# MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY

**APPROVED** 

by Rector of the Educational Institution (Belarusian State Medical University)

S.P.Rubnikovich

11. 2023

Reg. # UD-07-29/2324 /edu

Контрольный экземпляр

# **DERMATOVENEROLOGY**

Curriculum of the educational institution in the academic discipline for the specialty

1-79 01 07 «Dentistry»

Curriculum is based on the educational program «Dermatovenereology», approved 15.11.2023, registration # УД-07-29/2324/уч.; on the educational plan in the specialty 1-79 01 07 «Dentistry», approved 17.05.2023, registration # 7-07-0911-03/2324/mf.

## **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 # 2 of 08.09.2023);

by the Scientific Methodical Council of the Educational Institution «Belarusian State Medical University» (protocol # 11 of 15.11.2023

## EXPLANATORY NOTE

«Dermatovenereology» is the educational discipline of the module «General Clinical Therapy Module #2» containing systematized scientific knowledge concerning the causes, mechanism of development, manifestations, diagnostics, treatment and prevention of skin diseases and sexually transmitted infections.

The aim of the discipline «Dermatovenereology» is to develop basic professional competences to solve the problems of occupational activity in the field of diagnostics, management and prevention of the most common skin diseases and sexually transmitted infections, that may affect oral mucosa.

The objectives of the discipline «Dermatovenereology» are to develop the students' scientific knowledge about etiology, pathogenesis, diagnostics, management and prevention of the most common skin diseases and sexually transmitted infections, that may affect oral mucosa, skills and abilities, that are necessary for:

examination of patients with skin diseases and sexually transmitted infections; identification of clinical manifestations of acute and chronic dermatoses, that may affect oral mucosa, of infectious and non-infectious origin and also the most

common sexually transmitted infections;

application of techniques of clinical, instrumental and laboratory diagnostics, that are used in the field of skin diseases and sexually transmitted infections;

interpretation of the results of clinical and laboratory examinations; making a diagnosis of skin disease or sexually transmitted infection;

prescription a general and topical treatment for skin diseases and sexually transmitted infections;

prevention of skin diseases and sexually transmitted infections;

provision of urgent aid in case of life-threatening conditions with dermatological manifestations

adoption of principles of medical ethics and deontology while working with patients.

The knowledge, skills and abilities acquired during the study of the academic discipline "Dermatovenereology" are necessary for successful mastering of the following academic disciplines: "Clinical pharmacology", "Internal diseases", "Surgical diseases", "Obstetrics and Gynecology", modules "Periodontology", "Therapeutic stomatology".

Studying the educational discipline «Dermatovenereology» should ensure the formation of students' basic professional competency:

BPC. Use knowledge about the etiology and pathogenesis, clinical manifestations, complications, methods of diagnosis and differential diagnosis, apply the principles of treatment and prevention in diseases and injuries in adults and children, provide medical care in emergency conditions.

As a result of studying the discipline «Dematovenereology» the student should know:

etiology and pathogenesis of the most common infectious and non-infectious diseases of skin, lips, oral mucosa and sexually transmitted infections;

classification, clinical presentations, diagnostics and differential diagnostics of the most common infectious and non-infectious diseases of skin, lips, oral mucosa and sexually transmitted infections;

methods of prevention and treatment of the most common infectious and non-infectious diseases of skin, lips, oral mucosa and sexually transmitted infections

# be able to:

identify primary and secondary skin lesions, to reveal them on lips and oral mucosa;

plan and carry out the examination of dermatovenereological patient;

prescribe treatment, urgent aid included, to patients with skin diseases and sexually transmitted infections.

## master:

principal methods of clinical, laboratory, instrumental etc. examination applied in dermatology for inspection of skin and oral mucosa;

**Total number** of hours for the study of the discipline is 108 academic hours. Classroom hours according to the types of studies: lectures -12 hours (including 4 academic hours of supervised student independent work), practical classes -44 hours, student independent work (self-study) -52 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a graded credit (6th semester).

Form of higher education – full-time.

# ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

|                             |          |       | Νι       | ımber of a   | ıcademi                                  | e hours           |                           |                                 |
|-----------------------------|----------|-------|----------|--|--|-------------------|---------------------------|---------------------------------|
|                             |          |       |          | i  | ncluding                                 |                   |                           |                                 |
| Code, name of the specialty | semester | total | in-class | lectures<br>(including supervised<br>independent work) | including supervised<br>independent work | practical classes | out-of-class self-studies | Form of intermediate assessment |
| 1-79 01 07<br>«Dentistry»   | 6        | 108   | 56       | 12   | 4  | 44                | 52                        | Graded credit                   |

# THEMATIC PLAN

|  | Number of | class hours |
|--|-----------|-------------|
| Section (topic) name   | lectures  | practical   |
| 1. Dermatology   | 6         | 30          |
| 1.1. Introduction to dermatology. History of dermatovenereology. Structure and functions of human skin and oral mucosa | 2         | -           |
| 1.2. Skin pathology. Diagnostics in dermatology  | -         | 3           |
| 1.3. Principles of therapy of dermatoses   | -         | 3           |
| 1.4. Pustular diseases of the skin (pyodermas)   | -         | 3           |
| 1.5. Fungal infections of the skin (mycoses)   | -         | 3           |
| 1.6. Viral infections of the skin  | -         | 3           |
| 1.7. Dermatites, cheilites, eczema   | -         | 3           |
| 1.8. Drug and food eruptions. Erythema multiforme  | -         | 3           |
| 1.9. Allergic dermatoses   | 2         | -           |
| 1.10.Bullous dermatoses  | 2         | 3           |
| 1.11.Papulosquamous diseases of the skin   | -         | 3           |
| 1.12.Connective tissue autoimmune diseases   | _         | 3           |
| 2. Venereology   | 6         | 14          |
| 2.1. Introduction to venereology. Primary and secondary syphilis   | 2         | 3           |
| 2.2. Tertiary, atypical, congenital syphilis   | 2         | 3           |
| 2.3. Serological diagnostics of syphilis. Treatment and prevention of syphilis   | -         | 3           |
| 2.4. Gonococcal infection  | -         | 3           |
| 2.5. HIV-infection   | 2         | 2           |
| Total hours  | 12        | 44          |

# CONTENT OF THE EDUCATIONAL MATERIAL

# 1. **DERMATOLOGY**

# 1.1. Introduction to dermatology. History of dermatovenereology. Structure and functions of human skin and oral mucosa

Dermatology as a part of discipline «Dermatovenereology»: content, objectives, methods, relationship with other special subjects.

Main stages of dermatology development. Belarusian and foreign scientific schools, their role in the development of dermatovenereology.

Structure and physiology of the skin. Cellular composition. Collagen, reticular, elastic fibers, interstitial substance. Epidermis, dermis, hypodermis. Skin muscles. Blood and lymph vessels. Neuroreceptory apparatus. Sweat and sebaceous glands. pH-reaction of the skin. Hairs and the hair follicle. Nails. Skin color.

Age-related characteristics of skin structure, peculiarities in children and elderly people. Regulation of melanogenesis and epidermopoiesis, functions of sweat and sebaceous glands.

Main skin functions: protective, immunological, thermoregulatory, secretory, receptive, metabolic, resorptive, respiratory etc. Skin as the sense organ. Age –related characteristics of skin functions and metabolism.

Structure and functions of oral mucosa and lips.

Skin and oral mucosa relationship with internal organs and systems. Involvement of human skin in water, mineral, protein, carbohydrate, vitamin, enzyme and lipid metabolism.

# 1.2. Skin pathology. Diagnostics in dermatology

The role of exogenous, endogenous and social factors in the genesis and development of dermatoses.

Acute and chronic cutaneous inflammation. Hyperkeratosis, parakeratosis, dyskeratosis, acanthosis, granulosis, agranulosis, papillomatosis, acantholysis, vacuolar degeneration, spongiosis, ballooning degeneration, epidermolysis etc.

Skin lesions. Primary lesions: macula, papule, tubercle, node, wheal, vesicle, bulla, pustule. Secondary lesions: dyschromia (secondary macule), scale, crust, fissure, excoriation, erosion, ulcer, scar, atrophy, vegetation, lichenification. Peculiarities of mucosal manifestations. Subjective sensations in dermatology.

Methodology of examination of dermatological patient. Issues of medical ethics and deontology while working with patients. Ethics of medical staff interrelations.

Complaints of patient. Life history. Working and living conditions. History of disease. State of internal organs and nervous system. General properties of the skin: color, turgor and elasticity, the state of perspiration and sebum secretion; dermographism, vascular reactions, skin sensitivity. Description of skin and mucosal lesions.

Special examination in dermatology: palpation, scraping, diascopy, iodine test, isomorphic reaction, Nikolsky sign, inspection of lesions in side lighting etc. Dermatoscopy. Luminescent diagnostics in dermatology. Skin biopsy. Dermal, peroral and other allergological tests. Laboratory studies: general and special. Microbiological research methods in dermatology. The most important functional studies. Examination of oral mucosa.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations.

# 1.3. Principles of therapy of dermatoses

Medicines for general dermatological treatment. Medical formulations for external use: solutions, powders, suspensions, creams, gels, pastes, ointments, plasters, lacquers, aerosols etc. Anti-inflammatory, resolving, keratolytic, antipruritic, cauterizing, disinfecting, antifungal, antiparasitic and other topical pharmacological agents. Classification of topical corticosteroids. Peculiarities of topical treatment of mucosal lesions. Physical treatments: heat treatments, cryotherapy, light therapy,

electrotherapy, ultrasound, laser therapy, balneotherapy etc. SPA-therapy. General principles of prophylactic medical examination of patients with chronic dermatoses.

Practical component of the class: Identification of skin lesions, description of cutaneous and mucosal manifestations. Proper choice of medical formulation for external use.

# 1.4. Pustular diseases of the skin (pyodermas)

Pyodermas: definition, prevalence, etiology, pathogenesis. Role of pyogenic bacteria, macroorganism and the environment in the development of pyodermas. Classification of pyodermas. Clinical characteristics of disease course and pathomorphology of main clinical forms.

Diagnostics of pyodermas. Microbiological diagnosis, detection of microbial sensitivity to antibiotics.

Principles of general and topical treatment of pyodermas: regimen and diet of patient, antibacterial medicines, specific and nonspecific immunotherapy, regenerative preparations, treatment of opportunistic diseases, topical treatment, external antiseptics, physiotherapy. Pyodermas prevention.

Staphylococcal pyodermas. Clinical features and diagnostics of superficial folliculitis and folliculitis, sycosis (folliculitis barbae), furuncle and furunculosis, carbuncle, pseudofurunculosis, hydradenitis.

Streptococcal pyodermas. Clinical features and diagnostics of different kinds of impetigo and ecthyma.

Strepto-staphylococcal pyodermas.

Chronic ulcerative pyodermas.

Epidemiological safety of medical aid while working with pyoderma patients.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use.

# 1.5. Fungal infections of the skin (mycoses)

Mycoses (fungal infections): causative agents, prevalence, ways of infection. Factors contributing to the development of fungal infection. Pathogenesis of mycoses. Classification. Cutaneous and mucosal mycoses.

Candidiasis: etiopathogenesis. Candidiasis of skin folds and nails, oropharyngeal candidiasis. Clinical manifestations. Diagnostics, differential diagnostics, treatment of candidiasis.

Tinea capitis et barbae (ectotrix and endotrix types), tinea corporis caused by Microsporum canis and Microsporum ferrugineum, Trichophyton violaceum, Trichophyton gypseum and Trichophyton verrucosum, Trichophyton Shoenleini (favus): clinical manifestations, clinical types, differential diagnostics.

Clinical and laboratory diagnostics of fungal infection. Luminescent diagnostics of tinea capitis. Application of microscopic and cultural examination for diagnostics of mycoses of skin and skin appendages.

Treatment of fungal infection. General therapy: groups of medications, schemes of application, age-related peculiarities. Indications and contraindications

for systemic antimycotics prescription. Topical therapy: local fungicidal preparations. Recovery criteria.

Prevention of fungal infections. Epidemiological safety of medical aid while working with mycoses patients

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use.

# 1.6. Viral infections of the skin

Herpes simplex: etiology and pathogenesis, epidemiology, clinical presentations on skin and mucous membranes, complicated and atypical forms. Eczema herpeticum Kaposi. Diagnostics and therapy of herpes simplex. Prevention of herpes simplex.

Herpes zoster: etiology and pathogenesis, epidemiology, clinical forms. Diagnostics and treatment of herpes zoster: etiotropic agents, anti-inflammatory medications and pain-relievers, topical antiseptics. Prevention of herpes zoster.

Human papillomavirus infection (warts, condylomas acuminatum): etiology and pathogenesis, epidemiology, clinical forms, diagnostics, treatment. Specific and nonspecific prevention of human papillomavirus infection.

Molluscum contagiosum: etiology and pathogenesis, epidemiology, clinical presentations, diagnostics, treatment, prevention.

Epidemiological safety of medical aid while working with viral infections patients.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use.

# 1.7. Dermatites, cheilites, eczema

Dermatites: definition, etiology, pathogenesis, classification. Allergic and irritant contact dermatitis. The significance of general and local reactivity of organism in the development of allergic dermatitis. Clinical presentations of dermatites. Differential diagnostics of allergic and irritant contact dermatitis. The role of skin testing in diagnosing of allergic dermatitis. General and topical dermatitis treatment.

Cheilites. Primary cheilites (exfoliative, glandular, actinic, meteorological) and secondary (symptomatic). Clinical manifestations. Treatment. Prevention.

Eczema: etiology, pathogenesis. The role of environmental factors and immune reactivity in the development of eczema. Classification of eczema. Clinical types of eczema. Pathology of eczema. Stages of eczema. Differential diagnostics of various eczema types. Therapy of eczema. Topical therapy according to eczema stage. Prevention of eczema. Prophylactic medical examination and job placement of patients.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use.

# 1.8. Drug and food eruptions. Erythema multiforme

Drug and food eruptions: definition, etiology, pathogenesis, clinical types. Food-related and drug-related eruptions. Clinical features of drug eruptions. Diagnostics of drug eruptions diagnostic value of cutaneous, intracutaneous and other in-vivo tests, laboratory testing. Treatment and prevention of different forms of drug eruptions. Urgent aid in case of drug eruptions.

Urticaria: etiology, pathogenesis, role of exogenous and endogenous factors. Significance of immune reactivity for urticaria development. Classification of urticaria. Clinical types of urticaria. Quincke's edema: pathology, diagnostics, principles of treatment. Diagnostics of urticaria, pathology, treatment principles. Urgent therapy of urticaria and Quincke's edema. Prevention of urticaria and Quincke's edema.

Erythema multiforme: etiology, pathogenesis, clinical forms and their manifestation in the skin and mucous membranes. Stevens-Johnson and Lyell syndromes, diagnostics, treatment, relapse prevention.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use.

# 1.9. Allergic dermatoses

Allergic and irritant contact dermatites and stomatites: etiology, pathogenesis, clinical manifestations, diagnostics, principles of treatment, prevention.

Drug eruptions. Etiology. Pathogenesis. Cutaneous and mucosal (stomatitis, cheilitis) clinical manifestations. Stevens-Johnson and Lyell syndromes. Treatment and prevention of different forms of drug eruptions.

Eczema. Etiology. Pathogenesis. Classification. Clinical manifestations, their peculiarities of on the face and lips. Principles of treatment. Prevention. Экзема.

## 1.10. Bullous dermatoses

Acantholitic pemphigus: etiology, pathogenesis, classification. Clinical types of pemphigus (pemphigus vulgaris, foliaceus, vegetans, erythematosus). Clinical diagnostics (Nicholsky sign, Asboe-Hansen sign etc.), cytological diagnostics, histological and immunofluorescent diagnostics of acantholitic pemphigus. Anti-desmoglein tests (pemphigus antibodies). Differential diagnostics with other bullous dermatoses. Principles of therapy of pemphigus. The conception of loading and maintaining corticosteroids dose. Prevention of relapses and side effects of therapy. Prophylactic medical examination. Medical and social assessment of acantholitic pemphigus patients.

Bullous pemphigoid, cicatrical pemphigoid: etiology, pathogenesis, significance of concomitant malignancies, clinical manifestations on skin and

mucosa, pathomorphology, clinical and laboratory diagnostics, differential diagnostics, principles of therapy, relapses prevention. Prophylactic medical examination of patients with bullous pemphigoid.

Dermatitis herpetiformis (of Duhring): etiology, pathogenesis, significance of malabsorption syndrome, cutaneous and mucosal clinical manifestations, pathomorphology. Jadassohn test, immunofluorescent diagnosis, differential diagnostics. Principles of treatment, relapse prevention. Prophylactic medical examination.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use. Revelation of Nikolsky sign, Asboe-Hansen sign.

# 1.11. Papulosquamous diseases of the skin

Psoriasis: prevalence, etiology, pathogenesis, role of genetic factors in the development of disease, classification. Clinical types of psoriasis, disease stages, seasonality, pathomorphology. Isomorphic reaction (Koebner phenomenon). Diagnostic phenomena of psoriasis, their explanation. Psoriatic arthritis. The significance of PASI and NAPSI indices for estimation of psoriasis severity. Principles of general and topical therapy of psoriasis, depending on a disease stage. Psoriasis relapse prevention.

Lichen planus: etiology, pathogenesis, pathomorphology. The role of oral mucosa condition and concomitant diseases of gastrointestinal tract in the development of oral lichen planus. Clinical types of the disease affecting skin and oral mucosa. Isomorphic reaction (Koebner phenomenon). Wickham sign. Diagnostics and differential diagnostics. Treatment of lichen planus. Peculiarities of treatment in case of mucosal affection.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use. Revelation of Wickham sign. Revelation of psoriatic triad

## 1.12. Connective tissue autoimmune diseases

Lupus erythematosus: etiology, pathogenesis, role of heredity and external factors in the development of cutaneous manifestations, role of immunological disorders, classification. Cutaneous and mucosal clinical appearances of main types of lupus. Complications, pathomorphology, diagnostics, differential diagnosis. The conception of systemic lupus. Diagnostic criteria for systemic lupus erythematosus. Principles of treatment of lupus erythematosus. Prevention of lupus erythematosus. Prophylactic medical examination.

Scleroderma: etiology, pathogenesis, classification. Clinical types of localized scleroderma (morphea, linear scleroderma, idiopathic atrophoderma of Pasini and Pierini etc). The conception of systemic sclerosis, cutaneous findings, diagnostic

criteria. Diagnostics of scleroderma, pathomorphology. Treatment of scleroderma. Prophylactic medical examination.

Practical component of the class: obtaining of complaints, history of life and disease of dermatological patient. Examination of skin and mucosa of dermatological patient. Identification of skin lesions, description of cutaneous and mucosal manifestations. Interpretation of laboratory results. Proper choice of medical formulation for external use. Revelation of Besnier sign.

# 2. Venereology

# 2.1. Introduction to venereology. Primary and secondary syphilis

Principal stages of venereology development. The role of belarusian and foreign scientists in the development of venereology. The incidence of sexually transmitted infections. Social factors contributing to the spread of sexually transmitted diseases.

Syphilis. Morphological and biological features of Treponema pallidum. Environmental influences on Treponema pallidum. Routes of syphilis dissemination within human organism. Conditions and ways of contamination. The conception of syphilitic infection source and contact persons. Immunity in syphilitic patients, reinfection, superinfection. Experimental syphilis and its significance. General course and periodization of syphilis. Atypical course of syphilis. Classification of syphilis.

Incubation period. Factors affecting its duration.

Primary syphilis, duration, clinical manifestations. Clinical characteristics of different types of typical chancre, atypical and complicated chancres. Clinical features of chancres located on lips, tongue, gums, tonsils, chancres of transitional folds and oral mucosa. Differential diagnostics of primary syphilis manifestations. Chancre pathology. Clinical peculiarities of regional lymphadenitis and lymphangitis. Polyadenitis. Prodrome.

Secondary syphilis, duration, course features. Secondary syphilis of the skin and mucosa lasting less than 4 months and more than 4 months, differential diagnostics. Clinical and histopathologic characteristics of cutaneous and mucosal lesions of secondary syphilis (syphilitic roseola, papular syphilid and its varieties, condylomata lata, pustular syphilides, syphilitic leukoderma, syphilitic alopecia syphilitic tonsillitis etc).

Practical component of the class: obtaining of complaints, history of life and disease of patient with sexually transmitted infection. Examination of skin and mucosa of patient with sexually transmitted infection. Identification of skin lesions, description of cutaneous and mucosal manifestations.

# 2.2. Tertiary, atypical, congenital syphilis

Tertiary syphilis (active and latent). Factors contributing to the development of tertiary syphilis, general characteristics of tertiary period, classification. Clinical and histopathologic features of tubercles and gummas located on the skin and mucous membranes: their types, course, complications and outcome. Affection of bones, joints, internal organs and nervous system. Serological tests during tertiary syphilis.

Congenital syphilis: definition, ways of transmission to fetus. Classification of congenital syphilis. Fetal syphilis, clinical manifestations. Clinical appearances and course features of early and late congenital syphilis.

Latent syphilis: classification, differential diagnostics of early and late latent syphilis, ways of revelation. Malignant syphilis. Transfusional syphilis.

Practical component of the class: obtaining of complaints, history of life and disease of patient with sexually transmitted infection. Examination of skin and mucosa of patient with sexually transmitted infection. Identification of skin lesions, description of cutaneous and mucosal manifestations.

# 2.3. Serological diagnostics of syphilis. Treatment and prevention of syphilis

Clinical significance of serological tests for syphilis diagnosis and their interpretation – classical Wassermann test, precipitation-based tests (RPR, VDRL), ELISA (enzyme-linked immunosorbent assay), TPHA (passive hemmaglutination), immobilization of Treponema pallidum test, IFA (immunofluorescence assay), and others. Non-treponemal and treponemal tests, fields of application. Biologic false-positive results of serological tests. Methods of cerebrospinal fluid examination.

Treatment of syphilis – general principles. The clinical protocol (guideline) of diagnostics and treatment of patients with sexually transmitted infections. Specific antisyphylitic drugs, their mechanism of action, dosage, introduction methods, side effects and complications, their prevention, contraindications. Basic syphilis treatment regimens. Nonspecific therapy of syphilis. The conception of seroresistence. Peculiarities of late syphilis treatment and treatment of syphilis in pregnant women. Preventive, prophilactic treatment, ex-juvantibus treatment of syphilis.

Hygiene and regimen of syphilitic patient. Criteria for recovery from syphilis. Prophylactic medical examination, striking off the register. Public and individual prevention of syphilis.

Practical component of the class: Interpretation of laboratory results. Evaluation of of rapid plasma reagin test results. Evaluation of passive hemagglutination test results.

## 2.4. Gonococcal infection

Gonorrhea: definition, epidemiology, etiology, pathogenesis, classification.

Main clinical manifestations of recent and chronic gonorrhea and their complications in male and female patients.

Extragenital gonorrhea (blepharoconjunctivitis, pharyngitis, proctitis). Metastatic (disseminated) gonorrhea (septicemia, endocarditis, arthritis, skin lesions).

Methods of laboratory diagnosis of gonococcal infection: microscopy, culture, PCR etc. Instructions for laboratory diagnosis of gonococcal infection. Susceptibility of gonococci to antibiotics, indications for application. Methods of instrumental diagnostics for gonorrhea (ureteroscopy, colposcopy). Principles of general and topical therapy of gonorrheal urethritis and its complications. The clinical protocol (guideline) of diagnostics and treatment of patients with sexually transmitted infections. Criteria for recovery from gonorrhea. Public and individual prevention of gonorrhea.

Practical component of the class: obtaining of complaints, history of life and disease of patient with sexually transmitted infection. Examination of skin and

mucosa of patient with sexually transmitted infection. Identification of skin lesions, description of cutaneous and mucosal manifestations.

# 2.5. HIV-infection

Characteristics of human immunodeficiency virus (HIV).

HIV-infection: pathogenesis, epidemiology, immunologic disorders, classification, clinical appearance. Affection of the skin and mucous membranes in HIV patients (Kaposi's sarcoma, lymphomas, skin malignancies, bacterial, viral, mycotic lesions, seborrheic dermatitis etc). Clinical and laboratory diagnostics, principles of HIV infection therapy. HIV-infection prevention, communal and personal, including prevention in health care institutions.

Practical component of the class: obtaining of complaints, history of life and disease of patient with sexually transmitted infection. Examination of skin and mucosa of patient with sexually transmitted infection. Identification of skin lesions, description of cutaneous and mucosal manifestations.

CURRICULAR CHART OF EDUCATIONAL DISCIPLINE «DERMATOVENEREOLOGY»

|                 | Form of control  |          |             | 1   | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | Interview, tests, electronic tests, solving of situational tasks | 1                   | Interview, tests, electronic tests, solving of situational tasks |
|-----------------|--|----------|-------------|---|--|--|--|--|--|--|--|---------------------|--|
|                 | Self-studies   |          | 32          | ı   | 3  | 3  | 3  | w  | w  | c  | 3  | ı                   | 3  |
| ours            | practical  |          | 30          | ı   | ς,   | ω.   | n  | c  | c  | C)   | 3  | ı                   | 3  |
| Number of hours | including supervised<br>independent work               |          | 2           | 0,5   | 1  | ı  |  | 1  | 1  | 1  | 1  | _                   | 0,5  |
| Num             | Lectures<br>(including supervised<br>independent work) | semester | 9           | 2   | ı  | 1  | ı  | ı  | 1  | 1  | ı  | 2                   | 2  |
|                 | Section (topic) name                                   | 9        | Dermatology | Introduction to dermatology. History of dermatovenereology. Structure and functions of human skin and oral mucosa | Skin pathology. Diagnostics in dermatology                       | Principles of therapy of dermatoses                              | Pustular diseases of the skin (pyodermas)                        | Fungal infections of the skin (mycoses)                          | Viral infections of the skin                                     | Dermatites, cheilites, eczema                                    | Drug and food eruptions. Erythema multiforme                     | Allergic dermatoses | Bullous dermatoses   |
|                 | Section, topic #                                       |          | 1.          | L.I.  | 1.2.   | 1.3.   | 1.4.   | 1.5.   | 1.6.   | 1.7.   | 1.8  | 1.9.                | 1.10.  |

|       |  | 15 |     |               |    |  |
|-------|--|----|-----|---------------|----|--|
| 1.1   | 1.11. Papulosquamous diseases of the skin                                      | ı  | ı   | 3             | 4  | Interview, tests, electronic tests, solving of situational tasks |
| 1.12. | 1.12. Connective tissue autoimmune diseases                                    | ı  | ı   | $\mathcal{C}$ | 4  | Interview, tests, electronic tests, solving of situational tasks |
| ci    | Venereology  | 9  | 2   | 14            | 20 |  |
| 2.1.  | 2.1. Introduction to venereology. Primary and secondary syphilis               | 7  | 0,5 | æ             | 4  | Interview, tests, electronic tests, solving of situational tasks |
| 2.2.  | 2.2. Tertiary, atypical, congenital syphilis                                   | 2  | 1   | 3             | 4  | Interview, tests, electronic tests, solving of situational tasks |
| 2.3.  | 2.3. Serological diagnostics of syphilis. Treatment and prevention of syphilis | ı  | ı   | 3             | 4  | Interview, tests, electronic tests, solving of situational tasks |
| 2.4.  | 2.4. Gonococcal infection  | 1  | ı   | 3             | 4  | Interview, tests, electronic tests, solving of situational tasks |
| 2.5   | 2.5 HIV-infection  | 2  | 0,5 | 2             | 4  | Interview, tests, graded credit                                  |
|       |  | 12 | 4   | 44            | 52 |  |

# INFORMATION AND INSTRUCTIONAL UNIT

## LITERATURE

# Basic (relevant):

1. Chebotarev, V. V. Dermatovenereology: Textbook / V. V. Chebotarev, M. S. Askhakov. – Moscow: «Geotar-Media», 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]. 4th ed. Elsevier Limited, 2017. 2880 p.
- 4. Fitzpatrick's Dermatology In General Medicine, Eighth Edition: Two Volumes / S. Kang [et al]. 9th ed. McGraw Hill Medical, 2019. 1866 p.
- 5. Rook's Textbook of Dermatology, 4 volume set / C. Griffiths [et al]. 9th ed. Wiley-Blackwell, 2016. 4696 p.

# METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

Time, allotted for self-study, may be used by students on: preparations for the lectures, seminars, practical classes; preparations for the graded credit in educational discipline; studying of topics (matters) submitted for self-study; solving of situational tasks; taking notes of educational literature.

# METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF SUPERVISED STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

Basic forms of organization of guided self-study: studying of topics and problems that are not submitted to the lectures;

Control of guided self-study takes the form of: marking the oral replies to the question; individual interview.

## LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms are used for competences assessment:

## Oral form:

interviews.

#### Written form:

tests;

graded credit.

Oral-written form:

solving of situational tasks.

Technical form:

electronic tests.

#### LIST OF AVAILABLE TEACHING METHODS

Linear (traditional) method (lecture, practical classes);

## LIST OF PRACTICAL SKILLS

- 1. Obtaining of the complains and history of dermatological patient.
- 2. Examination of skin and visible mucosa of dermatological patient.
- 3. Identification of skin lesions, description of cutaneous and mucosal manifestations.
- 4. Proper choice and methodology of application of topical medical formulations.
  - 5. Revelation of Nikolsky and Asboe-Hansen signs.
  - 6. Revelation of Weekham sign.
  - 7. Revelation of Besnier sign.
  - 8. Revelation of psoriatic triad.
  - 9. Interpretation of laboratory results.
  - 10. Obtaining of history of patient with sexually transmitted infection.
- 11. Examination of skin and visible mucosa of patient with sexually transmitted infection
  - 12. Interpretation of rapid plasma reagin test results.
  - 13. Interpretation of passive hemagglutination test results.

# LIST OF REQUIRED EQUIPMENT

Computer

Magnifier

Portative lighter

Microscopic slide

Pincer

Wood's (UV) lamp

Microscope

Disposable spatula for oral cavity examination

Disposable rubber gloves

# LIST OF LECTURES

# 6<sup>th</sup> semester

- 1. Introduction to dermatology. History of dermatovenereology. Structure and functions of human skin and oral mucosa.
  - 2. Allergic dermatoses.
  - 3. Bullous dermatoses.

- 4. Introduction to venereology.
- 5. Tertiary, atypical, congenital syphilis.
- 6. HIV-infection.

# LIST OF PRACTICAL STUDIES

# 6<sup>th</sup> semester

- 1. Skin pathology. Diagnostics in dermatology.
- 2. Principles of therapy of dermatoses.
- 3. Pustular diseases of the skin (pyodermas).
- 4. Fungal infections of the skin (mycoses).
- 5. Viral infections of the skin.
- 6. Dermatites, cheilites, eczema.
- 7. Drug and food eruptions. Erythema multiforme.
- 8. Bullous dermatoses.
- 9. Papulosquamous diseases of the skin.
- 10. Connective tissue autoimmune diseases.
- 11. Introduction to venereology. Primary and secondary syphilis.
- 12. Tertiary, atypical, congenital syphilis.
- 13. Serological diagnostics of syphilis. Treatment and prevention of syphilis.
- 14. Gonococcal infection.
- 15. HIV-infection.

# PROTOCOL OF THE CURRICULUM APPROVAL BY OTHER DEPARTMENTS

| Title of the discipline requiring approval | Department             | Amendments to the curriculum of the | Decision of the department of skin and venereal diseases (date, |
|--|------------------------|-------------------------------------|---|
| Surgical diseases                          | Surgical diseases      | No amendments proposed              | protocol # <i>j</i> protocol # 2 of 8.09.2023                   |
| Infection diseases                         | Infection diseases     | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| Obstetrics and                             | Obstetrics and         | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| Gynecology                                 | Gynecology             |                                     |   |
| Clinical pharmacology.                     | Clinical pharmacology. | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| Internal diseases                          | Internal diseases #1   | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| Internal diseases                          | Internal diseases #2   | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| Therapeutical                              | Conservative           | No amendments proposed              | protocol # 2 of 8.09.2023                                       |
| stomatology                                | stomatology            |                                     |   |
| Periodontology                             | Periodontology         | No amendments proposed              | protocol # 2 of 8.09.2023                                       |

# **COMPILERS/AUTHORS:**

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A.P.Muzychenko

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

Head of the Medical Faculty for International students of the Educational Institution «Belarusian State Medical University»

13. 11. 2023

Methodologist-expert of the Educational Institution «Belarusian State Medical University»

*13. M.* 2023

O.S.Ishutin

S.V.Zaturanava