

A 42-year-old woman has been hospitalized with complaints of intense pain attacks in the lumbar and right iliac areas, which irradiate to the vulvar lips, frequent urination, nausea. The pain onset was acute. Objectively: the abdomen is soft, moderately painful in the right subcostal area, costovertebral angle tenderness on the right. Common urine analysis: specific gravity - 1016, traces of protein, leukocytes - 6-8 in the vision field, erythrocytes - 12-16 in the vision field, fresh. What diagnosis can be made?

a.Acute right-sided pyelonephritis

b.Acute appendicitis

c.Acute right-sided adnexitis

d.Acute cholecystitis

\*e.Right-sided renal colic

A 35-year-old woman complains of pain in her left arm that progresses over the last 4 months and intensifies after physical exertion of the affected limb. Additionally, she notes a cold and <<tingling>> sensation in her arm. The pain decreases slightly at night, when the arm hangs down from the bed. Moreover, the woman notes deteriorating vision and the weight loss of 4 kg. She does not smoke. Objectively, she is underweight, the pulse on the left arm cannot be found. There is no pulsation over the left carotid artery, a murmur is heard above the right carotid artery. Make the diagnosis:

a.Dermatomyositis

b.Neurological amyotrophy

c.Systemic lupus erythematosus

d.Arterial thrombosis of the left arm

\*e.Obliterating aortoarteritis

A 27-year-old patient developed a fever of 38.7°C, lumbar pain, weakness, and headache after an overexposure to cold. Examination detects a positive Pasternacki sign (costovertebral angle tenderness) on the left. General urinalysis detects pyuria and bacteriuria. What is the most likely diagnosis in this case?

a.Acute cystitis

b.Acute glomerulonephritis

c.Paranephric abscess

\*d.Acute pyelonephritis

e.Renal colic

A 20-year-old woman has been hospitalized with complaints of a fever of  $38.5^{\circ}\text{C}$ , excessive sweating, pain in her lumbar region and abdomen on the right, headache, and general weakness. Objectively, the sign of costovertebral angle tenderness is positive on the right (Pasternatski's sign). Complete blood count: hemoglobin - 115 g/L, erythrocytes -  $3.9 \cdot 10^{12}/\text{L}$ , leukocytes -  $15.2 \cdot 10^9/\text{L}$ , ESR - 28 mm/hour. General urinalysis: urine color - light yellow, specific gravity - 1018, protein - 0.42 g/L, leukocytes - 15-20 in sight, cylinders (casts) - 3-5 in sight, bacteria - "++". What is the most likely provisional diagnosis in this case?

a.Acute pancreatitis

\*b.Acute pyelonephritis

c.Acute appendicitis

d.Acute cholecystitis

e.Acute adnexitis

A 35-year-old person came to a hospital with complaints of pain attacks in the right lumbar region and frequent urination. General urinalysis detects protein levels of 0.066 g/L and 6-8 fresh erythrocytes in sight. Ultrasound shows moderate urosthesis on the right. What study must the patient undergo to establish the diagnosis?

a.Pneumoretroperitoneography

b.Chromocystoscopy

c.Retrograde ureteropyelography

d.Computed tomography

\*e.Excretory urography

A 38-year-old patient complains of pain in the area of the metatarsophalangeal joints of toes 1-2 on the right foot. Examination detects bluish-purple skin over the affected joints that is hot to the touch. There are nodular formations covered with thin shiny skin in the area of the auricles. What drug must be prescribed for this patient as a part of the urate-lowering therapy?

\*a. Allopurinol

b. Febuxostat

c. Colchicine

d. Methotrexate

e. Nimesulide

A 38-year-old patient complains of pain in the lower back and left knee and ankle joints. Blood test results were as follows: leukocytes -  $11 \cdot 10^9/L$ , ESR - 38 mm/hour, CRP - ++, ASL-O titer - 125 units, uric acid - 375  $\mu\text{mol/L}$ , rheumatoid factor - negative. Chlamydia were detected in the urethral swab. X-ray shows that the articular surfaces on the left are uneven, indistinct, the joint space is narrowed. What is the most likely diagnosis in this case?

\*a. Reactive polyarthritis

b. Gouty arthritis

c. Rheumatoid polyarthritis

d. Ankylosing spondylitis

e. Spinal osteochondrosis

A 45-year-old woman is undergoing treatment for active rheumatism, combined mitral valve failure. During her morning procedures she suddenly sensed pain in the left hand, which was followed by numbness. Pain and numbness continued to aggravate. Objectively: the skin of the left hand is pale and comparatively cold. Pulse in the hand arteries is absent along the whole length. What treatment tactics is most efficient?

\*a. Urgent embolectomy

b. Urgent thrombectomy

c. Cardiac catheterization

d. Prescription of fibrinolytics and anticoagulants

e. Prescription of antibiotics and antiinflammatory agents

A 23-year-old man complains of severe pain in his left knee joint. Objectively the left knee joint is enlarged, with hyperemic skin, painful on palpation. Complete blood count: erythrocytes -  $3.8 \cdot 10^{12}/L$ , Hb- 122 g/L, leukocytes -  $7.4 \cdot 10^9/L$ ,

platelets -  $183 \cdot 10^9/L$ . Erythrocyte sedimentation rate - 10 mm/hour. Bleeding time (Duke method) - 4 min., Lee-White coagulation time - 24 min. Partial thromboplastin time (activated) - 89 seconds. Rheumatoid factor - negative. What is the most likely diagnosis?

a. Rheumatoid arthritis

\*b. Hemophilia, hemarthrosis

c. Thrombocytopathy

d. Werlhof disease (immune thrombocytopenia)

e. Hemorrhagic vasculitis (Henoch-Schonlein purpura), articular form

A 23-year-old woman complains of an increase in body temperature to  $37.4^{\circ}C$ , a hemorrhagic rash that appeared on her legs, lumbar pain, and red urine. She fell ill 3 days ago after an overexposure to cold. Objectively, her skin is pale, there is a fine symmetrical hemorrhagic rash on the surface of her lower legs and thighs. Heart rate - 90/min., blood pressure - 115/90 mm Hg. The sign of costovertebral angle tenderness (Pasternatski's sign) is mildly positive on both sides. Blood test: leukocytes -  $9.6 \cdot 10^9/L$ , platelets -  $180 \cdot 10^9/L$ , ESR - 31 mm/hour. Urinalysis: protein - 0.33 g/L, changed erythrocytes - 3-40 in sight, leukocytes - 5-8 in sight. What is the most likely diagnosis in this case?

\*a. Hemorrhagic vasculitis

b. Systemic lupus erythematosus

c. Thrombocytopenic purpura

d. Polyarteritis nodosa

e. Acute interstitial nephritis

A 55-year-old man complains of a pain in the sternum, lumbar spine, and ribs. He has a history of bone fracture in his right shin. In the blood: total protein - 100 g/L, M-gradient is positive. In the urine there is Bence Jones protein. Make the diagnosis:

a. Glomerulonephritis

b. Osteochondrosis

c. Neuralgia

\*d. Multiple myeloma

e. Exertional angina pectoris, 2 FC

An 18-year-old young man complains of pain in his knee and ankle joints and a fever of 39.5°C. A week and a half before, he had a case of respiratory disease. Objectively, his body temperature is 38.5°C, his knee and ankle joints are swollen. His pulse is 106/min., rhythmic. His blood pressure is 90/60 mm Hg. The heart borders are normal, the heart sounds are weakened, and there is a soft systolic murmur at the apex. What parameter is most closely associated with the possible etiology of this process?

a. Rheumatoid factor

b.  $\alpha_1$ -antitrypsin

\*c. Antistreptolysin O

d. Seromucoid

e. Creatine kinase