

The Ministry of Health of Ukraine
National Pyrogov Memorial Medical University, Vinnytsia
The direction – 1201 “Medicine”
Specialty – 7.12010001 “General Medicine”

«Considered»

on the methodical council of
therapeutic disciplines
Protocol № 4 from 21.01.2020
Chairman _____
prof. Stanislavchuk M.A.

Instruction to the station №1
"Standardized patient in the clinic of internal medicine, Part #1"

At the station, the student must greet and introduce himself, present a student identification card and a route sheet to the teacher.

A student receives a clinical task, which involves communication with the patient (tutor), who needs to interview complaints, their details and anamnestic data.

During working with a patient (tutor):

The student must greet and introduce himself and ask the patient how he can address him. After receiving information about the patient's name, ask the permission to interview him.

NB! Pay attention!

When dealing with a patient, student's communicability is assessed separately
Interview the patient's complaints, detail them, and analyze the anamnestic data.

NB! Pay attention!

When working with a patient, the ability to elaborate complaints and interview anamnestic data is assessed separately.

The patient reports immediately all complaints that concern him, which automatically indicates no other complaints.

The patient may inquire: "Explain, please, what is with me?", which indicates that the patient does not have information about which the student is too inquisitive interrogated, thus making it clear that it is necessary to proceed to the next step in the survey. The student must give a brief answer to the patient and continue to perform the next task.

The student receives data from the objective examination of the patient in a paper version (clinical task) in addition to the task.

During working with the clinical task:

it is necessary to analyze the data of the objective patient survey, which are given,

- to interpret the data of the laboratory-instrumental examination of the patient,
- to make a preliminary diagnosis
- determine the tactics of patient management,
 - Appoint a treatment for the patient, referring to the group of drugs and the representative indicated in the task.

After completing the assignment or ending the time at the station, return the task to the teacher, pick up your route card with a mark on the station and leave the station.

Station №1
"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The general condition is satisfactory. Constitution of the patient is hypersthenic. The body mass index is 30.5 kg/m². The skin is clean. Pulse - 76 per minute, rhythmic, satisfactory filling, but tension is increased. BP 170/100 mm Hg. Borders of the heart: right and upper - normal, left - 1 cm to the left from the mid-clavicular line. Vascular bundle - within normal limit. I sound is moderately weakened at the apex, accent of II sound above aorta. Breathing is vesicular. Abdominal palpation is soft, painless. Pulse on a. dorsalis pedis is normal.

Indicator	Result	Reference values
RBC	4,2. 10 ¹² /L	4,5 - 5,5 x 10 ¹² /L
Hemoglobin	135 g/L	120 - 140 g/L
Color index	0,96	0,9 - 1,0
WBC	7,4. 10 ⁹ /L	4,0 - 9,0 x 10 ⁹ /L
ESR	8 mm/h	less than 10 mm/h
Blood glucose	5,1 mmol/L	4.44-6.66 mmol/L
Total cholesterol	4,1 mmol/L	3,5-5,2 mmol/L

ECG: Rhythm is sinus, regular, 72/min. P-Q - 0.16; QRS - 0.09; QT - 0.36; horizontal electrical position of the heart. RV5 - 30 mm, SV1+RV6 – 38mm.

The task:

1. Make a diagnosis.
2. Give an interpretation of additional methods.
3. Prescribe therapy with name of the group of drugs and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: Pulse is 80/min, rhythmic. BP 130/80 mm Hg. Heart auscultation: I sound is weakened at the apex, II sound - accentuated on the aorta. Auscultation of the lungs: breathing, is vesicular, clear. Liver + 3 cm. Oedema of the legs is dense.

On ECG: Rhythm is sinus, regular. HR is 80/min, Q wave in II, III, AVF leads, depth is 50% of the amplitude of R wave, segment ST is on the isoline.

Echocardiography

Indicator	Result	Reference values
Left atrium size (LA), mm	44,0	24,0-38,0
Posterior wall thickness at end-diastole (PWd) in diastole, mm	11	8-11
Interventricular septal thickness at end-diastole (IVSd), mm	10	7-10
Ejection fraction (EF),%	34	> 40,1
Left ventricular mass index (LVMI), g/m ²	120	for men <115
Hypokinesis of left ventricle posterior wall		

The task:

1. Make a diagnosis.
2. Explain results of additional methods.
3. Specify the tactics of patient management, prescribe basic therapy with name of the drug group and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The body temperature is 36.6°C. BP 135/75 mm Hg. Pulse is arrhythmic, 120 beats/min. The borders of the relative heart dullness are shifted up and to the right. Heart' sounds are arrhythmic and different intensivity. S1 is loud, clapping, S2 accentuation on a. pulmonalis, diastolic and systolic murmurs on the apex. Systolic murmur is irradiated to the left axillary region. Respiratory rate is 24 per minute. Vesicular breathing is hard. The liver is enlarged + 2 cm. Oedema of the legs.

ECG - Rhythm is not sinus, irregular, the axis of the heart is shifted to the right, heart rate 120-150 beats / min, distance R-R is different, f - waves are determined.
QRS - 0.12 with rSR 'type in V1.

The task:

1. Make a diagnosis.
2. Explain ECG changes.
3. Specify the tactics of patient management, Prescribe therapy with name of the group of drugs and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The general condition of the patient is moderate severity. Skin is pale, proximal interphalangeal joints are deformed, active movements are significantly limited due to pain. Pulse is rhythmic, 80 per min., BP - 130/80 mm Hg. Borders of the heart and heart sounds are normal. Breathing is vesicular. The liver is not enlarged.

Indicator	Result	Reference values
RBC	$3,4 \times 10^{12}/L$	$4,5 - 5,5 \times 10^{12}/L$
Hemoglobin	94 g/L	120 - 140 g/L
Color index	0,84	0,9 - 1,0
WBC	$7,7 \times 10^9/L$	$4,0 - 9,0 \times 10^9/L$
ESR	48 mm/h	less than 10 mm/h
C-reactive protein (CRP)	10,1 mg/L	less than 5 mg/L
Rheumatoid factor	154 IU/mL	less than 14,0 IU/mL

Radiography of the joints of the hands: diffuse osteoporosis, interphalangeal articular spaces are narrowed, multiple erosions of the articular surfaces, multiple subluxations.

The task:

1. Make a diagnosis.
2. Explain results of the hands X-ray.
3. Specify the tactics of patient management, prescribe symptomatic and disease-modifying antirheumatic therapy, indicating the group of drugs and representative.

Station №1
"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The patient's condition is moderate severity. Skin, mucous membranes are pale pink, clear. Blood pressure is 130/80 mm Hg. Heart sounds are rhythmic, clear. Breathing is vesicular, clear. Tongue is covered with white plaque, dry. The abdomen is slightly enlarged due to bloating, moderately painful in the epigastrium on the left. The Kera's, Ortner's and Murphy's signs are negative. Chauffard's, Gubergrits-Skulsky's regions are painful. Liver and spleen are not enlarged.

Indicator	Result	Reference values
Blood glucose	5,1	4.44-6.66 mmol/L
Total protein	76 g/L	60-80 g/L
Total bilirubin	16,5 μmol/L	8,0-20,5 μmol/L
ALT	0,54 μmol/(mL*h)	0,1-0,68 μmol/(mL*h)
AST	0,45 μmol/(mL*h)	0,1-0,45 μmol/(mL*h)
GGT	55 U/L	<38 U/L
Urine diastase	128 U/L	10-64 U/
Fecal elastase-1	120 μg/g	> 200 μg/g

Ultrasound examination of abdominal organs: Borders of pancreas are uneven and fuzzy, echogenicity of the parenchyma is increased, there are cysts, inhomogeneous distribution of the echo signal, calcification of the parenchyma, Wirsung duct is dilated in the distal part.

The task:

1. Make a diagnosis.
2. Explain the results of additional methods of investigation.
3. Specify the tactics of management, prescribe basic therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The patient's condition is moderate severity. Skin, mucous membranes - pale pink, clean; sclera is icteric. Pulse is 78/min, rhythmic. BP 130/80 mm Hg; heart sounds are rhythmic, clear; above the lungs - vesicular breathing. The tongue is dry, coated with yellow plaque. The abdomen is slightly bloated, painful in the right hypochondrium (in Kera's point). Liver + 1 cm. Kerr's, Ortner's and Murphy's signs are positive.

Indicator	Result	Reference values
RBC	$4,2 \times 10^{12}/L$	$4.5 \times 10^{12} - 5.5 \times 10^{12}/L$
Hemoglobin	131 g/L	120-140 g/L
Platelets	$240 \times 10^9/L$	$180 \times 10^9 - 320 \times 10^9/L$
WBC	$11,1 \times 10^9/L$	$4.0 \times 10^9 - 9.0 \times 10^9/L$
Monocytes	5%	2-8%
Lymphocytes	12%	25-40%
Eosinophils	2%	2-4%
Basophils	0%	0-1%
stab	6%	3-5%
Segmented neutrophils	75%	50-70%
ESR	35 mm/h	less than 10 mm/h
Blood glucose	5,2 mmol/L	4.44-6.66 mmol/L
Total protein	76 g/L	60-80 g/L
Total bilirubin	25,5 $\mu\text{mol}/L$	8,0-20,5 $\mu\text{mol}/L$
Direct bilirubin	12,7 $\mu\text{mol}/L$	2,0-5,5 $\mu\text{mol}/L$

Ultrasound examination of the abdominal organs: Liver: the size of the right lobe is 130 mm, the left lobe is 72 mm, the caudate lobe is 22 mm (norm 120 x 60 x 20 mm), protrudes 1 cm from the edge of the right costal arch. Parenchyma is of medium echogenicity, the structure is homogeneous. The diameter of the common bile duct - 3.2 mm (normal - 4-8 mm). The gallbladder located typically. Neck of the gallbladder is bend. Size: 93 · 36 mm. Gallbladder's wall thickness is up to 5.5 mm (norm: up to 4 mm), the wall structure is heterogeneous. The content of the gallbladder is inhomogeneous, layered, several concrements (echo-positive signal) are in the cavity.

The task:

1. Make a diagnosis.
2. Explain the results of additional methods of investigation.
3. Specify the treatment, prescribe basic therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively. The general condition is satisfactory. Weight is 105 kg, height is 172 cm. Skin and mucous membranes are pale pink, clean. Tongue is wet, white coated. Breathing is vesicular, clear. Heart sounds are rhythmic, not changed. BP 125/85 mm Hg. Pulse is 68/min, rhythmic, BR is 16/min. The abdomen during palpation is soft, sensitive in the epigastric region. Mendel's, Kerr's, Murphy's, Ortner's signs are negative.

Data of additional methods:

Indicator	Result	Reference values
Gregersen Reaction	negative	negative
Gastric pH-metry	1.6	1.8-2.9

Daily Esophageal pH monitoring

Measurement time	pH in distal esophagus	Norm
8:00	6,2	In distal esophagus pH = 6,0
11:00	3,9	
14:00	4,1	
17:00	3,7	
20:00	4,2	
23:00	5,8	
2:00	6,0	
5:00	6,4	
8:00	6,1	

Fibrogastroduodenoscopy: isolated erosion, which occupy 10% of the surface of the mucous membrane of the distal esophagus.

The task:

1. Make a diagnosis.
2. Give explanation of the results of additional methods investigation.
3. Specify the tactics of patient management, prescribe therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints and anamnesis interrogate the patient.

Objectively: the general condition is satisfactory. Mucous membranes are pale pink. Tongue is wet, white coated. Breathing is vesicular, clear. Heart sounds are rhythmic, clear. BP 120/80 mm Hg. Pulse is 64/min, rhythmic. BR 17/min. Front abdominal wall is soft, painful in the pilodoroduodenal region. Mendel's symptom is positive. Murphy's, Kerr's, Ortner's signs are negative.

Data of additional methods:

Indicator	Result	Reference values
Gregersen Reaction	negative	negative
Gastric pH-metry	1.3	1.8-2.9
Urea breath test	positive	negative

Fibrogastroduodenoscopy: There is a defect on the front wall of the duodenal bulb with infiltration around it, size is 1.3 x 2.3 cm.

The task:

1. Make a diagnosis.
2. Give explanation of the results of additional methods investigation.
3. Specify the tactics of patient management, prescribe therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the state is moderate severity. The skin is pale, hot to the touch. The temperature is 38.2°C. RR is 26/min. The pulse is 95/min., rhythmic. Blood pressure is 115/70 mm Hg. Percussion over the lungs: shortening of the percussion sound below the right scapula angle. Breathing is weakened, crepitation is heard below the right scapula angle. SaO₂ - 97%.

Complete blood count (CBC)

Indicator	Result	Reference values
RBC	4,2x10 ¹² /L	4.5*10 ¹² -5.5*10 ¹² /L
Hemoglobin	131 g/L	120-140 g/L
Platelets	240*10 ⁹ /L	180*10 ⁹ -320*10 ⁹ /L
WBC	11,1x10 ⁹ /L	4.0*10 ⁹ -9.0*10 ⁹ /L
ESR	22 mm/h	less than 10 mm/h

The task:

1. Make a diagnosis.
2. Give interpretation of additional methods.
3. Specify the tactics of patient management, prescribe therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the skin is clean, mild diffuse cyanosis. Body temperature is 37.3 ° C. Anterior-posterior chest size increased, supra- and subclavian fossae are smoothness. Vocal fremitus is weakened symmetrically on both sides. The lower edges of the lungs are shifted down. boxed sound. Breathing is vesicular, hard, dry rales, withings. RR - 26/min. The borders of the heart can not be clearly defined. The heart sounds are weak, rhythmic. Ps is 90/min, rhythmic, satisfactory properties. Blood pressure is 120/80 mm Hg. Art. Abdominal organs are without changes. Spirogram (test with bronchodilation):

Parameter	Predicted (L)	Measured (pre)(L)	% Predicted (pre)	Measured (post)(L)	% Predicted (post)
FVC	3.90	2.59	70	2.67	71
FEV ₁	3.39	1.34	40	1.45	43
FEV ₁ /FVC	86.85	56.15	65	58.64	68
FEF 25	6.31	1.61	26	1.89	30
FEF 50	4.52	0.76	17	0.84	19
FEF 75	2.02	0.30	15	0.32	16

Task:

1. Diagnosis.
2. Give interpretation the results of spirometry.
3. Specify the tactics of patient management, prescribe therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints on the anamnesis to collect from the patient (tutor).

Objectively: the general condition is moderate severity. RR is 24/ min. Skin and mucous membranes are pale pink, cyanosis of the face. Pulse is 88/min., rhythmic, satisfactory properties. BP is 120/70 mm Hg. Heart sounds are rhythmic and clear, I sound is weakened on the apex. Breathing is vesicular, dry wheezing over the entire chest.

Sputum analysis:

Indicator	Result	Reference values
Macroscopic examination		
Amount, mL	15	10-100
Smell	Without smell	Without smell
Color	Transparent	Transparent
Character	Mucous	Mucous
Consistency	Lumpy	not viscous
Microscopic examination		
WBC, in sight	20 - 30	До 25
RBC, in sight	absent	absent
Epithelial cells, in sight	4-6	less than 25
Elastic fibers, in sight	absent	absent
Alveolar Macrophages, in sight	1-2	absent
Eosinophils, in sight	10-12	absent
Curschmann's spirals	+	absent

Task:

1. Diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with indication of the group of drugs and representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The general condition is satisfactory. Constitution of the patient is hypersthenic. The body mass index is 30.5 kg/m². The skin is clean. Pulse - 76 per minute, rhythmic, satisfactory filling, but tension is increased. BP 170/100 mm Hg. Borders of the heart: right and upper - normal, left - 1 cm to the left from the mid-clavicular line. Vascular bundle - within normal limit. I sound is moderately weakened at the apex, accent of II sound above aorta. Breathing is vesicular. Abdominal palpation is soft, painless. Pulse on a. dorsalis pedis is normal.

Indicator	Result	Reference values
RBC	4,2. 10 ¹² /L	4,5 - 5,5 x 10 ¹² /L
Hemoglobin	135 g/L	120 - 140 g/L
Color index	0,96	0,9 - 1,0
WBC	7,4. 10 ⁹ /L	4,0 - 9,0 x 10 ⁹ /L
ESR	8 mm/h	less than 10 mm/h
Blood glucose	5,1 mmol/L	4.44-6.66 mmol/L
Total cholesterol	4,1 mmol/L	3,5-5,2 mmol/L

ECG: Rhythm is sinus, regular, 72/min. P-Q - 0.16; QRS - 0.09; QT - 0.36; horizontal electrical position of the heart. RV5 - 30 mm, SV1+RV6 – 38mm.

The task:

4. Make a diagnosis.
5. Give an interpretation of additional methods.
6. Prescribe therapy with name of the group of drugs and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints on the anamnesis to collect from the patient (tutor).

Objective examination: skin and visible mucous membranes are pale. Heart rate 95 beats / min, rhythmic. BP - 115/70 mm Hg. The left border of relative dullness of the heart is 1.5 cm outside the mid-clavicular line. I tone at the top of the heart is weakened. Second tone is intensified on the pulmonary artery. Auscultation over the lungs - vesicular respiration. The abdomen is soft, painless. Edema of both legs is determined.

CBC:

Indicator	Result	Reference values
Hemoglobin, mg/l	130	130-160
WBC, *10 ⁹ /л	11,2	4,0-9,0
ESR, mm/hour	48	2-15
CRP, mg/l	26	до 5

ECG: rhythm is sinus, regular, heart rate - 95 beats/min. PQ - 0.28 sec. Signs of overload of both ventricles. Negative T-wave in V1-V6 leads.

Ultrasound of the heart:

Indicator	Result	Reference values
End systolic size (ESS), mm	46,0	33,0-38,0
End diastolic size (EDS), mm	64	49-55
The thickness of the posterior wall of the left ventricle (TPWLV) in diastole, mm	11	8-11
Thickness of interventricular septum (TIS), mm	9	7-10
Fraction ejection (FE), %	38	> 40,1
Left ventricular myocardial mass index (LVMMI), g/m ²	135	For male < 115
Diffuse hypokinesis of the walls of the left ventricle		

Task:

1. Make a diagnosis.
2. Explain the results of Echocardiography.
3. Determine patient management tactics and prescribe treatment, naming group of drugs and representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints on the anamnesis to collect from the patient (tutor).

Objectively: the overall condition is satisfactory. Pulse rate - 110 beats / min, arrhythmic, alternating. HR - 143 beats / min, blood pressure - 110/80 mm Hg. Auscultation of the heart: tones of heart are arrhythmic, different strength. Auscultation of the lungs: breathing is vesicular. The liver is not palpable. There is no edema of the feet.

On the ECG: HR - 100-150 beats/min, the P-waves are absent, the R-R distances are different, the amplitude of the R-waves is different, the QRS complex is not expanded.

Task:

1. Formulate a diagnosis.
2. Give ECG data interpretation.
3. Determine patient management tactics and prescribe treatment, naming group of drugs and representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the patient's overall condition is satisfactory. Pulse –84 beats / min, rhythmic, with satisfactory properties. BP 130/80 mmHg The boundaries of the heart meet the age standards. I tone over the apex of the heart is weakened, the accent of the second tone over the aorta is heard. There is edema of leg is determined. There is no changes were detected in the study of the respiratory system and organs of the abdominal cavity.

Lipidogram:

Indicator	Result	Reference values
Total cholesterol, mmol / l	6,2	3,9-5,2
Triglycerides, mmol / l	2,4	0,45-1,7
LDL cholesterol, mmol / l	2,9	до 2,6
HDL cholesterol, mmol / l	0,8	1,0-1,6

Bicycle ergometry: at 75 W the patient has discomfort in the heart area. The ECG shows ST segment depression 4 mm below the line in I, AVL, V5- V6.

Task:

1. Make a diagnosis.
2. Give interpretation of lipidogram and bicycle ergometry.
3. Assign a treatment by naming the group of drugs and representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objective examination: BP - 165/105 mm Hg. Pulse - 75 beats / min, rhythmic tense. The left border of relative dullness of the heart at the level of the middle-clavicular line. I tone on the top of heart is weakened, accent of the second tone over the aorta is heard. Auscultation of lungs: vesicular breathing. The abdomen is soft, painless. There is no edema on the lower extremities.

Lipidogram: Increase level of total cholesterol and low density lipoproteins.

ECG: rhythm is sinus, regular. Heart rate - 90 beats/min. The electric axis of the heart is deflected to the left, the Sokolov-Lyon index is 38 mm.

Ultrasound of the heart:

Indicator	Result	Reference values
End systolic size (ESS), mm	36,0	33,0-38,0
End diastolic size (EDS), mm	54	49-55
The thickness of the posterior wall of the left ventricle (TPWLV) in diastole, mm	13	8-11
Thickness of interventricular septum (TIS), mm	14	7-10
Myocardial mass index (MMI), g /m ²	145	for male ≤ 115
Fraction ejection (FE), %	64	>50

Task:

1. Make a diagnosis.
2. Give interpretation of instrumental research methods.
3. Assign a treatment by naming the group of drugs and representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: The patient is pale. Pulse - 110 per minute, rhythmic, satisfactory filling. BP 110/75 mm Hg. Body temperature 38,20 C. Investigation of cardiovascular, respiratory and abdominal organs reveal no changes.

Knee and ankle joints are swollen, hyperemic, hot to the touch, painful on palpation. Movements in the joints are limited and painful.

Complete blood count (CBC):

Indicator	Result	Reference values
CRP, mg/l	104	0-5
ASLO, U/ml	200	0-200
Hb, g/l	135	130-160
WBC, *10 ⁹ /l	12,6	4-9
ESR, mm/hour	60	5-10
PCR Chlamydia trachomatis, U	3	>1

X-ray of the knee and ankle joints: no changes detected.

Ultrasound of the knee and ankle joints: thickening of the synovial membranes, intraarticular exudation.

Task:

1. Make a diagnosis.
2. Give interpretation of instrumental research methods.
3. Assign a treatment by naming the group of drugs and representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the general condition is moderate severity, pale skin, oedema of the face, legs, scrotum, lower back and anterior abdominal wall. Lungs - without changes. Pulse is 88/min, rhythmic, intense, full. Blood pressure 185/110 mm Hg. Apex beat is diffuse, displaced to the mid-clavicular line in 5th intercostal space, resistant. The right and upper borders of heart are normal, the left border on mid-clavicular line in the 5th intercostal space. The heart sounds are clear, rhythmic, accent of II sound over the aorta. The abdomen is soft, painless. Kidneys are not palpable, the area of their palpation is painless, the Pasternatsky symptom is negative.

Complete blood count (CBC):

Indicator	Result	Reference values
RBC	$4,2 \times 10^{12}/L$	$4.5 \times 10^{12} - 5.5 \times 10^{12}/L$
Hemoglobin	121 g/L	120-140 g/L
Platelets	$240 \times 10^9/L$	$180 \times 10^9 - 320 \times 10^9/L$
WBC	$6,1 \times 10^9/L$	$4.0 \times 10^9 - 9.0 \times 10^9/L$
ESR	36 mm/h	less than 10 mm/h
Blood creatinine	320 $\mu\text{mol}/L$	for men 62-124 $\mu\text{mol}/L$

Urinalysis:

Indicator	Result	Reference values
Color	Dark yellow	straw yellow
Transparency	slightly cloudy	full
Reaction	7,5	4,6-8,0
Specific gravity	1.008	1.010-1.025
Protein, g/L	3,3	absent
WBC, in visual field	3-4	for women 0-5
RBC, in visual field	8-10	for women 0-3
Epithelial cells, in sight	single	0-10
Cylinders (microscopy), in sight	4-6 hyaline 5-6 grainy	absent

The task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the patient is of satisfactory condition, the skin color is normal, the body temperature is 37.9°C; vesicular breathing; right and the upper borders of the heart are normal, the left border on mid-clavicular line in 5 intercostal space. The heart sounds are clear, rhythmic. Pulse is 86/min. Blood pressure 160/105 mm Hg. Abdomen is soft, palpation of the kidney is moderate painful. Symptom of Pasternatsky is positive on both sides.

Urinalysis:

Indicator	Result	Reference values
Color	light yellow	straw yellow
Transparency	slightly cloudy	full
Reaction	7,5	4,6-8,0
Specific gravity	1.014	1.010-1.025
Protein, g/L	0,099	absent
WBC in visual field	18-25	for women 0-5
RBC, in visual field	0-1	for women 0-3
Epithelial cells, in visual field	single	0-10
Cylinders (microscopy in visual field)	absent	absent
Mucus	+++	absent
Nechiporenko test, in 1 mL	RBC – 1000 WBC – 7000	RBC –1000 WBC –2000

The velocity of glomerular filtration is normal.

Task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representative.

Station №1
"Standardized patient in the clinic of internal medicine, Part 1"

Complaints on the anamnesis to collect from the patient (tutor).

Objectively: height 171 cm, weight 92 kg. There is painless dense formations of whitish color (0.3 x 0.2 cm in diameter) on the ears. Deformities are noted in the region of the 1st and 2nd metatarsophalangeal joints of right foot, edema, reddening of the skin, increase of the local temperature above them; hallus valgus on the right foot.

Indicator	Result	Reference values
RBC	$4,6 \times 10^{12}/L$	$4.5 \times 10^{12} - 5.5 \times 10^{12}/L$
Hemoglobin	151 g/L	120-140 g/L
Platelets	$280 \times 10^9/L$	$180 \times 10^9 - 320 \times 10^9/L$
WBC	$7,1 \times 10^9/L$	$4.0 \times 10^9 - 9.0 \times 10^9/L$
ESR	36 mm/h	less than 10 mm/h
C-reactive protein, mg/L	22	< 5
Uric acid, mmol/L	0,59	for men less than 0,42

Investigation of synovial fluid: the presence of needles, located intracellularly and birefringent light in a polarization microscope.

The task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: A patient moves with difficulties due to pain in the spine and hip joints. Constitution is astenic, nutrition is satisfactory. The skin is clean, of normal color, sufficient moisture.

Smoothness of lumbar lordosis, muscle atrophy is noted. On palpation, pain in the lumbosacral spine and in the sacroiliac joints is determined. Schober`s symptom is positive, movement in the spine is limited. Internal organs without significant changes.

Complete blood count (CBC):

Indicator	Result	Reference values
RBC	4,6 x10 ¹² /L	4.5*10 ¹² -5.5*10 ¹² /L
Hemoglobin	125 g/L	120-140 g/L
Platelets	220*10 ⁹ /L	180*10 ⁹ -320*10 ⁹ /L
WBC	8,2x10 ⁹ /L	4.0*10 ⁹ -9.0*10 ⁹ /L
Monocytes	3%	2-8%
Lymphocytes	25%	25-40%
Eosinophils	2%	2-4%
Basophils	0%	0-1%
Stab	4%	3-5%
Segmented neutrophils	66%	50-70%
ESR	50 mm/h	10-15 mm/h

X-ray of pelvic bones: subchondral osteosclerosis, non-uniform narrowing, single erosion of sacroiliac joint, narrowing of articular space of hip joints.

Task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representative.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints on the anamnesis to collect from the patient (tutor).

Objectively: the body is correct, nutrition is high (height 162 cm, weight 85 kg, BMI - 32 kg/m²). There is difficulty in the movement because of pain in the knee joints. The skin is not changed. There is deformity of the knee joints due to the predominance of proliferative changes, swelling of the right knee joint, the volume of active movements is reduced, the volume of passive movements is preserved. Crepitation and crackling are noted during movements in the knee joints.

Complete blood count (CBC):

Indicator	Result	Reference values
RBC	3,9 x10 ¹² /L	4.5*10 ¹² -5.5*10 ¹² /L
Hemoglobin	123 g/L	120-140 g/L
Platelets	182 *10 ⁹ /L	180*10 ⁹ -320*10 ⁹ /L
WBC	7,3 x10 ⁹ /L	4.0*10 ⁹ -9.0*10 ⁹ /L
Monocytes	3%	2-8%
Lymphocytes	25%	25-40%
Eosinophils	2%	2-4%
Basophils	0%	0-1%
Stab	4%	3-5%
Segmented neutrophils	66%	50-70%
ESR	15 mm/h	10-15 mm/h

Task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management; prescribe therapy with name of the group of drugs and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the skin is pale, slightly icteric. Muffled heart sounds, systolic murmur at the apex. Blood pressure is 130/80 mm Hg, pulse is 98/min, rhythmic. Lungs - without changes. The abdomen is soft, sensitive in the epigastric region. Liver +1 cm, spleen - the lower edge is palpated. Swelling of the feet and legs.

Complete blood count:

Indicator	Result	Reference values
RBC	$1,2 \times 10^{12}/L$	$4.5 \times 10^{12} - 5.5 \times 10^{12}/L$
Hemoglobin(g/L)	50	120-140
Color index	1,25	0,85-1,05
Reticulocytes(‰)	11	2-12
Platelets	$140 \times 10^9/L$	$180 \times 10^9 - 320 \times 10^9/L$
WBC	$4,1 \times 10^9/L$	$4.0 \times 10^9 - 9.0 \times 10^9/L$
Monocytes	5%	2-8%
Lymphocytes	12%	25-40%
Eosinophils	2%	2-4%
Basophils	0%	0-1%
Stab	6%	3-5%
Segmented neutrophils	75%	50-70%
ESR	35 mm/h	less than 10 mm/h

Task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representatives.

Station №1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: the skin is pale, dry; nails are brittle, streaked; cracks in the corners of the mouth, hair sparse. The tongue is pale; nipples of tongue are atrophied. Pulse 100/min, rhythmic. BP 110/70 mm Hg. Heart sounds are rhythmic, systolic murmur above all five points of auscultation and above the vessels of the neck. RR 18/min. Above the lungs - vesicular breathing. The abdomen is soft, painless.

Complete blood count:

Indicator	Result	Reference values
RBC	$3.0 \times 10^{12}/L$	$4.5 \times 10^{12} - 5.5 \times 10^{12}/L$
Hemoglobin(g/L)	74	120-140
Color index	0,74	0,85-1,05
Reticulocytes(‰)	1	2-12
Platelets	$220 \times 10^9/L$	$180 \times 10^9 - 320 \times 10^9/L$
WBC	$4,8 \times 10^9/L$	$4.0 \times 10^9 - 9.0 \times 10^9/L$
Monocytes	3%	2-8%
Lymphocytes	25%	25-40%
Eosinophils	2%	2-4%
Basophils	0%	0-1%
Stab	3%	3-5%
Segmented neutrophils	67%	50-70%
ESR	13 mm/h	less than 10 mm/h

Task:

1. Make diagnosis.
2. Give interpretation results of additional methods.
3. Specify the tactics of patient management, prescribe therapy with name of the group of drugs and the representative.

Station № 1
"Standardized patient in the clinic of internal medicine, Part 1"

Complaints about the history collected from the patient (tutor).

Objectively: diffuse cyanosis. RR - 31/min, oxygen saturation - 89%, body temperature - 36,60 C. Percussion: box sound is heard over the lungs, auscultation: hard vesicular breathing with prolonged exhalation, a large number of dry wheezes. Heart tones are weak, rhythmic. Pulse rate - 88 beats / min. BP - 135/85 mm Hg. there is no edema.

Spirometry: FEV1 / FVC <0.65; FEV1- 42% from the reference. Ventolin test – reversibility of obstruction - 9%.

Task:

1. Make a diagnosis.
2. Give interpretation of spirometry and bronchodilator tests.
3. Prescribe treatment by naming the group of drugs and representative.

Station № 1

"Standardized patient in the clinic of internal medicine, Part 1"

Complaints and anamnesis should be questioned in the patient.

Objectively: : the skin is pale, dry. Face edema. Pulse - 102 per minute, rhythmic, resistant. BP 170/100 mmrt. Art. Heart borders are normal. I tone over the top of the heart is preserved, the accent of the second tone over the aorta is heard. There is no changes in the respiratory system and organs of the abdominal cavity.

CBC:

Indicator	Result	Reference values
RBC, *10 ¹² /l	3,4	Male.: 4,0-5,0
Hb, g/l	115	130-160
WBC, *10 ⁹ /l	7,2	4,0-9,0
ESR, mm/hour	24	Male. до 10
ASL-O, U/l	425	≤ 200
Creatinin, mcmol/l	105	Male.: 74.0-110,0

Urinalysis:

Indicator	Result	Reference values
Color	Dark yellow	From straw to rich yellow
Transparency	Slightly cloudy	Transparent
Reaction	7.5	neutral, slightly alkaline, slightly acidic (4,8-7,5), usually 5.0-6.0
Specific weight	1.030	1.010-1.025
Protein, g / l	1,2	None, up to 0.033
Leukocytes	5-6	Men 0-3
Erythrocytes	20-25	Men 0-1
Epithelial cells	5	3-5
Casts	8-10 hyaline casts	Absent

Task:

1. Formulate a diagnosis.
2. Give an interpretation of the general blood and urine test.
3. Assign treatment by naming the drug group and representative.