection: normochromic anemia, blood sedimentation - 55 mm/h, general protein - 130 g/l, proteinuria - 3 g/l. What research is needed to conduct:

- A. Sternal puncture
- B. Proteinogram
- C. Skull radiography
- D. Electrophoresis of urine proteins
- E. All answers are true

168. At the 38-years-old armenin from teens there were episodes of stomach-ache with rising of body temperature, which passed independently in a day. Proteinuria to 1,5 g/l appeared last year. The patient`s father died from disease of kidneys. The most expedient will be appointment:

- A. Prednisolone
- B. Cyclophosphan
- C. Colchicine
- D. Fraxiparin
- E. All answers are true

169. At the 42-years-old patient urolithiasis was diagnosed in 30 years. The patient

was operated for three times concerning hydronephrosis (lithotomy). At the examination: kidneys are increased, painful at the palpation. At the US research coralloid stones are discovered in both kidneys. What research must be conducted for clarification of the diagnosis (reason of stone formation):

- A. Determination of parathormone of blood
- B. Determination of creatinine of blood
- C. Determination of aldosteron of blood
- D. Densitometry
- E. All answers are true

170. The 19-years-old sick complains on periodic pain in lumbar area, which increases after protracted static position, physical loading, in the second half of day. At the examination: kidneys are increased, painful at the palpation. At the US research plural cysts of kidneys were found out. What instrumental method cannot diagnose the disease:

- A. Computed tomography
- B. Angiography of kidneys
- C. Isotope renography
- D. Isotope scanning of kidneys
- E. MRI

171. At the patient, 72 years old, on the background of acute transmural anterior myocardial infarction decline of FE to 35%, systolic pressure to 70, daily diuresis to 100 ml, appearance of proteinuria – 0,33 g/l, increase of creatinine of blood to 0,36 mmol/l are marked. About what state is it necessary to think:

- A. Rapidly progressive glomerulonephritis
- B. Acute pre-renal kidney failure
- C. Acute tubulointerstitial nephritis
- D. Acute renal kidney failure
- E. Congestive kidney

172. The 45-years-old patient from 30 years suffered on urolithiasis, concerning which he was operated (lithotomy) for three times. At the examination: kidneys are increased, painful at the palpation. At the US research coralloid stones are discovered in both kidneys. What research must be conducted for clarification of the diagnosis (reason of stone formation):

- A. Determination of parathormone of blood
- B. Determination of uric acid of blood
- C. Determination of Ca of blood serum
- D. Conducting of densitometry
- E. All answers are true

173. The sick F., 68 years old, complains on pain in bones, subfebrile body temperature, weight loss. In the general analysis of blood: moderate normochromic anemia, blood sedimentation - 55 mm/h; in the general analysis of urine: proteinuria - 0,99 g/l. What research method is the most informative for clarification of the diagnosis:

- A. Determination of general protein
- B. Determination of protein fractions
- C. Radiography of bones
- D. Determination of iron of blood serum
- E. Sternal puncture

174. The 22-years-old man entered infectious unit with the diagnosis - follicularis angina. At the examination: body temperature 39C, pulse 110, AP 90/60. In blood test: leukocytosis with change to the left, in the analysis of urine: proteinuria - 0,066 g/l, E – 2-3, L – 5-6, hyaline cylinders 1-3 in eyeshot. What research must be conducted for determination of the pathology of kidneys:

- A. Nechiporenko sample
- B. Daily proteinuria
- C. US research of kidneys
- D. Repeated research of global analysis of urine
- E. All answers are true

175. At the examination of the 70-years-old patient, who during 2 months complained on fever, chill, there were pallor of skin, moist rales in the lower departments of lungs, tachycardia, diastolic noise in the V point, AP - 140/40, increased spleen. In blood: E - $2,5 \times 10^{12}/l$, Hb - 70 g/l, L - $4,2 \times 10^9/l$, blood sedimentation - 45 mm/h; in urine: protein – 1,2 g/l, microhematuria. Name the reason of urinary syndrome:

- A. Infectious endocarditis, glomerulonephritis

- B. Pyelonephritis
- C. Infarction of kidney
- D. Congestive kidney
- E. Thrombosis of renal veins

176. At the young woman after viral infection terminata, diarrhea with admixtures of blood, pain in knee-joints, increase of body temperature appeared. Objectively: microspotal rash on the skin of shins, hydropic knee and ankle joints, painfulness at the palpation of intestine. In blood: leukocytosis, increased blood sedimentation, in urine: low proteinuria, microhematuria. What additional research for clarification of the diagnosis is necessary to conduct:

- A. Proteinogram
- B. C-reactive protein
- C. LE-cells, antibodies to native DNA
- D. Vilebrandt factor, circulating immune complexes
- E. US research of abdominal cavity

177. At the sick A., 72 years old, aversion to meat, weight loss on 14 kg for half-year are marked. At the examination: skin is pale, on the left increased, not mobile, dense lymphatic knot is palpated above a collar-bone. General analysis of blood: E - $2,5 \times 10^{12}/l$, Hb - 78 g/l, L - $3,8 \times 10^9/l$, change of leukocyte formula to the left, T - $460 \times 10^9/l$, blood sedimentation - 55 mm/h.; in the analysis of urine: proteinuria - 5,0 g/l, microhematuria. About what state of kidneys is necessary to think:

- A. Acute glomerulonephritis
- B. Paraneoplastic nephropathy
- C. Acute pyelonephritis
- D. Urolithiasis
- E. Cancer of kidneys

178. 2 weeks after recovering from angina a 29-year-old patient noticed face edemata, weakness, decreased work performance. There was gradual progress of dyspnea, edemata of the lower extremities, lumbar spine. Objectively: pale skin, weakening of the heart sounds, anasarca. AP-160/100 mm Hg. In urine: the relative density - 1021, protein - 5 g/l, erythrocytes - 20-30 in the field of vision, hyaline cylinders - 4-6 in the field of vision. What is the most likely diagnosis?

- A. Myxedema
- B. Acute glomerulonephritis
- C. Essential hypertension
- D. Acute pyelonephritis
- E. Infectious allergic myocarditis

179. A 54-year-old patient has an over 20-year history of femoral osteomyelitis. Over the last month she has developed progressing edemata of the lower extremities. Urine test reveals: proteinuria at the rate of 6,6 g/l; in blood: dysproteinemia in form of hypoalbuminemia, increase in α_2 - and γ -globulin rate, ESR - 50 mm/h. What is the most likely diagnosis?

- A. Chronic glomerulonephritis
- B. Secondary renal amyloidosis
- C. Acute glomerulonephritis
- D. Myelomatosis
- E. Systemic lupus erythematosus

180. A 54-year-old male patient complains of aching pain in the lumbar region, that is getting worse after standing in an upright position, physical exercise, supercooling. The patient also reports of experiencing weakness in the afternoon. Pain in the lumbar region, said about 10 years old. Objectively: pale skin, t_o - 37,2°C, AP - 180/100 mm Hg, minor costovertebral angle tenderness (Pasternatsky symptom). In blood: RBCs - $3,5 \cdot 10^{12}/l$, WBCs - $6,5 \cdot 10^9/l$, ESR - 22 mm/h. In urine: the relative density - 1010, leukocytes - 12-15 in the field of vision, erythrocytes - 2-3 in the field of vision. Urine bacterial count - 100000 in 1 ml. What is the most likely diagnosis?

- A. Chronic pyelonephritis
- B. Nephrolithiasis
- C. Polycystic renal disease
- D. Chronic glomerulonephritis
- E. Amyloidosis

181. A 28-year-old woman has a 12-year history of chronic glomerulonephritis with latent course. Over the past six months she has developed general weakness, loss of appetite, low work performance, nausea. The patient complains of headache, pain in the joints. On examination: anemia, blood urea - 34,5 millimole/l, blood creatinine - 0,766 milli-mole/l, hyperkalemia. What complication has developed?

- A. Chronic renal insufficiency
- B. Acute renal insufficiency
- C. Nephrotic syndrome
- D. Renal amyloidosis
- E. Pyelonephritis

182. A 24-years-old patient has chronic glomerulonephritis. Urine test reveals the following: the relative density is 1010, protein - 1,65 g/l, RBCs - 5-7 in the field of vision, WBCs - 2-3 in the field of vision. Blood creatinine - 0,350 millimole/l. Serum sodium - 148 millimole/l. What is the main reason for hyperazotemia in this patient?

- A. Reduction of tubular reabsorption rate
- B. Reduction of glomerular filtration rate
- C. Increased proteinuria
- D. Reduction of renal blood flow
- E. Sodium retention in the organism

183. A 54-year-old patient complains of frequent painful urination, chills, fever up to 38°C. Urine test results: protein - 0,33 g/L, WBCs - up to 50-60 in the field of vision, RBCs - 5-8 in the field of vision, gram-negative bacilli. Which of the listed antibiotics should be preferred in this case?

- A. Erythromycin
- B. Tetracycline
- C. Tseporin
- D. Ciprofloxacin
- E. Oxacillin

184. A 48-year-old patient complains of having dull pain in the right lumbar region for over three years. USI shows that kidneys are of normal size, at the upper pole of the right kidney there is a fluid-containing formation up to 12 cm in diameter. Excretory urograms show normal condition on the left, and the deformation of the superior renal calyces with satisfactory function on the right. What kind of disease can you think of?

- A. Right hydronephrosis
- B. Simple cyst of the right kidney
- C. Multicystic kidney disease

- D. Multiple cysts of the right kidney
- E. Tumour of the right kidney

185. 2 weeks after having quinsy, a 26-year-old male patient got facial edemata, moderate pain in the sacrum. Objectively: body temperature is 37,5°C, AP- 100/80 mm Hg. Urinalysis results: RBC- up to 100 fresh cells in per HPF, protein - 2,2 g/l, hyaline cylinders - up to 10 per HPF, relative density -1002. What is the most likely diagnosis?

- A. Urolithiasis
- B. Acute glomerulonephritis
- C. Nephroma
- D. Acute pyelonephritis
- E. -

186. A 41-year-old male patient was delivered to a hospital unconscious. During the previous 7 days he had been taking large doses of biseptolum for a cold. The night before, he began complaining of dyspnea, especially when lying down, swollen legs, 2-day urinary retention. In the morning he had seizures and lost consciousness. Objectively: noisy breathing at the rate of 30/min, edematous legs and lumbar region, Ps- 50/min. Plasma creatinine is 0,586 mmol/l, plasma potassium - 7,2 mmol/l. What treatment is necessary for this patient?

- A. Hemodialysis
- B. Large doses of verospiron
- C. Plasma volume expanders
- D. Glucocorticosteroids
- E. Heparin

187. A 30-year-old woman with a long history of chronic pyelonephritis complains of considerable weakness, sleepiness, decrease in diuresis down to 100 ml per day. BP is 200/120 mm Hg. In blood: creatinine - 0,62 millimole/l, hypoproteinemia, albumines - 32 g/l, potassium - 6,8 millimole/l, hypochromic anemia, increased ESR. What is the first step in the patient treatment tactics?

- A. Haemodialysis
- B. Antibacterial therapy
- C. Enterosorption
- D. Haemosorption

E. Blood transfusion

188. A 45-year-old patient with urolithiasis had an attack of renal colic. What is the mechanism of the attack development?

- A. Destruction of renal glomerules
- B. Disturbed urine outflow from the kidney
- C. Increase in urine specific gravity
- D. Ureteric twists
- E. Renal artery spasm

189. A 23-year-old patient after intake of brake fluid has developed anuria that has been lasting for 5 days already. Creatinine level increased up to 0,769 mmol/l. What treatment tactics should be chosen in the given case?

- A. Detoxification therapy
- B. Antidotal therapy
- C. Diuretics
- D. Plasmapheresis Hemodialysis
- E.

190. A 39-year-old man complains of morning headaches, appetite loss, nausea, morning vomiting, periodic nasal hemorrhages. The patient had a case of acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin hemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical parameter is the most important for making diagnosis in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

191. For 4 days a 35-year-old man has been treated in the resuscitation unit for acute renal failure caused by compartment syndrome. The patient is disoriented. ECG shows high T waves and right ventricular extrasystoles. His central venous pressure is 159 mmH₂O; for the last 3 hours auscultation has been detecting isolated moist crackles in the lungs. Respirations are 32/min. Blood test: residual nitrogen - 62

mmol/L, K⁺ - 7.1 mmol/L, Cl⁻ - 78 mmol/L, N a⁺ - 120 mmol/L, Ht- 0.32 L/L, Hb- 100 g/L, blood creatinine - 0.9 mmol/L. In this case the most advisable would be to perform:

- A. Hemodialysis
- B. Plasmasorption
- C. Hemosorption
- D. Plasmafiltration
- E. Ultrafiltration

192. A 46-year-old man notes swollen legs, weakness, sensation of fullness and heaviness in the right subcostal area; it is the first occurrence of these signs in the patient. The patient has 20-year-long history of rheumatoid arthritis. The liver and spleen are enlarged and dense. Blood creatinine - 0,23 mmol/l, proteinemia - 68 g/l, cholesterol - 4,2 mmol/l, urine specific gravity - 1012, proteinuria - 3,3 g/l, isolated wax-like cylinders, leached erythrocytes in the vision field, leukocytes - 5-6 in the vision field. What is the most likely complication?

- A. Renal amyloidosis
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Heart failure
- E. Chronic pyelonephritis

193. A 25-year-old woman has been suffering from diabetes mellitus since she was 9. She was admitted into the nephrology unit with significant edemas of the face, arms, and legs. Blood pressure - 200/110 mm Hg, Hb- 90 g/L, blood creatinine - 850 μmol/L, urine proteins - 1.0 g/L, leukocytes - 10-15 in the vision field. Glomerular filtration rate - 10 mL/min. What tactics should the doctor choose?

- A. Transfer into the hemodialysis unit
- B. Active conservative therapy for diabetic nephropathy
- C. Dietotherapy
- D. Transfer into the endocrinology clinic
- E. Renal transplantation

194. After overexposure to cold a 45- year-old woman developed acute pain in her suprapubic and lumbar areas during urination, sharp pains at the end of urination, false urges to urinate. Urine is turbid with blood streaks. The doctor suspects urinary

tract infection. What results of laboratory analysis would be the most indicative of such infection?

- A. Leukocyturia, gross hematuria
- B. Gross hematuria
- C. Increased blood creatinine and blood urea
- D. Daily proteinuria under 3.0
- E. Daily proteinuria over 3.0

195. A man was brought into the admission room after an overexposure to cold. He complains of sharp pain in the small of his back and elevated body temperature up to 38°C. He took some aspirin. Blood test: leukocytes - $10.5 \times 10^9/L$, eosinophils - 5%, band neutrophils - 8%, segmented neutrophils - 51%, lymphocytes - 32%, monocytes - 4%, erythrocyte sedimentation rate - 28 mm/hour. Urinalysis: protein - 0.6 g/L, leukocytes - cover the whole vision field, large amount of mucus. What is the most likely diagnosis?

- A. Acute pyelonephritis
- B. Chronic pyelonephritis
- C. Acute glomerulonephritis
- D. Tubulointerstitial nephritis
- E. Subacute malignant glomerulonephritis

196. A patient has gradually lost consciousness. The skin is pale and dry. There is a smell of ammonia from the mouth. Respirations are deep and noisy. Heart sounds are muffled, pericardial friction rub is present. Blood pressure is 180/130 mm Hg. Blood test: Hb - 80 g/L, leukocytes - $12 \times 10^9/L$, blood glucose - 6.4 mmol/L, urea - 50 mmol/L, creatinine - 1200 $\mu\text{mol/L}$, blood osmolarity - 350 mOsmol/L. No urinary excretion. Make the diagnosis:

- A. Uremic coma
- B. Hyperglycemic coma
- C. Acute renal failure
- D. Acute disturbance of cerebral circulation
- E. Hyperosmolar coma

197. A 23-year-old man has accidentally swallowed brake fluid. After that he has been presenting with anuria for 5 days already; his creatinine levels elevated up to 0.569 mmol/L. What treatment tactics should be chosen in this case?

- A. Hemodialysis
- B. Detoxication therapy
- C. Antidotal therapy
- D. Diuretics
- E. Plasmapheresis

198. A resuscitation unit received a 46-year-old woman, who has been suffering from diabetes mellitus type 1 for approximately 30 years. Objectively: the skin is pale, heart sounds are weakened, BP is 170/100 mm Hg, lower limbs are markedly swollen. Blood creatinine - 1125 $\mu\text{mol/l}$, urea - 49,6 mmol/l , potassium - 6.3 mmol/l , glucose - 7,6 mmol/l , glomerular filtration rate - 5 ml/min . What treatment is indicated for the patient in the first place?

- A. Hemodialysis
- B. Kidney transplantation
- C. Hemofiltration
- D. Enterosorption
- E. Conservative detoxification therapy

199. A patient has gradually lost consciousness. The skin is pale and dry. There is smell of ammonia from the mouth. Respirations are deep and noisy. Heart sounds are muffled, pericardial friction rub is present. Blood pressure is 180/130 mm Hg. Blood test: Hb - 80 g/L , leukocytes - 12 109/ L , blood glucose - 6.4 mmol/L , urea - 50 mmol/L , creatinine - 1200 $\mu\text{mol/L}$, blood osmolality - 350 $\text{mOsmol/kg H}_2\text{O}$. No urinary excretion. Make the diagnosis:

- A. Uremic coma
- B. Hyperglycemic coma
- C. Acute renal failure
- D. Acute disturbance of cerebral circulation
- E. Hyperosmolar coma

200. A 46-year-old woman complains of severe pain attacks in the right lumbar area, which irradiate to the lower abdomen, and nausea. This kind of pain attacks has never been detected in the patient before. Plain abdominal X-ray reveals no pathologic shadows. Ultrasound detects a hyperechogenic mass 1.5 cm in diameter, which reflects sound wave, in the enlarged right renal pelvis. What diagnosis is the most likely?

- A. Renal calculus
- B. Benign renal tumor
- C. Renal cyst
- D. Renal tuberculosis
- E. Malignant renal tumor

Standards of true answers

№ of test	True answer	№ of test	True answer	№ of test	True answer	№ of test	True answer
1	A	51	C	101	C	151	A
2	A	52	D	102	D	152	A
3	A	53	C	103	C	153	A
4	E	54	A	104	A	154	E
5	B	55	D	105	A	155	C
6	D	56	B	106	C	156	C
7	C	57	B	107	E	157	B
8	E	58	C	108	E	158	A
9	A	59	B	109	A	159	A
10	A	60	B	110	E	160	E
11	C	61	E	111	A	161	C
12	A	62	A	112	A	162	A
13	E	63	A	113	D	163	D
14	D	64	B	114	A	164	B
15	D	65	A	115	B	165	A
16	B	66	B	116	B	166	C
17	D	67	D	117	D	167	E
18	B	68	B	118	D	168	C
19	B	69	C	119	E	169	A
20	B	70	D	120	B	170	C
21	B	71	E	121	B	171	B
22	C	72	E	122	B	172	E
23	E	73	C	123	E	173	D
24	D	74	D	124	A	174	E
25	E	75	D	125	B	175	A
26	C	76	A	126	C	176	D
27	C	77	B	127	C	177	B
28	B	78	A	128	E	178	B
29	B	79	B	129	A	179	B
30	A	80	B	130	E	180	A
31	B	81	A	131	E	181	A
32	C	82	B	132	C	182	B
33	B	83	A	133	B	183	D
34	Д	84	D	134	C	184	B
35	B	85	E	135	A	185	B
36	E	86	B	136	D	186	A
37	B	87	C	137	A	187	A
38	D	88	A	138	B	188	B
39	A	89	A	139	A	189	D
40	C	90	B	140	C	190	C
41	C	91	C	141	A	191	A
42	E	92	B	142	B	192	A
43	C	93	D	143	B	193	C
44	E	94	C	144	E	194	E
45	C	95	C	145	B	195	A
46	B	96	D	146	C	196	B
47	B	97	B	147	D	197	A
48	D	98	A	148	A	198	D
49	B	99	B	149	B	199	A
50	A	100	A	150	D	200	E

Recommended literature

Basic

1. Kumar and Clark Clinical Medicine, 10th edition, 2020.
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3. Davidson's Principles and Practice of Medicine, 23d Edition. 2018. – 1440 p.
4. Murray and Nadel's Textbook of Respiratory Medicine, 6th Edition, 2016
5. Williams Textbook of Endocrinology, 14th Edition, 2019
6. Williams Hematology, 9th edition 2016.
7. Vizir V.A, Berezin A.E. Comprehence clinical nephrology (Task force for students). Kiev: Morion. 2014. 1056 p.

Additional

8. USMLE Step 2 CK Lecture Notes 2017: Internal Medicine (Kaplan Test Prep). - 2016. - Published by Kaplan Medical. - 474 pages.
9. Kidney Disease; Improving Global Outcomes (KDIGO) Blood Pressure Work Group. KDIGO clinical practice guideline for the management of blood pressure in chronic kidney disease. *Kidney Int Suppl.* 2012; 2(5):337-414
10. NKF-DOQI and K/DOQI clinical guidelines for Chronic Kidney Disease
https://www.kidney.org/sites/default/files/docs/ckd_evaluation_classification_stratification.pdf
11. The KDIGO practice guideline on acute kidney injury in the individual patient (2012) - <http://www.kidney-international.org>, <http://nephrology.kiev.ua>.