

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

**Federal State Autonomous Educational Institution of Higher Education
«National Research Lobachevsky State University of Nizhny Novgorod»**

Институт клинической медицины

УТВЕРЖДЕНО

решением Ученого совета ННГУ

протокол № 10 от 02.12.2024 г.

Working programme of the discipline

Allergology

Higher education level

Specialist degree

Area of study / speciality

31.05.01 - General Medicine

Focus /specialization of the study programme

General Medicine

Mode of study

full-time

Nizhny Novgorod

Year of commencement of studies 2025

1. Место дисциплины в структуре ОПОП

Дисциплина Б1.В.1.05 Аллергология относится к части, формируемой участниками образовательных отношений образовательной программы.

2. Планируемые результаты обучения по дисциплине, соотнесенные с планируемыми результатами освоения образовательной программы (компетенциями и индикаторами достижения компетенций)

Формируемые компетенции (код, содержание компетенции)	Планируемые результаты обучения по дисциплине (модулю), в соответствии с индикатором достижения компетенции		Наименование оценочного средства	
	Индикатор достижения компетенции (код, содержание индикатора)	Результаты обучения по дисциплине	Для текущего контроля успеваемости	Для промежуточной аттестации
ПК-2: Готовность к распознаванию состояний, возникающих при внезапных острых заболеваниях, обострении хронических заболеваний, требующих оказания помощи в неотложной или экстренной форме и участию в оказании скорой медицинской помощи при этих состояниях, требующих срочного медицинского вмешательства, в том числе при чрезвычайных ситуациях, и участие в медицинской эвакуации	ПК-2.1: Знать методы проведения неотложных мероприятий и показания для госпитализации больных; клинические проявления основных синдромов, требующих срочного медицинского вмешательства; принципы и методы оказания первой медицинской и при неотложных состояниях.	ПК-2.1: Be able to identify life-threatening disorders and provide emergency first aid to victims in the affected areas in emergency situations. Master the algorithm for performing basic medical diagnostic and therapeutic measures to provide first aid in urgent and life-threatening conditions	Задачи Тест	Зачёт: Задания
ПК-9: Готовность к осуществлению комплекса мероприятий, направленных на сохранение и укрепление здоровья и включающих в себя формирование здорового образа жизни,	ПК-9.1: Знать принципы ранней диагностики заболеваний, проведения скринингов ПК-9.2: Уметь проводить мероприятия по ранней диагностике заболеваний ПК-9.3: Владеть методами ранней диагностики заболеваний, в том числе - организации и проведения	ПК-9.1: Know how to identify and assess the severity of risk factors for the development and progression of diseases that correspond to the learning profile - - identify early symptoms of diseases - - to find out the family history ПК-9.2:	Задачи Тест	Зачёт: Задания

предупреждение возникновения и (или) распространения заболеваний, в том числе обучению пациентов и их родственников, раннюю диагностику, диспансеризацию, проведение медосмотров выявление причин и условий возникновения заболеваний и устранение вредного влияния на здоровье человека факторов среды его обитания	скринингов	<p>to find out the family history - comply with the norms of the sanitary and epidemiological regime and have the skills to assess the total risk of developing and progressing diseases, reducing morbidity by influencing risk factors for their development</p> <p>ПК-9.3: to know methods of early diagnosis of diseases - - methods of combating bad habits, sanitary and educational work</p>		
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3. Структура и содержание дисциплины

3.1 Трудоемкость дисциплины

	очная
Общая трудоемкость, з.е.	2
Часов по учебному плану	72
в том числе	
аудиторные занятия (контактная работа):	
- занятия лекционного типа	14
- занятия семинарского типа (практические занятия / лабораторные работы)	28
- КСР	1
самостоятельная работа	29
Промежуточная аттестация	0 Зачёт

3.2. Содержание дисциплины

(структурированное по темам (разделам) с указанием отведенного на них количества академических часов и виды учебных занятий)

Наименование разделов и тем дисциплины	Всего (часы)	в том числе			Самостоятельная работа обучающегося, часы
		Контактная работа (работа во взаимодействии с преподавателем), часы из них			
		Занятия лекционного	Занятия семинарского	Всего	

		типа	типа (практические занятия/ лабора- торные работы), часы		
	0 Ф 0	0 Ф 0	0 Ф 0	0 Ф 0	0 Ф 0
Topic 1. Organization of allergological and immunological services in the Russian Federation.	5	1	2	3	2
Topic 2. Theoretical foundations of allergology and immunology	15	3	6	9	6
Topic 3. Specific allergological diagnostics.	5	1	2	3	2
Topic 4. Prevention and therapy of allergic diseases	5	1	2	3	2
Topic 5. Pollinosis	6	1	2	3	3
Topic 6. Food allergy	5	1	2	3	2
Topic 7. Dermatitis, toxidermia. hives.	10	2	4	6	4
Topic 8. Latex allergy	5	1	2	3	2
Topic 9. Allergic respiratory diseases	10	2	4	6	4
Topic 10. Vaccination and vaccine prevention	5	1	2	3	2
Аттестация	0				
КСР	1			1	
Итого	72	14	28	43	29

Contents of sections and topics of the discipline

Topic 1. Organization of allergological and immunological services in the Russian Federation.

Topic 2. Theoretical foundations of allergology and immunology

Topic 3. Specific allergological diagnostics.

Topic 4. Prevention and therapy of allergic diseases

Topic 5. Pollinosis.

Topic 6. Food allergy

Topic 7. Dermatitis, toxidermia. hives.

Topic 8. Latex allergy

Topic 9. Allergic respiratory diseases

Topic 10. Vaccination and vaccine prevention

4. Учебно-методическое обеспечение самостоятельной работы обучающихся

Самостоятельная работа обучающихся включает в себя подготовку к контрольным вопросам и заданиям для текущего контроля и промежуточной аттестации по итогам освоения дисциплины приведенным в п. 5.

5. Assessment tools for ongoing monitoring of learning progress and interim certification in the discipline (module)

5.1 Model assignments required for assessment of learning outcomes during the ongoing monitoring of learning progress with the criteria for their assessment:

5.1.1 Model assignments (assessment tool - Tasks) to assess the development of the competency ПК-2:

Task 1. PC-2

Patient E., 18 years old, against the background of taking analgin for headaches, felt a sharp deterioration in her well-being. Headaches increased, runny nose, lacrimation,

photophobia arose, t- rose to 38.0 °C, skin rashes of a spotty-papular nature appeared, damage to the mucous membranes of the nose, oral cavity, and eyes was noted. On the second day after the onset of symptoms – drowsiness, confusion, thirst, puffiness of the face, t- up to 40.0 °C, skin changes quickly transformed into large blisters with opening and formation of erosive surfaces. 20

Objectively: The condition is severe, the temperature is 38.5. The skin and mucous membranes have a yellowish tinge.

On the skin of the back in the armpits, in the groin areas, on the abdomen, thighs, there are multiple painful erythemas, blisters, erosions. The affected skin looks scalded with boiling water. The mucous membrane of the mouth, nose, conjunctiva of the eyes is sharply hyperemic,

There are erosions in places. BDD - 26 per minute, BP -100/60, Ps-110 beats per minute, rhythmic. The heart tones are muted, clear, vesicular breathing in the lungs, without local changes. The abdomen is soft, slightly painful in the right hypochondrium, the liver at the edge of the costal arch.

Pasty face.

1. Formulate and justify the presumed diagnosis.
2. Name additional symptoms to clarify the diagnosis, tell us about the method of their detection.
3. Tell us about the scope and methods of providing pre-medical care. 4. Make a plan for diagnostic studies in the hospital, tell us about the principles of treatment.

Task 2. PC-2

A patient, aged 10 years, suffering from allergic asthma (household sensitization) with achieved control of asthma symptoms against a background of low doses of GCS (pulmicort 100 mcg /day). He attends a secondary school where seasonal flu vaccination ("Grippol") is planned.

1. Is vaccination indicated for this patient?
2. What medical history data are relevant for the administration of this vaccine?
3. Conditions for vaccination of children with allergopathology?

Task 3. PC-2

Patient V., 18 years old, was hospitalized urgently with swelling of the face (lips, chin), with spread to the neck and increasing phenomena of difficulty breathing, hoarseness of voice, barking cough. Skin itching and rashes are not noted. The swelling appeared and gradually progressed after dental intervention (removal of the "wisdom tooth"), after which about 36 hours passed. The AMBULANCE team administered prednisone 90 mg, suprastin 1% - 2 ml – without effect. In the past, I have not noticed allergic reactions, including to local anesthetics. There are no allergic relatives, but my grandmother had similar acute edema, died of laryngeal edema at the age of 45.

Objectively: The condition is severe, the temperature is 37.2. The skin and mucous membranes are of normal color and humidity. Swelling of the lower part of the face –lips, chin and neck,

indistinguishable in color from healthy skin areas, rashes, no combs. The mucous membrane of the oral cavity, palate,

the tongues are edematous, of a normal color, without plaque and rashes. BDD - 26 per minute, BP 110/60, Ps- 100 beats per minute, rhythmic. The tones of the heart are clear, pure. In the lungs, breathing is shallow, with difficulty breathing, vesicular, without local changes. The belly is soft, painless. The liver and spleen are not enlarged.

1. A presumptive diagnosis.
2. Tactics of patient management at this stage.
3. Further diagnostic measures, principles of treatment.

Task 4.PC-2

Patient D., 20 years old. I turned to an allergist in May due to the appearance (symptoms have persisted for 1.5 weeks) of a runny nose, nasal congestion, nasal itching and sneezing. I did not catch a cold,

my body temperature did not rise, I did not notice sore throat, cough. During the survey, it turned out that similar phenomena were also bothered in May - June last year, for 3-4 weeks, but were less pronounced, associated them with a cold, did not go to the doctors. In the anamnesis at an early age as a child, there was a food allergy – a rash on chicken protein. The mother has a constant runny nose, about which she was not examined. Objectively: The condition is satisfactory, the temperature is 36.2. The skin and mucous membranes are of normal color and humidity, there is no rash. There is no hyperemia and plaque in the throat, the tonsils are not enlarged. BDD - 16 per minute, BP - 110/60, Ps-70 beats per minute, rhythmic.

The tones of the heart are clear, pure. In the lungs, breathing is vesicular, there are no wheezes. The belly is soft, painless. The liver and spleen are not enlarged. There is no swelling.

1. A presumptive diagnosis.
2. Tactics of patient management at this stage.
3. Further diagnostic measures, principles of treatment.

Task 5.PC-2

Patient I., 38 years old. Sent for consultation by a therapist. I am concerned about the gradual deterioration of my well-being for more than six months. Shortness of breath progresses with little physical exertion, cough is constant with the discharge of a small amount of mucous sputum, periodically subfebrile body temperature, weakness, loss of appetite, lost 5 kg.

He denies choking/coughing attacks. He works as a high school math teacher. He denies smoking. The allergic history is calm. 2 parrots have been living at home for about one year.

Heredity – a 10-year-old son has mild manifestations of atopic dermatitis in early childhood, an uncle (on the maternal side) has bronchial asthma, COPD.

Objectively: The condition is satisfactory, the temperature is 37.2. The skin and mucous membranes are of normal color and humidity, there is no rash. The peripheral lymph nodes are not enlarged. There is no hyperemia and plaque in the throat, the tonsils are not enlarged. BDD - 16 per minute, BP -

110/60, Ps-70 beats per minute, rhythmic. The heart tones are muted, there is no noise. Above the lungs is a percussion tone with a boxy tinge. In the lungs, breathing is harsh, scattered crepitating wheezes. The belly is soft,

painless. The liver and spleen are not enlarged. There is no swelling.

On the X-ray of the lungs: a decrease in the transparency of the pulmonary fields ("frosted glass"), diffuse nodular-mesh infiltrates with a diameter of up to 5 mm.

According to the FVD data, there are mainly restrictive changes – a moderate decrease in OEL, LEL, and FOE. Decreased lung diffusion capacity (DSL). Moderate hypoxemia.

Clinical blood test: er- $3,5 \cdot 10^{12}/l$, Hb-140g/l, lake- $8 \cdot 10^9/l$, p-1, s-50, e-2, m-8, L39, SOE- 35mm/ h

- . 1. Presumptive diagnosis.
2. What studies are needed to make a definitive diagnosis?
3. What diseases should be treated with differential diagnosis?
4. Treatment plan

Task 6 pc-2

A 6-year-old patient complains of difficulty breathing, mainly during daytime hours. According to the mother, the symptoms appeared after suffering acute respiratory infections about 2 weeks ago.

According to my mother, my uncle has pollinosis. In the blood test, the number of eosinophils is slightly increased, the ESR is 20 mm / h.

On examination, the girl had wet wheezing during auscultation. Breathing is difficult on the inhale and free on the exhale.

1. A presumptive diagnosis.
2. What studies are necessary to make a definitive diagnosis?
3. With which diseases should differential diagnosis be carried out?
4. Treatment plan

Task 7 pc-2

A 45-year-old patient complains of skin rashes and severe itching. According to the patient, she recently arrived from India and brought a herbal extract. I used it once, pouring the contents into the tub. The next day, I found itchy rashes on my body.

Upon examination, the process is widespread with localization on the skin of the trunk and limbs, represented by erythematous spots of bright pink color with vesiculation and weeping phenomena.

1. A presumptive diagnosis.
2. What studies are needed to make a definitive diagnosis?
3. What diseases should be treated with differential diagnosis?
4. Treatment plan

Task 8. PC-2

A 20-year-old patient complains of nasal congestion and lacrimation for 2 weeks. According to the patient, such phenomena occur annually at the same time period in the spring and last about 2 weeks. He has not been examined, he has not consulted a doctor before.

On examination, the conjunctiva is hyperemic, the eyelid skin is edematous, and there is abundant lacrimation. Nasal breathing is difficult, the nasal mucosa is swollen and hyperemic.

1. A presumptive diagnosis.
2. What studies are needed to make a definitive diagnosis?
3. What diseases should be treated with differential diagnosis?
4. Treatment plan

Task 9. PC-2

A 48-year-old patient complained of the presence of rashes in the oral cavity and pain.

According to the patient, rashes appear periodically after a cold and begin with the oral mucosa with paresthesia, then rashes in the idea of bubbles spread to the oral mucosa, palms and soles.

During examination, the process is common. On the oral mucosa, it is represented by erosions of bright pink color of rounded shape up to 2 cm, on the palms and soles by foci of bright edematous erythema of pink color of rounded shape up to 2 cm. The "target" symptom is positive.

1. A presumptive diagnosis.
2. What studies are necessary to make a definitive diagnosis?
3. With which diseases should differential diagnosis be carried out?
4. Treatment plan

Task 10 PC-2

A 2-year-old patient complained of rashes and itching. According to the mother, the first rashes at the age of 4 months on the cheeks were independently applied topical GCS with a positive effect. The appearance of rashes is associated with the fact that mom ate a banana while breastfeeding. In the future, the process proceeded with exacerbations in winter and remissions. The real aggravation is within 2 weeks after the trip to the sea.

On examination, the process is limited with localization in the cheeks, represented by pink erythema foci with relatively clear boundaries up to 5 cm in size and a slight peeling on the surface, the entire skin is dry.

1. A presumptive diagnosis.
2. What studies are necessary to make a definitive diagnosis?
3. With which diseases should differential diagnosis be carried out?
4. Treatment plan

Task 11 PC-2

The patient, a 4-year-old girl, complained of difficulty breathing. The symptoms appeared 3 weeks ago after severe stress. According to the mother, there is a night cough of a barking nature, which passes after taking warm milk with honey.

The hereditary history is not burdened. Allergic reactions to food and medicines have not been noted before.

When examining the respiratory function within the normal range.

1. A presumptive diagnosis.
2. What studies are needed to make a definitive diagnosis?
3. What diseases should be treated with differential diagnosis?
4. Treatment plan

Task 12 PC-2

A 12-year-old patient complained of nasal congestion, lacrimation, rash, itching.

He has been ill since early childhood. The first manifestations of the skin process at the age of 6 months. Further, the process proceeded with exacerbations and remissions in the summer. At the age of 4, in the spring, he began to notice nasal congestion and lacrimation for 2-3 weeks. When taking antihistamines, he notes an improvement.

On examination, the skin process is widespread with localization in the neck, elbow and knee bends, represented by foci of lichenization up to 10 cm.

The conjunctiva is hyperemic, the eyelids are edematous. The nasal mucosa is hyperemic and edematous.

1. A presumptive diagnosis.
2. What studies are necessary to make a definitive diagnosis?
3. With which diseases should differential diagnosis be carried out?
4. Treatment plan

Task 13 PC-2

A 44-year-old patient complained about the presence of rashes on the back of the neck. According to the patient, the rash has existed for 3 years. The appearance of the rash coincided with a stressful situation in the patient's life. He denies the presence of allergic reactions and diathesis in childhood.

UAC and OAM data without pathologically significant changes.

On examination, the process is limited with localization on the back of the neck. It is represented by an irregularly shaped lichenization hearth, measuring about 10 cm in diameter. There are numerous scratches on the surface of the lesion, covered with hemorrhagic crusts, peeling of white color.

Dermographism in the hearth is white

1. Assume a probable diagnosis
2. Justify the presumed diagnosis
3. Perform a differential diagnosis
4. Draw up and justify the patient's treatment plan

Task 14 PC-2

A 30-year-old patient complained of rashes on the palms and soles, itching. The rash appeared 3 days ago, after an episode of herpes simplex on the red border of the lips. First, rashes appeared on the palms, then on the soles, and discomfort in the oral cavity. I used NSAIDs on my own without effect. On examination, the process is common with localization on the palms, soles. It is represented by rounded edematous spots with clear borders of bright pink color about 1 cm in diameter. In the center of the elements there is a small bubble with serous contents, the elements resemble a target. There are several oval-shaped erosions on the oral mucosa about 1 cm in diameter. There are brown hemorrhagic crusts on the red border of the lips.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 15 PC-2

An 18-year-old patient complained of soreness and swelling of the skin in the eyebrow area. According to the patient, she carried out home eyebrow coloring. I bought the paint at the hardware store.

On examination, the skin in the eyebrow area is strongly edematous, hyperemic, and there are bubbles with serous contents on the surface.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 16 PC-2

A 36-year-old patient, a surgeon, complained of rashes and itching in the area of the hands.

According to the patient, such rashes appear within the last 2 months. The situation improves significantly on weekends and after taking antihistamines.

On examination, the spots on the back of the hands are bright pink, edematous with a tendency to vesiculation.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 17 PC-2

A 20-year-old patient complained of episodes of difficulty breathing, coughing at night, and spasms when inhaling pungent odors.

She has been ill for a year. After a cold that occurred with prolonged bronchitis. The mother and grandmother were diagnosed with COPD.

On examination, breathing is harsh, dry wheezing in the lungs.

1. Specify the intended diagnosis

2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 18 PC-2

A 50-year-old patient complained of rashes and itching. Rashes during the day after visiting the dentist.

There are numerous bright pink spots on the skin of the trunk with a tendency to merge. During the examination, the development of lip edema and initial signs of difficulty breathing, shortness of breath were noted.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 19 PC-2

The patient is a 5-year-old boy. According to the parents, the rash on the trunk appeared a few hours ago, along with a slight difficulty breathing, which was mistaken for a cold and given cough medicine. Previously, Quincke's edema developed on similar drugs.

On examination, the process is common with localization on the trunk and limbs, represented by blisters on a hyperemic background, lips and nose are swollen, breathing is difficult.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

Task 20 PC-2

A 30-year-old patient was hospitalized in a serious condition and unconscious. According to relatives, the changes occurred after self-treatment of a cold with ceftriaxone.

Breathing is difficult, pulse is rapid, thready, consciousness is absent. On the skin of the trunk, numerous thin-walled blisters up to 15 cm in diameter on the face and limbs, erosion, Nikolsky's symptom is positive.

1. Specify the intended diagnosis
2. What laboratory diagnostic tests should be prescribed to the patient
3. Perform a differential diagnosis of this condition
4. Determine the patient's treatment plan

5.1.2 Model assignments (assessment tool - Tasks) to assess the development of the competency ИК-9:

Task 1.

A 43-year-old patient complained of damage to the mucous membrane of the mouth and skin of the hands, accompanied by constant itching during the day. Notes the appearance of new elements in the last few days.

These symptoms appeared about 3 weeks after appendectomy, first at the site of the postoperative scar. She herself associates the appearance of rashes with stress. She is registered with a therapist for gastrointestinal diseases and type 2 diabetes mellitus.

Dermatological status: a monomorphic rash is detected on the skin of the flexor surfaces of the wrist joints and in the lumbar skin area. The primary morphological element is a flat papule with an indentation in the center of a polygonal shape measuring from 0.5 to 1 cm in diameter, purple-red in color with a waxy sheen, and a dense consistency. When treating papules with petroleum jelly oil, whitish-opalescent thin lines intersecting in the form of a grid are determined on their surface. A positive isomorphic reaction is revealed on the anterior surface of the shins. On the mucous membrane of the oral cavity (along the line of closure of the teeth), small multiple papules are detected, visually resembling fern leaves.

1. Suggest the most likely diagnosis (CPL)
2. Justify your diagnosis (clinic)
3. Draw up and justify a plan for additional examination of the patient (histological examination)

Task 2

A 19-year-old female student turned to a dermatologist with complaints of rashes on the skin of the body, accompanied by slight itching.

Anamnesis: the first signs of the disease appeared 1.5 years ago after suffering from acute respiratory viral infections. After a while, they turned pale, acquired a brownish-bluish hue. Subjectively, they didn't bother, but they didn't disappear at all. 2 weeks ago, I got the flu and the elements became bright again, protruding above the surrounding skin, itching appeared again. I tried to be treated with baby cream on my own, with no effect.

Dermatological status: there are 2 pinkish-cyanotic spots on the skin of the upper third of the back, rounded in shape, with clear borders, one 4 cm, the other 6 cm in diameter. The peripheral zone of the elements is more brightly colored and swollen.

General blood test: slight increase in monocytes and ESR.

1. Suggest the most likely diagnosis and prognosis (fixed erythema)
2. Justify your diagnosis (clinic)
3. What is the treatment plan?(withdrawal of NSAIDs)
4. What measures should be taken to prevent relapses? (do not take NSAIDs)

Task 3

A 45-year-old patient, an accountant, contacted a dermatologist for an appointment about a sudden feeling of ill health, muscle pain, painful urination and rashes in the upper, lower extremities, and oral mucosa.

Anamnesis: I consulted a psychiatrist about depression and some time ago I started taking sedatives prescribed by a doctor.

Objective status: temperature 37.7 ° C, polymorphic rashes in the form of purplish-red spots with a bluish tinge, papules, blisters, target-shaped foci on the skin of the distal areas of the upper and lower extremities,

sharply painful erosions on the oral mucosa, covered with grayish fibrinous plaque, thick brownish-brown hemorrhagic crusts on the red border of the lips.

Laboratory examination results: anemia, lymphopenia.

1. Suggest the most likely diagnosis (erythema multiforme)
2. Justify your diagnosis (clinic)
3. Draw up and justify a plan for additional examination of the patient to confirm the diagnosis (ESR, eosinophils in the blood)
4. Make a therapy plan (systemic GCS)

Task 4

A boy of 2 months old, from the age of 3 months, rashes on the skin of the face and upper extremities periodically appear, itching of the skin is bothering, especially with increased sweating

The child's father suffers from bronchial asthma, exacerbations are largely associated with nutritional factors, the duration of remissions is 2-3 months, and the frequency of exacerbations is 3-4 times a year.

Dermatological status: multiple excoriations, erythematous-squamous rashes, papules, vesicles and weeping on the cheeks, forehead, on the extensor surfaces of the upper extremities, accompanied by intense itching, swelling, weeping, red dermographism, the initial manifestations of the disease were also localized on the extensor and flexor surfaces of the extremities.

Laboratory examination: blood eosinophilia

1. Suggest the most likely diagnosis and prognosis (BP)
2. Justify your diagnosis (clinic, medical history)
3. Make a possible examination plan (UAC, allergological tests)

4. Identify and justify the tactics of patient care (emollients, topical GCS)

Task 5

A 63-year-old patient turned to an optometrist for redness, peeling and mild itching of the eyelid skin.

Anamnesis: the patient is being observed by an optometrist with a diagnosis of glaucoma of the right eye and constantly uses eye drops as prescribed by a doctor, but the rash has appeared only in the last 3 weeks.

Dermatological status: the skin of the eyelids is swollen and hyperemic, the boundaries of the foci are indistinct, small scales are visible on the surface of the elements, the mucous membrane of the eyeball is hyperemic, there is an injection of scleral vessels.

1. Suggest the most likely diagnosis (contact dermatitis)
2. Justify your diagnosis. (clinic, medical history)
3. What additional examination methods should be performed to confirm the diagnosis (allergological tests)
4. Make a treatment plan (topical calcineurin inhibitors)

Task 6

The patient is 20 years old, hospitalized in a dermatological hospital for a disease that she has been suffering from since early childhood. According to her, her maternal grandmother had a similar process, but there were significantly fewer skin manifestations.

I am worried about painful itching, which increases after emotional experiences. The duration of remissions is 2-3 months, the frequency of exacerbation is 3-4 times a year.

Dermatological status: the skin is dry, the process is widespread, symmetrical, localized on the skin of the face, trunk, upper and lower extremities, with a predominant lesion of the skin of the elbow and knee bends, neck, perioral and periorbital localization of the process. There is marked hyperpigmentation around the eyes. White dermographism in the foci.

The affected area is represented by foci of congestive erythema, multiple papular elements, and lichenization. Multiple excoriations are visible throughout the skin

1. Assume the most likely diagnosis and prognosis (BP)
2. Justify your diagnosis (clinic, medical history)
3. The tactics of therapy of this patient (emollients, sedatives, calcineurin inhibitors)
4. Specify side effects when prescribing systemic corticosteroid therapy and methods of their correction (atrophy)

Task 7

A 35-year-old patient went to a dermatologist for excruciating itching for 2 weeks, mostly at night. He notes that he was on a business trip a month ago, there were no skin problems. He suspects an allergic reaction to fruits imported from tropical countries, as his wife also developed itching a few days ago.

Dermatological status: the process is widespread, symmetrical, with localization in the area of the skin of the hands and the lower third of the abdomen, represented by multiple follicular papules, non-inflammatory small vesicles, combs and bloody crusts disseminated throughout the skin, slightly raised multiple curved lines of dirty gray color, 5-7 mm long on the skin of the abdomen.

1. Suggest the most likely diagnosis (scabies)
2. Justify your diagnosis. (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (skin scraping for the presence of a tick)
4. Specify the general principles of differential diagnosis (АД)

Task 8

The patient is 48 years old and has nodules on the front and side surfaces of her lower legs. The first elements appeared 2.5 years ago against the background of an exacerbation of rheumatoid arthritis. Against the background of treatment of the underlying disease, individual nodes regressed, but at the same time new ones appeared. Exacerbations are mainly in winter and autumn.

Objectively: on both shins, mainly on the front and side surfaces, there are several bluish-pink, dense nodes, the size of a walnut. The lower legs are edematous.

1. Suggest the most likely diagnosis (erythema nodosum)
2. Justify your diagnosis (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (UAC, rheumatoid factor, C-reactive protein)
4. Prescribe treatment (AB, systemic GCS)

Task 9

A 44-year-old patient complained of rashes on the skin of his right hand, not accompanied by subjective sensations. He considers himself ill for two months. It is known that 3 weeks before the appearance of the rash, he was on a business trip to South America, his profession was a florist.

Two months ago, the first element appeared on the back of the right hand, it was not accompanied by subjective sensations. In the last 2 weeks, the rash has spread to the right forearm.

Dermatological status: monomorphic rash on the skin of the back of the right hand and on the skin of the extensor surface of the forearm. On the skin of the back surface of the hand, the element is represented by an ulcer on a dense base with uneven undercut edges, separable ulcers of a serous nature. At a distance of 5 cm from the ulcer on the forearm, there are 2 nodes up to 4 cm in diameter, dark red in color with a bluish tinge, soldered to the surrounding tissues. The severity of lymphangiitis is palpated between the elements

1. Suggest the most likely diagnosis (immunosuppression)
2. Justify your diagnosis (the presence of deep mycosis)
3. Draw up and justify a patient's examination plan to confirm the diagnosis (biopsy)

Task 10

Patient K., 7 years old, complains of sore throat, cough; body temperature 38 °C. The district pediatrician diagnosed acute bronchitis, prescribed penicillin antibiotics and a mucolytic agent. My health improved during therapy. On the 7th day of treatment, body temperature rose again to 39 °C, weakness, sore throat, muscles and joints, skin rashes accompanied by itching and burning.

On examination, the skin of the extensor surfaces of the forearms has purplish erythema with a bluish tinge, blisters up to 6 cm in diameter, with serous contents; erosions with hemorrhagic crusts on the surface on the red border of the lips, multiple erosions with a gray coating on the mucous membrane of the cheeks and gums, bordered by fragments of epithelium. BH 20 per minute.

1. Suggest the most likely diagnosis (toxidermy)
2. Justify your diagnosis. (clinic, medical history)
3. Name the general principles of treatment of this patient at the pre-hospital stage. (systemic corticosteroids, antihistamines)

Task 11

A 57-year-old patient complained of occasional itchy skin attacks in the lower corner of the right shoulder blade for 6 years. The patient finds it difficult to name any causes of skin itching. Periodically, along with itching, there is a tingling sensation. She also complains of increased sensitivity in this area, which she feels when putting on clothes.

Previously, she was observed by a dermatologist, treatment was prescribed, chloropyramine hydrochloride orally for 10 days and topically methylprednisolone aceponate for 14 days, treatment without effect.

On examination: a focus of hyperpigmentation with indistinct borders medially to the right scapula at the level of T2-T6 dermatomes, single excoriations on the surface. Pronounced hyperesthesia in the focus is determined

1. Suggest the most likely diagnosis (hornic simple contact dermatitis)
2. Justify your diagnosis (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient. (consultation with a neurologist)

Task 12

A woman with a child of 1 year and 3 months old went to a dermatovenerologist with complaints that the child had rashes in the area of the hands and feet, around the mouth, as well as in the anal area, which last about a month, and new ones appear. Throughout this time, the child suffers from diarrhea.

Also, according to the mother, it became known that 3 months ago she stopped breastfeeding.

Dermatological status: erythematous pink scaly plaques with pustular and vesiculobullous elements, crusts are detected in the distal extremities, as well as in the periorific and anogenital areas.

There are Boreal furrows on the nail plates.

There is alopecia on the scalp.

1. Suggest the most likely diagnosis. (primary immunodeficiency)
2. Justify your diagnosis (medical history)
3. Draw up and justify a plan for additional examination of the patient (UAC, protein and globulin fractions)
4. What is the basis of the treatment of this category of patients? Is there a need for laboratory monitoring? Possible dosages and conditions for their correction? (replacement therapy)

Task 13

A 35-year-old patient complained of skin lesions on the extensor surfaces of the arms and legs, shoulders, sacrum, buttocks, accompanied by intense itching and burning. It was also noted that as the rashes disappear in some areas of the body, new elements appear in other places.

These symptoms appeared four weeks ago, the patient does not notice a tendency to decrease the number of rashes.

On the eve of the rash, there was a slight increase in body temperature, general malaise, headache, dyspeptic symptoms. The woman also noted that similar rashes were noted about 3-4 months ago, but they regressed independently within three weeks.

Dermatological status: on the skin of the extensor surfaces of the arms and legs, shoulders, sacrum, buttocks, polymorphic elements (vesicles, blisters, pustules) are herpetiformly grouped (some of them are located on an unchanged, some on an edematous erythematous background, there are erosions and crusts that repeat the shape of the preceding vesicular element. The bubble cover is dense. The contents of some bubbles are transparent, some are cloudy. Some of the elements are in the epithelialization stage, blisters are detected along the periphery of these areas.

The rashes have a symmetrical, generalized, herpetiform character.

There are areas of hyperpigmentation in place of resolved elements.

1. Suggest the most likely diagnosis (Duhring's dermatosis)
2. Justify your diagnosis (clinic, dyspepsia)
3. Draw up and justify a plan for additional examination of the patient (smear print for eosinophils)

Task 14

A woman with a 1.5-year-old child came to the reception complaining that the child had peeling of the skin on the front surface of the shins, forearms, and buttocks. She also noticed changes in the skin of her palms and soles.

This peeling appeared at the age of 7 months, and significant improvement was noted in the summer.

The child's grandfather has similar rashes.

In addition, the child suffers from allergic diseases (urticaria, vasomotor rhinitis). It does not tolerate a number of medications.

Dermatological status: there are thin, small scales with wavy edges on the extensor surfaces of the extremities, their color varies from dark gray to brown. The scales on the skin of the shins are the darkest, polygonal in shape, tightly attached.

Follicular hyperkeratosis is observed on the skin of the thighs, forearms, and buttocks in the form of small, dry nodules at the mouths of the hair follicles. Palpation revealed a symptom of << grater >>.

The palms and soles have an accentuated pattern, increased folding (senile appearance).

The nail plates are brittle, crumble from the free edge

1. Suggest the most likely diagnosis (ichthyosis)
2. Draw up and justify a plan for additional examination of the patient (consultation with a geneticist)

Task 15

A young woman with a 5-year-old child turned to a dermatologist. It was difficult to explain her complaints.

The patient dumped a whole bunch of laboratory forms and medical reports on the table and asked to sort them out. There doesn't seem to be a specific complaint, but I'm worried about scratching and itching.

Objectively: the presence of separate erosions (psoriatic acne), mainly on the face, upper third of the back and arms.

During the conversation, the presence of scarring in the wrist area, usually left after traumatic effects, was noted.

The patient answered very confidently – these are the manifestations of her illness, the causes of which no one can determine, countless tests and consultations of various specialists are prescribed. Then, the patient begins to delve into the results of the examinations again, looking for the causes of her illness in the deviation of the internal organs.

Objectively: mottled atrophic rash on the skin of the extremities, chest and back. The rash is in the form of rounded atrophic spots, with follicular depressions in the center of some of them. Against this background, there are fresh excoriations with the formation of hemorrhagic crusts in the center. The rash resembles the skin of a leopard.

Laboratory examination results (general blood test, general urine test, biochemical blood test) without pathology.

A diagnosis of pruritus was established and the patient was prescribed ketotifen 180 1 tablet 1 time a day for 10 days, fucorcin for erosive defects and advantan, repeated administration after 2 weeks

1. Suggest the most likely diagnosis. (neurotic excoriation)
2. Draw up and justify a plan for additional examination of the patient (differential diagnosis with blood pressure and scabies)

Task 16

A 7-year-old boy developed grouped vesicles on a hyperemic base on the skin of his hand about a year ago. He and his mother went to the pediatrician at their place of residence, who prescribed antibiotics inside, and diagnosed impetigo. Within a week after the start of treatment, the rash resolved. Over the past year, there have been four similar relapses of the disease with the same localization. In each case, the treatment was limited to the use of antibacterial and antifungal agents. The last relapse was 4 days ago. This time, the pediatrician referred the boy to a dermatologist. I feel good, there are no complaints. He does not take any medications.

Physical examination:

The basic physiological parameters are normal. The mucous membranes are free of rashes. There are grouped vesicles from 3-5 mm in diameter and pustules of a similar size on the skin of the left elbow joint.

Additional studies: general analysis of blood and urine without pathology. Seeding the contents for bacteria and fungi revealed no growth.

1. Suggest the most likely diagnosis (herpes on the background of immunosuppression)
2. Justify your diagnosis (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (search for the cause of decreased immunity)

Task 17

A 21-year-old soldier was receiving antibiotics for a sore throat. Two days after the start of treatment, red spots appeared, first on the extremities, then vesicles and blisters appeared on the lips and oral mucosa. The patient was treated with this drug 5 years ago, without side effects. When contacting the doctor, a diagnosis of allergic contact was established. Outpatient treatment was prescribed: the antibacterial drug was replaced by another, claritin antihistamines 1 tablet 1 time a day for 7 days, mouthwash with Chamomile infusion and intramuscular injections of sodium thiosulfate. The effect of therapy is without positive dynamics.

Physical examination:

Temperature-39 degrees, pulse-120/min, BH -30/min, blood pressure 120/80 mmHg.

There are multiple round bluish-red spots on the skin, exudative elements in the center of some elements, and cyanotic central part of some elements. There are multiple vesicles and blisters on the lips, and erosions on the oral mucosa.

Additional studies:

General blood analysis, biochemic parameters of the liver and kidneys, chest X-ray, general urinalysis - without pathology.

1. Suggest the most likely diagnosis (toxidermy)
2. Justify your diagnosis. (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (systemic GCS)

Task 18

The girl, who is now 13 years old, had a rash on her face 2 years ago in the summer. The rash progressed slowly. Over time, pinpoint atrophic scars appeared on the skin in the foci. Treatment with topical corticosteroids, antifungal drugs (including griseofulvin), and antibiotics proved ineffective. There are no other complaints. The family history is burdened by maternal systemic lupus erythematosus.

Physical examination:

There are peeling plaques on the skin of the cheeks, nose, chin in the temporal region and the central part of the forehead. There are multiple foci of atrophy on the background of plaques. Peeling on the surface of the elements in the form of poorly removable scales. Erythema of the back surface of the hands with resolution in the area of the proximal interphalangeal joints. Diffuse thinning of hair on the head, in the pubic area-short broken hair. Nails: the capillaries of the posterior nail rollers are not changed.

Additional research:

A general blood test, biochemical parameters of the liver and kidneys, chest X-ray, general urinalysis - without pathology. Antinuclear AT and AT to DNA have not been identified. A biopsy has not been performed.

1. Suggest the most likely diagnosis (lupus erythematosus)
2. Justify your diagnosis (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (ANA, ANCA)

Task 19

An obese 70-year-old man has been regularly taking thiazide diuretics for hypertension for the past 20 years. Two weeks ago, he developed large strained blisters on his legs. Then the rash appeared on his hands. I feel good. The patient denies changing the drug regimen and taking new medications.

Objectively: weight 125 kg, a lot of tense and flaccid blisters with a diameter of 5-15 mm, on unchanged skin and on the background of erythema. Nikolsky's symptom is negative. After the bubbles burst, there is erosion and crusting. The content is transparent. The mucous membranes are not affected, the lymph nodes are not enlarged, and the gastrointestinal tract is without pathology.

The results of the laboratory examination (general blood test, general urine test, biochemical blood test) are without pathology, only increased blood glucose.

A diagnosis of pemphigus was made and treatment with systemic GCS was prescribed, after which the patient's condition improved somewhat, most of the elements regressed, lifelong intake of the drug in a maintenance dose and observation by a dermatologist at the place of residence were recommended.

1. Suggest the most likely diagnosis (pemphigus)
2. Justify your diagnosis.(clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient (systemic corticosteroids, methotrexate)

Task 20

A 22-year-old young man was taking amidopyrine and sulfadimethoxine on his own due to a cold. He began to worry about headaches, general weakness, sore throat, muscles and joints. A few days after taking the medications, rashes appeared on the skin of the trunk, the mucous membrane of the mouth and the red border of the lips. Rashes on the back of the hands and feet, extensor surfaces of the forearms and lower leg, are represented as spots or flat papules of pink - red color, 2-3 cm in size. The central part of the elements slightly sinks and acquires a bluish hue, the peripheral part retains a pink-red color. There are blisters with serous contents, single elements with hemorrhagic contents. It is bothered by burning and moderate itching. Nikolsky's symptom is negative. All laboratory tests are without pathology (slight increase in ESR).

The patient went to the polyclinic at his place of residence, was diagnosed with toxicoderma, prescribed antihistamines, hyposensitizing drugs, topical corticosteroids externally, antiseptics. There is some positive dynamics.

1. Suggest the most likely diagnosis. (toxidermy)
2. Justify your diagnosis (clinic, medical history)
3. Draw up and justify a plan for additional examination of the patient
4. What kind of therapy is indicated? (intensive GCS therapy and replacement of fluid loss)

Assessment criteria (assessment tool — Tasks)

Grade	Assessment criteria
outstanding	All competencies (parts of competencies) that the discipline is aimed at forming are formed at a level not lower than "excellent", while at least one competence is formed at the "excellent"

Grade	Assessment criteria
	level
excellent	All competencies (parts of competencies) that the discipline is aimed at forming are formed at a level not lower than "excellent", while at least one competence is formed at the "excellent" level
very good	All competencies (parts of competencies) that the discipline is aimed at forming are formed at a level not lower than "very good", while at least one competence is formed at the "very good" level
good	All competencies (parts of competencies) that the discipline is aimed at forming are formed at a level not lower than "good", while at least one competence is formed at the "good" level
satisfactory	All competencies (parts of competencies) that the discipline is aimed at forming are formed at a level not lower than "satisfactory", while at least one competence is formed at the "satisfactory" level
unsatisfactory	At least one competence has been formed at the "unsatisfactory" level.
poor	At least one competence is formed at the "bad" level.

5.1.3 Model assignments (assessment tool - Test) to assess the development of the competency ИК-2:

1.PC-2. Innate or specific immunity is

- A) hereditary
- B) artificial
- C) recreated
- D) unnatural

2. PC-2 Acquired immunity is formed

- A) only when meeting with an allergen
- B) at a natural meeting with an antigen
- C) only when vaccinated
- D) for allergies

3. PC-2 Vaccination is regarded as

- A) the result of an allergic reaction
- B) the result of immunosuppression
- C) a variant of acquired immunity
- D) a random event

4.PC-2 Immunity obtained as a result of deliberate immunization is called

- A) primary
- B) ephemeral
- C) painful
- D) post-vaccination

5.PC-2 Passive immunity is created as a result of

- A) Immunization
 - B) vertical transmission of antibodies
 - C) vaccinations
 - D) encounters with infection
6. PC-2 The immune system is represented in the body
- A) muscle tissue
 - B) hair
 - C) glands of external secretion
 - D) lymphoid tissue
7. PC-2 The main function of the immune system is
- A) specific protection against antigens
 - B) interaction with allergens
 - C) reduced reactivity of the body
 - D) sensitization
8. PC-2 Antigen is
- A) metal
 - B) the basis
 - C) protein
 - D) an inorganic compound
9. PK-2 Objects formed within the body itself due to structural changes in molecules during biodegradation, disruption of normal biosynthesis or genetic mutation of cells are called
- A) allergens
 - B) haptens
 - C) autoantigens
 - D) antigens
- 10,PC-2 The central organs of the immune system include
- A) lymph nodes
 - B) liver
 - C) the brain
 - D) bone marrow and thymus
11. PC-2 The main functional cells of the immune system are
- A) hepatocytes
 - B) sebocytes
 - C) lymphocytes
 - D) pericytes
12. PC-2 is a self-assembly process of the system in which active protein breakdown products are formed, which perform three important functions: cause membrane perforation and cell lysis, provide opsonization of microorganisms for their further phagocytosis and initiate the development of vascular inflammatory reactions called
- A) complement degradation
 - B) activation of the complement system
 - C) complement negation
 - D) utilization of the complement system
13. PC-2 Heat shock proteins are activated when
- A) decrease in temperature
 - B) at 0 degrees

C) when the temperature rises

D) does not depend on temperature

14. PC-2 Growth factors that regulate the proliferation, differentiation and function of blood cells, including cells of the immune system are called

A) lipokines

B) megakines

C) monokines

D) cytokines

15. PC-2 eicosanoids are metabolites

A) arachidonic acid

B) benzoic acid

C) sulfuric acid

D) grape acid

16. PC-2 Prostacyclin and thromboxane are included in the group

A) lymphocytes

B) antigens

C) prostaglandins

D) red blood cells

17. PC-2 The presence of C-reactive protein in the blood serum indicates

A) the presence of inflammation, injury, or antigen penetration

B) the absence of allergies

C) the presence of allergies

D) the presence of parasites

18. PC-2 Signs of inflammation include

A) pain, redness, fever, swelling, dysfunction

B) pain, redness, fever, swelling

C) redness, fever, swelling, dysfunction

D) pain, redness, fever, dysfunction

19. PK-2 The cause of the inflammatory reaction is called

A) anagen

B) catagen

C) phlogogen

D) telogen

20. PC-2 Acute inflammation is characterized by

A) long-term flow

B) rapid development and short course

C) sluggish flow

D) slow development

**5.1.4 Model assignments (assessment tool - Test) to assess the development of the competency
IIK-9:**

21. Alternative inflammation is characterized by

A) the predominance of proliferation

B) the predominance of damage phenomena

C) the predominance of exudation

D) the predominance of edema

22. Main phases of inflammation

A) alteration, exudation, proliferation

B) exudation , alteration, hibernation

C) proliferation, myelination, alteration

D) edema, proliferation

23. As a result of alteration, acute inflammation begins upon activation

A) cytochromes

B) mitochondria

C) interleukin 1

D) red blood cells

24. PC-2 Massive release of inflammatory mediators belongs to the phase

A) alterations

B) exudation

C) proliferation

D) degradation

25. Histamine causes

A) increased vascular permeability

B) decrease in vascular permeability

C) proliferation

D) necrosis

26. The arachidonic acid cascade system is started under the influence of

A) phospholipase A 2

B) red blood cells

C) interleukin 2

D) COG

27. PC-9 Tumor necrosis factor refers to

A) to lymphocytes

B) to platelets

C) to cytokines

D) to enzymes

28. PC-9 During exudation, the main clinical manifestations are due to

A) increased vascular permeability

B) decrease in vascular permeability

C) increased proliferation

D) growth of pathological tissue

29. PC-9 is the most characteristic for allergic inflammation

A) purulent exudate

B) serous exudate

C) hemorrhagic exudate

D) putrid exudate

30. PC-9 Purulent exudate contains a high concentration

- A) red blood cells
- B) lysosomes
- C) platelets
- D) leukocytes

31. PC-9 With a dense connection of the fibrinous film with the underlying tissues, it is said about

- A) diphtheria inflammation
- B) exudative inflammation
- C) purulent inflammation
- D) putrefactive inflammation

32. PC-9 Hemorrhagic exudate is characterized by a high content

- A) lymphocytes
- B) macrophages
- C) pericytes
- D) red blood cells

33. PC-9 Catarrhal exudate is usually secreted

- A) skin
- B) glands of internal secretion
- C) sebaceous glands
- D) mucous membranes

34. PC-9 The main function of macrophages is to

- A) the creation of edema
- B) phagocytosis
- C) the formation of exudate
- D) the formation of fibrin

35. PC-9 If the pathogen is not completely removed from the body, it can develop

- A) acute inflammation
- B) catarrhal inflammation
- C) copious acute purulent inflammation
- D) chronic inflammation

36. PC-9 When the external signs are adequate to the effect of the trigger factor, inflammation is called

- A) hyperergic
- B) hypoallergenic
- C) normergic
- D) atrophic

37. PC-9 increased and perverted reactivity of the body to the action of substances of antigenic and non-antigenic origin is called

- A) allergies
- B) synergy
- C) anuria
- D) normergy

38. PC-9 Allergen is

- A) the basis
- B) protein
- C) acid
- D) a carbohydrate

39. PC-9 Proteins that are well isolated from immunologically competent cells of the body are called
- A) natural auto-allergens
 - B) external allergens
 - C) haptens
 - D) auto-allergens
40. PC-9 Lymphocytes suppressing allergic reactions are called
- A) T-killers
 - B) T-helpers
 - C) T-suppressors
 - D) t-aggressors
41. PC-9 is the main function of B lymphocytes
- A) formation of antibodies
 - B) antigen lysis
 - C) activation of macrophages
 - D) suppression of inflammation
42. PC-9 Antigen-presenting function is mainly carried out
- A) red blood cells
 - B) T-suppressors
 - C) platelets
 - D) macrophages
43. PC-9 Immediate type reactions develop
- A) after a few hours
 - B) after a few minutes
 - C) in a few days
 - D) in a few weeks
44. PC-9 Type 1 hypersensitivity includes
- A) humoral cytotoxic reactions
 - B) anaphylactic reactions
 - C) reactions mediated by immune complexes
 - D) cell-mediated hypersensitivity
45. PC-9 Type 2 hypersensitivity includes
- A) humoral cytotoxic reactions
 - B) anaphylactic reactions
 - C) reactions mediated by immune complexes
 - D) cell-mediated hypersensitivity
46. PC-9 Type 3 hypersensitivity includes
- A) humoral cytotoxic reactions
 - B) anaphylactic reactions
 - C) reactions mediated by immune complexes
 - D) cell-mediated hypersensitivity
47. PC-9 hypersensitivity of 4 types includes
- A) humoral cytotoxic reactions
 - B) anaphylactic reactions
 - C) reactions mediated by immune complexes
 - D) cell-mediated hypersensitivity

48. PC-9 Type 3 hypersensitivity is caused by

- A) the formation of immune complexes
- B) the formation of allergens
- C) platelet aggregation
- D) protein coagulation

Assessment criteria (assessment tool — Test)

Grade	Assessment criteria
outstanding	96-100% correct answers
excellent	91-95% correct answers
very good	81-90% correct answers
good	71-80% correct answers
satisfactory	51-70% correct answers
unsatisfactory	31-50% correct answers
poor	0-49% correct answers

5.2. Description of scales for assessing learning outcomes in the discipline during interim certification

Шкала оценивания сформированности компетенций

Уровень сформированности компетенций (индикатора достижения компетенций)	плохо	неудовлетворительно	удовлетворительно	хорошо	очень хорошо	отлично	превосходно
	не зачтено			зачтено			
<u>Знания</u>	Отсутствие знаний теоретического материала. Невозможность оценить полноту знаний вследствие отказа обучающегося от ответа	Уровень знаний ниже минимальных требований. Имели место грубые ошибки	Минимально допустимый уровень знаний. Допущено много негрубых ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Допущено несколько негрубых ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Допущено несколько несущественных ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Ошибок нет.	Уровень знаний в объеме, превышающем программу подготовки.
<u>Умения</u>	Отсутствие минимальных умений. Невозможность	При решении стандартных задач не продемонстрир	Продемонстрированы основные умения.	Продемонстрированы все основные	Продемонстрированы все основные	Продемонстрированы все основные	Продемонстрированы все основные умения.

	оценить наличие умений вследствие отказа обучающегося от ответа	ованы основные умения. Имели место грубые ошибки	Решены типовые задачи с негрубыми ошибками. Выполнены все задания, но не в полном объеме	умения. Решены все основные задачи с негрубыми ошибками. Выполнены все задания в полном объеме, но некоторые с недочетами	умения. Решены все основные задачи. Выполнены все задания в полном объеме, но некоторые с недочетами	умения. Решены все основные задачи с отдельными недочетами, выполнены все задания в полном объеме	Решены все основные задачи. Выполнены все задания, в полном объеме без недочетов
<u>Навыки</u>	Отсутствие базовых навыков. Невозможность оценить наличие навыков вследствие отказа обучающегося от ответа	При решении стандартных задач не продемонстрированы базовые навыки. Имели место грубые ошибки	Имеется минимальный набор навыков для решения стандартных задач с некоторыми недочетами	Продемонстрированы базовые навыки при решении стандартных задач с некоторыми недочетами	Продемонстрированы базовые навыки при решении стандартных задач без ошибок и недочетов	Продемонстрированы навыки при решении нестандартных задач без ошибок и недочетов	Продемонстрирован творческий подход к решению нестандартных задач

Scale of assessment for interim certification

Grade		Assessment criteria
pass	outstanding	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "outstanding", the knowledge and skills for the relevant competencies have been demonstrated at a level higher than the one set out in the programme.
	excellent	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "excellent",
	very good	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "very good",
	good	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "good",
	satisfactory	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "satisfactory", with at least one competency developed at the "satisfactory" level.
fail	unsatisfactory	At least one competency has been developed at the "unsatisfactory" level.
	poor	At least one competency has been developed at the "poor" level.

5.3 Model control assignments or other materials required to assess learning outcomes during the interim certification with the criteria for their assessment:

5.3.1 Model assignments (assessment tool - Assignments) to assess the development of the competency ПК-2

1. Organization of outpatient specialized care for patients with allergic diseases. PC-2
2. Organization of inpatient specialized care for patients with allergic diseases. PC-2
3. Fundamentals of medical and social expertise and rehabilitation for patients with allergic diseases. PC-2
4. The physiological basis of the body's defense systems. Determination of immunity. The concept of the immune system PK-2
5. Organs and cells of the immune system. Functional organization of the PC-2 immune system
6. Antigens, types of antigens: full-fledged antigens, haptens. Antigenicity and immunogenicity of PK-2
7. Composition and functions of the immune system. Immunocompetent cells and their role in the PC-2 immune response
8. Mechanisms of induction and regulation of the PC-2 immune response
9. Effector mechanisms of the immune response. Specific antigen recognition, structure of antigen-recognizing receptors of T- and B-lymphocytes PK-2
10. Modern ideas about allergies; definition of the concept of "allergy", the relationship of allergy and immunity PK-2
11. Allergens and their classification. Classifications and pathogenesis of allergic reactions PK-2
12. Allergic reactions of the immediate type PK-2
13. Target cells of the 1st and 2nd order; early and late phase of the PK-2 reaction
14. Allergic inflammation PK-2
15. Delayed allergic reactions (T-dependent), clinical manifestations, pathogenesis of diseases, the role of cytokines PK-2
16. The role of genetic factors in the formation of allergies PK-2
17. Specific diagnosis of allergic diseases PK-2
18. Specific diagnosis of allergic diseases PK-2
19. Skin allergy tests with non-infectious allergens (PR tests, scarification skin tests, intradermal allergic tests) and infectious allergens. Choosing the skin testing method PC
20. General characteristics of autoimmune diseases

5.3.2 Model assignments (assessment tool - Assignments) to assess the development of the competency ПК-9

1. Characteristics of allergy tests
2. Skin tests
3. Intradermal tests
4. Provocative tests
5. The concept of primary immunodeficiency
6. the concept of secondary immunodeficiency
7. types of vaccines

8. opportunistic infections
9. Primary immunodeficiency clinic
- 10 Secondary immunodeficiency clinic
11. immunodeficiency therapy
12. treatment of bronchial asthma
13. physical research methods for asthma
14. immunotherapy of pollinosis
15. prevention of hay fever
16. prevention of immunodeficiency
17. Replacement therapy for immunodeficiency
18. Traffic police, causes of development
19. allergic reactions of type 3 and 4
20. Emergency treatment for anaphylaxis

Assessment criteria (assessment tool — Assignments)

Grade	Assessment criteria
pass	The student attends classes well, participates in discussions in the classroom, forms questions, expresses his point of view in discussions. He answered the questions of the test.
fail	Frequent absences from classes, not active in classes. Did not answer the question of the test

6. Учебно-методическое и информационное обеспечение дисциплины (модуля)

Основная литература:

1. Клиническая иммунология и аллергология с основами общей иммунологии / Ковальчук Л.В., Ганковская Л.В., Мешкова Р.Я. - Москва : ГЭОТАР-Медиа, 2014., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=646772&idb=0>.
2. Аллергология и иммунология : практическое руководство. - Москва : ГЭОТАР-Медиа, 2014. - 656 с. - ISBN ISBN 978-5-9704-2830-6., <https://e-lib.unn.ru/MegaPro/UserEntry?>

Action=FindDocs&ids=734339&idb=0.

3. Макеева Ксения Сергеевна (Гомельский государственный медицинский университет).
Клиническая аллергология для обучающихся на английском языке (Clinical Allergology for Learners in English) : Учебное пособие / Гомельский государственный медицинский университет. - 1. - Москва : ООО "Научно-издательский центр ИНФРА-М", 2024. - 82 с. - (ЭБС). - Профессиональное образование. - ISBN 978-5-16-112683-7 (электр. издание)., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=917247&idb=0>.

Дополнительная литература:

1. Земсков Андрей Михайлович. Клиническая иммунология и аллергология : Учебник / Воронежский государственный медицинский университет им. Н.Н. Бурденко; Воронежский государственный медицинский университет им. Н.Н. Бурденко. - 1. - Москва : ООО "Научно-издательский центр ИНФРА-М", 2023. - 420 с. - (Высшее образование: Специалитет). - ВО - Специалитет. - ISBN 978-5-16-015737-5. - ISBN 978-5-16-108133-4., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=873402&idb=0>.

Программное обеспечение и Интернет-ресурсы (в соответствии с содержанием дисциплины):

ЭБС «Юрайт». Режим доступа: <http://biblio-online.ru>

ЭБС «Консультант студента». Режим доступа: <http://www.studentlibrary.ru> ЭБС «Лань». Режим доступа: <http://e.lanbook.com/>

ЭБС «Znaniy.com». Режим доступа: <http://www.znaniy.com>

Лицензионное ПО (операционная система Microsoft Windows, пакет прикладных программ Microsoft Office) и свободно распространяемое программное обеспечение.

7. Материально-техническое обеспечение дисциплины (модуля)

Учебные аудитории для проведения учебных занятий, предусмотренных образовательной программой, оснащены мультимедийным оборудованием (проектор, экран), техническими средствами обучения, компьютерами.

Помещения для самостоятельной работы обучающихся оснащены компьютерной техникой с возможностью подключения к сети "Интернет" и обеспечены доступом в электронную информационно-образовательную среду.

Программа составлена в соответствии с требованиями ФГОС ВО по направлению подготовки/специальности 31.05.01 - General Medicine.

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