## MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS EDUCATIONAL INSTITUTION

## BELARUSIAN STATE MEDICAL UNIVERSITY

Контрольный экземпляр 

## **DERMATOVENEROLOGY**

Curriculum of educational institution in the educational discipline for the specialty 1-79 01 01 «General Medicine»

**Sub-Residency «General Clinical Practice»** 

Curriculum is based on the educational program of educational institution in the educational discipline «Dermatovenereology» for the Sub-Residency «General Clinical Practice (for foreign citizens)», approved 11.08.2023, registration #УД-<u>1. 10/2324/уч. суб.</u>

## **COMPILER:**

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### RECOMMENDED FOR APPROVAL:

by the Department of Skin and Venereal Diseases of the Educational Institution «Belarusian State Medical University» (protocol # № 11 от 29.06.2023);

by the Scientific and Methodological Council of the Educational Institution «Belarusian State Medical University» (protocol # 7 of 10.08.2023)

## **EXPLANATORY NOTE**

«Dermatovenereology» is the educational discipline containing systematized scientific knowledge and techniques in the field of dermatology and venereology, studying the causes, mechanism of development, manifestations, diagnostics, treatment and prevention of skin diseases and sexually transmitted infections (STI).

The aim of teaching the discipline «Dermatovenereology» for the sub-residency «General Clinical Practice (for foreign citizens)» is to develop the students' academic, social and personal, occupational competences for aiding the patients with skin diseases and STI of native inhabitants of tropic countries or visitors who came to hot and humid climatic conditions.

The task of teaching the discipline is to provide the students with the scientific knowledge about etiology, pathogenesis, clinical manifestations of infectious skin diseases, chronic dermatoses and STI that are specific for native population and visitors of countries with hot humid climate and also skills and abilities that are required for:

examination of patients with skin diseases and STI;

interpretation of the results of clinical and laboratory investigation methods; diagnostics, treatment and prevention of skin diseases and STI.

Teaching and successful learning of the discipline «Dermatovenereology» for the sub-residency «General Clinical Practice (for foreign citizens)» is carried out on the basis of the knowledge and skills previously acquired by the students in the following disciplines:

Human anatomy. General morphologic description of human skin.

Histology, cytology, embryology. Embryogenesis of the skin. Normal histological structure of the skin

Normal physiology. Skin functions.

Pathological anatomy. Possible causes, trigger mechanisms and main manifestations of general pathologic processes. Acute and chronic inflammation. Pathomorphologic skin changes in various skin diseases.

Pathological physiology. Patterns of formation of inflammatory reactions.

Microbiology, virology, immunology. Microbiologic description of causative agents of infectious and parasitic skin diseases. Conception of immunity and allergy. General characteristics of cell-mediated and humoral immune reactions.

Pharmacology. Mechanisms of action of main groups of medicines. Drug formulations for external use.

Dermatovenereology. Principles of diagnostics and treatment of skin diseases and STI.

Propedeutics of internal diseases. Age-related anatomical and physiological peculiarities of organs and systems of human organism. Medical history and general methodology of patient's examination. Laboratory and instrumental methods of examination. Principles of designing of plan of diagnostic examination of patient. The process of diagnosing. Semiotics and syndromes of

affection of main systems and organs of humans. Methods of care of the patients and main nursing manipulations. International classification of diseases.

Internal diseases. Methodology of examination of patients with affection of internal organs. Etiology, pathogenesis, clinical manifestations of commonest diseases of respiratory, circulation, digestive, urinary organs and blood system. Diagnostics, semiotic analysis, differential diagnostics, methodology and medicines for treatment of internal organ diseases.

General surgery. Suppurative and inflammatory diseases of skin and subcutaneous fat.

Medical psychology. Principles of medical ethics. General models of interaction of doctors with patients. Moral aspects of disclosure of medical secrecy. Moral and legal problems of «doctor-patient system» interactions.

As a result of studying the discipline «Dermatovenereology» for the subresidency «General Clinical Practice (for foreign citizens)» the student should

## know:

principles of medical ethics and deontology;

primary and secondary skin lesions, their main pathomorphological features;

basic ideas about etiology, pathogenesis, clinical manifestations, methods of diagnostics and differential diagnostics, prevention and treatment of skin diseases and STI in countries wit hot humid climate;

### be able to:

identify the primary and secondary skin lesions;

carry out the complex examination of patient with skin diseases and STI;

design the plan of laboratory and instrumental examination of patients with skin diseases and STI;

interpret the results of examination;

formulate the diagnosis;

prescribe treatment in accordance with diagnosis, clinical type and severity of disease;

differentiate diseases with clinically close conditions;

assign preventive measures for skin diseases and STI that are specific for countries of hot climate;

arrange medical documents;

## master:

modern methods of examination of patients;

modes of diagnostics and differential diagnostics of skin diseases and sexually transmitted infections that are specific for countries with hot humid climate.

Total number of hours for the discipline study is 42 academic hours. Classroom hours according to the types of studies: practical classes - 28 hours; student independent work (self-study) - 14 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit.

Form of higher education is full-time.

## THEMATIC PLAN

Section (topic) name	Number of class hours	
	practical	
1. General principles of diagnostics and treatment of skin diseases and sexually transmitted infections	7	
2. Tropical and subcutaneous mycoses. Tropical pyodermas, tropical ulcers cutaneous gangrenes. Cutaneous helminthiases	7	
3. Leprosy. Leishmaniases. Cutaneous tuberculosis	7	
4. Tropical sexually transmitted infections. Endemic treponematoses	7	
Total hours	28	

## CONTENT OF THE EDUCATIONAL MATERIAL

## 1. General principles of diagnostics and treatment of skin diseases and sexually transmitted infections

Methodology of examination of dermatological patient. Primary skin lesions: macula (kinds of macules), papule, node, tubercle, wheal, vesicle, pustule, blister. The idea of exudative and proliferative primary lesions. Secondary skin lesions: scale, crust, erosion, ulcer, lichenification, scar, vegetation, excoriation, fissure. Pathomorphology of the skin: hyperkeratosis, parakeratosis, dyskeratosis, acanthosis, granulosis, spongiosis, vacuolar degeneration, ballooning degeneration, acantholysis. Chronic granulomatous inflammation. Principles of special examination in dermatology: diascopy, palpation, scraping, dermatoscopy. Microscopic and cultural examination in dermatology. Skin biopsy, indications. Main principles of dermatological treatment (general and topical treatment). Medical formulations for external use (ointment, cream, emulsion, solution, gel, lotion, spray). Indications for application. Methods of diagnostics and treatment of STI.

Obtaining the history and complains of patient, designing the plan of laboratory and instrumental examination of patients with skin diseases and suspected STI (syphilis, gonorrhea, chlamydiosis, trichomoniasis, ureamycoplasmosis). Interpretation of the results of laboratory and instrumental examination, formulating the diagnosis, planning of treatment.

# 2. Tropical and subcutaneous mycoses. Tropical pyodermas, tropical ulcers cutaneous gangrenes. Cutaneous helminthiases

Tropical mycoses. Pityriasis versicolor: peculiarities of clinical manifestations. Tinea imbricata: epidemiology, clinical manifestations, diagnostics, treatment. Shimbery: etiology, epidemiology, clinical manifestations, diagnostics, treatment. Tinea nigra: etiology, epidemiology, clinical manifestations, diagnostics, treatment. Tinea alba: etiology, epidemiology, clinical manifestations, diagnostics, treatment. Tinea flava: etiology, epidemiology, clinical manifestations, diagnostics, treatment. Piedra: etiology, predisposing factors, clinical course, diagnostics, treatment.

Subcutaneous mycoses. Classification. Coccidioidomycosis: causative agent, ways of transmission, clinical manifestations, diagnostics, differential diagnostics, treatment, prevention. Histoplasmosis: causative agent, clinical manifestations, laboratory diagnostics, treatment, prevention. Sporotrichosis: causative agent, ways of transmission, clinical course, manifestations, laboratory diagnostics, treatment. Eumycetoma; etiology, ways of contagion, clinical course, manifestations, laboratory diagnostics, treatment. Chromomycosis: causative agent, ways of transmission, clinical course, manifestations, laboratory diagnostics, treatment.

Tropical pyodermas. Pyosis of Manson: etiology, clinical manifestations, treatment. Acne-keloid: clinical manifestations, treatment. Tropical acne: etiology, clinical manifestations, treatment. Tropical vesicular acrodermatitis of Castellani and Chalmer: etiology, clinical manifestations, treatment. Tropical pyomiositis: clinical peculiarities, diagnostics, differentia diagnostics, treatment.

Tropical ulcers. True tropical ulcer: etiology, clinical manifestations, diagnostics, treatment. Tropicaloid ulcer: epidemiology, clinical manifestations, diagnostics, treatment. Desert ulcer: epidemiology, clinical manifestations, diagnostics, treatment. Buruli ulcer: etiology, epidemiology, clinical manifestations, diagnostics, treatment.

Cutaneous gangrenes. Multiple gagngrene of children: etiology, clinical manifestations, treatment. Multiple gangrene of adults: course peculiarities. Noma (stomatonecrosis): etiology, clinical manifestations, treatment. Madagascar noma: clinical manifestations, treatment.

Cutaneous helminthiases. Schistosomiasis (bilharziasis): etiology, clinical manifestations, complications, diagnostics, treatment. Cysticercosis: clinical manifestations, diagnostics, treatment. Diphyllobothriasis, trichinosis, larva migrans: etiology, clinical manifestations, treatment. Filariases: etiology, clinical manifestations, treatment.

Obtaining the history and complains of patient, designing the plan of laboratory and instrumental examination of patients with suspected tropical pyodermas, tropical mycoses, subcutaneous mycoses or cutaneous helminthiases. Interpretation of the results of laboratory and instrumental examination, formulating the diagnosis, planning of treatment.

## 3. Leprosy. Leishmaniases. Cutaneous tuberculosis

Leprosy classification, reservoir and source of leprosy, ways of leprosy transmission. Lepromatous, tuberculoid, borderline leprosy: clinical manifestations, laboratory diagnostics. Treatment of patients with different types of leprosy, organization of leprosy control, striking off the register, prevention of leprosy.

Cutaneous Old World leishmaniasis: epidemiology, etiology, classification, clinical manifestations, complications, treatment, prevention. Cutaneous New World leishmaniasis: epidemiology, etiology, classification, clinical manifestations, complications, treatment, prevention. Mucocutaneous leishmaniasis: epidemiology, etiology, classification, clinical manifestations, complications, treatment, prevention.

Cutaneous tuberculosis: epidemiology, etiology, classification. Verrucous tuberculosis, lupus vulgaris, scrofuloderma, papulonecrotic tuberculosis, miliary tuberculosis: clinical manifestations, principles of diagnostics and treatment.

Obtaining the history and complains of patient, designing the plan of laboratory and instrumental examination of patients with suspected leprosy, leismaniasis, cutaneous tuberculosis. Interpretation of the results of laboratory and instrumental examination, formulating the diagnosis, planning of treatment.

## 4. Tropical sexually transmitted infections. Endemic treponematoses *Tropical STI*

Lymphogranuloma venereum: epidemiology, etiology, pathogenesis, incubation period, clinical manifestations, clinical and laboratory diagnostics, differential diagnosis, treatment, prevention.

Chancroid (ulcus molle): epidemiology, etiology, pathogenesis, incubation period, clinical types (towering, serpeginous, gangrenous, miliary, funnel-shaped, diphtheritic, papular, mixed), complications, clinical and laboratory diagnostics, differential diagnostics, principles of treatment, prevention.

Donovanosis: etiology, pathogenesis, ways of transmission, course of disease, clinical manifestations, diagnostics, principles of treatment.

Endemic treponematoses

Yaws (frambesia): etiology, pathogenesis, ways of transmission, course of disease, primary, secondary and tertiary periods, clinical manifestations, principles of diagnostics, differential diagnostics, treatment, prevention.

Bejel: etiology, pathogenesis, ways of transmission, course of disease, clinical manifestations, principles of diagnostics, differential diagnostics, treatment, prevention.

Pinta (carate): etiology, pathogenesis, ways of transmission, course of disease, primary, secondary and tertiary periods, clinical manifestations, principles of diagnostics, differential diagnostics, treatment, prevention.

Obtaining the history and complains of patient, designing the plan of laboratory and instrumental examination of patients with suspected endemic treponematoses. Interpretation of the results of laboratory and instrumental examination, formulating the diagnosis, differentiation from syphilis with comparison of laboratory data, planning of treatment.

EDUCATIONAL METHODICAL CARD OF EDUCATIONAL DISCIPLINE «DERMATOVENEREOLOGY» FOR THE SUB-RESIDENCY «GENERAL CLINICAL PRACTICE (FOR FOREIGN CITIZENS)»

	Form of knowledge assessment		1, 3, 4, 6, 7	1, 3-7	1, 3-7	1-7	χ.
	Literature		1, 2, 3	1, 2, 4	1, 2, 4	1, 2, 5	
	Equipment		1-5	1-5	1-5	1-5	
	selfstudies selfstudies		2	4	4	4	14
Number of hours	practical		7	7	7	7	28
	Section (topic) name		General principles of diagnostics and treatment of skin diseases and sexually transmitted infections	Tropical and subcutaneous mycoses. Tropical pyodermas, tropical ulcers cutaneous gangrenes. Cutaneous helminthiases	Leprosy. Leishmaniases. Cutaneous tuberculosis	Tropical sexually transmitted infections. Endemic treponematoses	Total hours
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## INFORMATION AND INSTRUCTIONAL UNIT

### LITERATURE

## Basic (relevant):

1. Chebotarev, V.V. Dermatovenereology: textbook / V. V. Chebotarev, M. S. Askhakov. – Moscow: «Geotar-media» publishing group, 2020. – 627 p.

### Additional:

- 2. Adaskevich, U. P. Skin diseases and sexually transmitted infections: handbook / U. P. Adaskevich (Complier and editor). Vitebsk: VSMU, 2016. 398 p.
- 3. Dermatology. 2 volume set / J. L. Bolognia [et al]. Elsevier Limited, 2017. 2880 p.
- 4. Fitzpatrick's Dermatology In General Medicine, Eighth Edition: Two Volumes / S. Kang [et al]. McGraw Hill Medical, 2019. 1866 p.
- 5. Rook's Textbook of Dermatology, 4 volume set / C. Griffiths [et al]. Wiley-Blackwell, 2016. 4696 p.

## CHARACTERISTICS OF THE USED TRAINING METHODS

For organizing the educational process there are used traditional methods of teaching of educational discipline: practical classes and elements of controlled self-study of students.

It is recommended to organize the educational process using both traditional and contemporary educational technologies (technologies of simulated study, «standardized patient» methodology, different types of communication, variative models of self-study, modular and rating educational systems, testing and other systems of competence evaluation etc).

Practical classes are conducted on the basis of dermatological and laboratory departments of health care establishments. During practical classes teacher controls activity of students: obtaining the history and complaints, conducting the physical examination, designing the plan of laboratory and instrumental examination, correct interpreting of the results of laboratory and instrumental examination, formulating the diagnosis, planning the treatment, processing the medical documents.

Practical training is provided by means of solution of clinical case and tests, adjustment of skills of examination of patients, diagnostics and differential diagnostics of diseases, conducting of medical manipulations using electronic-mechanical, virtual and multicomponent simulators, skills of communicative competence.

Self-independent work includes analysis of basic and additional literature, monographs and periodicals; preparation of essays, abstracts, presentations and short reports related to most actual issues of tropical mycoses, parasitary diseases, modern methods of diagnostics and treatment of syphilis; discussion of topics (issues) that were recommended for self-study; preparation for practical classes and credit.

During practical classes students shall familiarize themselves with safe working conditions, international specifications and ethical norms.

#### LIST OF TRAINING MEANS

- 1. Multimedia presentations.
- 2. Atlases, photos of cases.
- 3. Training films.
- 4. Medical cards of inpatients and outpatients.
- 5. Laboratory and instrumental examination results.

## LIST OF AVAILABLE DIAGNOSTIC TOOLS

Assessment of student's educational achievements is carried out by means of diagnostic tools and technologies fund of educational establishment. Fund of tools for diagnostic of educational achievements includes:

standard tasks of different types (oral, written, tests, clinical cases, simulations);

medical cards of in-patients and out-patients and results of additional examination methods (laboratory, functional, x-ray).

Diagnostic tools that are used to diagnose the competences:

Oral form:

- 1. Interview.
- 2. Credit.

Written form:

3. Tests.

Written-oral form:

- 4. Situational problems (case-method).
- 5. Analysis of medical cards of in-patients and out-patients Technical form:
- 6. Electronic tests

Simulatory form:

7. Evaluation of skills by means of simulatory equipment.

### LIST OF PRACTICAL SKILLS

- 1. Obtaining of the complains of dermatological patient.
- 2. Obtaining of the medical history of dermatological patient.
- 3. Obtaining of the life history of dermatological patient.
- 4. Examination of skin and visible mucosa of dermatological patient.
- 5. Identification of skin lesions, description of cutaneous and mucosal manifestations.
  - 6. Diascopy, palpation, scrapping of skin lesions.
  - 7. Evaluation of pain, temperature and tactile sensitivity.
  - 8. Application of Wood's lamp for diagnostics of dermatoses.
  - 9. Application of Baltzer test with Iodine solution.
  - 10. Microscopic revelation of causatives of fungal infections.
  - 11. Interpretation of laboratory results.
  - 12. Obtaining of history of STl patient.
  - 13. Examination of skin and visible mucosa of STI patient

- 14. Interpretation of rapid plasma reagin test results.
- 15. Interpretation of passive hemagglutination test results.
- 16. Designing of plan of treatment of skin diseases and STI.

## **COMPILERS:**

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Curriculum content, composition and the accompanying documents comply with established requirements.

Dean of the Medical Faculty for International Students of the educational institution «Belarusian State Medical University»

09. 08. 2023

Methodologist of the educational institution «Belarusian State Medical University»

*09.08.* 2023

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