**Azerbaijan Medical University**

**Department of Dermatovenerology**

**Practical lesson number 7**

**Dermatitis is simple (irritant) and allergic. Professional dermatoses. Toxidermia. Erythema multiforme exudative. Stevens-Johnson Syndrome.**

**Lyell's syndrome.**

*Epidemiology. Etiopathogenesis. Clinical and pathomorphological manifestations. Diagnostics. Differential diagnosis. Treatment and prevention.*

**QUESTIONS / ANSWERS TO DETERMINE THE LEVEL OF SELF-TRAINING OF STUDENTS**

1. Give the definition of dermatitis.

 ICD-10: L23-L25 Dermatitis is an inflammatory skin lesion resulting from direct exposure to the skin of external factors.Distinguish between simple (irritant) contact dermatitis and allergic contact dermatitis.

2. Give the definition of simple (irritant) contact dermatitis.

 ICD - 10: L24 Simple (irritant) contact dermatitis is an inflammatory skin lesion that occurs in all people with direct exposure to the skin of obligate (obligatory) irritants.

3. Indicate the types of obligatory (obligatory) irritants that can cause simple (irritant) contact dermatitis.

 ● mechanical (friction, continuous pressure, etc.)

 ● physical (UV rays, high and low temperatures, solar insolation, etc.)

 ● chemical (concentrated acids, alkalis and other reagents)

 ● biological (nettle, hogweed, etc.)

4. Describe the clinical manifestations of simple (irritant) contact dermatitis.

Simple contact dermatitis, both in everyday life and at work, usually develops as a result of an accident (burns, frostbite, electric shock, etc.). The severity of clinical changes on the skin with simple contact dermatitis depends on the strength of the irritant, the time of its exposure to the skin, and manifested by the following violations:

 ● erythematous

 ● vesicular-bullous

 ● necrotic-ulcerative

5. Indicate with what diseases simple (irritant) contact dermatitis is differentiated.

Allergic contact dermatitis, true / microbial eczema, atopic dermatitis, superficial dermatomycosis.

6. Indicate the principles of treatment of simple (irritant) contact dermatitis.

Treatment of the disease begins with eliminating the action of the stimulus. With simple dermatitis, developed under the influence of concentrated acids and alkalis, a long and abundant rinse of the affected surfaces with water is an emergency aid. For simple dermatitis, accompanied by erythema and edema, lotions, corticosteroid ointments are used; with vesiculobullous rashes, the vesicles / blisters are opened, followed by the use of disinfecting lotions and combined corticosteroid ointments with antibiotics (celestoderm, etc.); with erythematous-papular rashes, corticosteroid ointments are used.

7. Give the definition of allergic contact dermatitis.

ICD-10: L23 Allergic contact dermatitis is an inflammatory skin lesion that occurs when facultative (sensitizing) irritants are directly exposed to the skin in persons with hypersensitivity to these irritants.

8. Name the types of facultative (sensitizing) irritants that contribute to the occurrence of allergic contact dermatitis.

Allergic contact dermatitis is caused by various chemicals with sensitizing properties, for example, chromium, nickel salts, synthetic resins, paints, insecticides, cosmetics and detergents, etc. A large group of allergens is made up of medicinal substances: antibiotics, sulfonic, iodide, bromide, mercury preparations and many other externally used drugs. Allergens can be biological irritants: various plants, animals, inhabitants of marine reservoirs.

9.Specify the clinical manifestations of allergic contact dermatitis.

The clinical picture in allergic contact dermatitis is varied, but more often it manifests itself as acute eczema - edema, erythema, skin vesiculation at the site of contact with the allergen and intense itching. In this connection, during allergic contact dermatitis, there are erythematous, vesicular, weeping, cortical, squamous stages. The intensity of manifestations depends on the concentration of the allergen and the duration of contact; inflammatory changes can go beyond the area of ​​primary contact with the allergen.

10. What are the laboratory tests that are used to diagnose allergic contact dermatitis?

Allergy skin tests, tryptase, I gE

11. Indicate with what diseases allergic contact dermatitis is differentiated.

Irritant contact dermatitis, atopic dermatitis, cellulite, rosacea.

12. List the principles of treatment for allergic contact dermatitis.

In the treatment of allergic contact dermatitis, it is necessary to identify the allergen and exclude contact with the patient.In addition to external anti-inflammatory therapy (topical steroids), systemic therapy is carried out - desensitizing, antihistamines, in severe cases - corticosteroid hormones.

13. What is the difference between allergic contact dermatitis and simple (irritant) contact dermatitis.

Simple (irritant) contact dermatitis occurs when the skin is exposed to obligate (obligatory) irritants in all people, immediately after exposure to irritants. The area of ​​the lesion strictly corresponds to the site of the stimulus. Allergic contact dermatitis occurs when the skin is exposed to facultative (sensitizing) irritants only in persons with hypersensitivity to these irritants, after a certain time after sensitization and is an allergic reaction of a delayed type.

14. Give a definition of professional dermatoses.

Occupational dermatoses are skin diseases that first appeared in production conditions under the influence of production factors and are accompanied by impaired work capacity.

15. Indicate the production factors that contribute to the development of occupational dermatoses.

 ● chemical factors - acids, alkalis, turpentine, fiberglass, nickel, chlorine, mercury, synthetic resins, varnishes, paints, cement, formalin, pesticides, etc.

 ● physical factors - radioactive isotopes, X-rays and ultraviolet rays, mechanical and thermal effects.

 ● infectious factors - fungi of the genus Candida, Mycobacterium tuberculosis, etc.

16. List the clinical forms of occupational dermatoses.

 ● professional simple contact dermatitis

 ● professional allergic contact dermatitis

 ● professional photodermatosis

 ● professional eczema

 ● professional folliculitis

 ● professional ulcers

 ● professional hyperkeratosis and papillomatosis.

17. Specify the clinical manifestations of professional signs and their difference from professional dermatoses

 Professional signs are clinically manifested in the form of calcification, cracks, pigmentation, staining, telangiectasias, scars, and, unlike professional dermatoses, do not impair the ability to work.

18.Name the basic principles of diagnostics of occupational dermatoses.

 ● establishing the connection of this disease with a certain production factor

 ● localization in open areas of the skin

 ● results of skin tests for suspected irritants and immunological tests

 ● similar diseases among employees working in the same production area

19. List the principles of treatment of occupational dermatoses.

Treatment of occupational dermatoses does not differ from similar skin diseases. Treatment is carried out with desensitizing and antihistamines; in severe cases, corticosteroid hormones are used. It is necessary to eliminate contact with an irritating production factor.

20. Specify the methods of prevention of occupational dermatoses.

● protection of the skin from damaging factors (special clothing, the use of protective agents - silicone cream, biological gloves, alcohol 96 °, etc.)

 ● mechanization, automation, sealing of production

 ● observance and improvement of sanitary and technical conditions in production

 ● sanitary and educational work

 ● Professional selection of personnel should include skin testing.

21. Give the definition of toxidermia.

ICD-10: L27 Toxidermia is an acute toxicoallergic inflammation of the skin (possibly mucous membranes) caused by an irritant that has a sensitizing effect and entered the body through the respiratory tract, gastrointestinal tract, by injection (subcutaneously, intramuscularly, intravenously), through mucous membranes ( vagina, anus) Depending on the cause of the development of toxidermia, a distinction is made between medication (antibiotics, sulfa drugs, analgesics, salicylates, etc.) and alimentary (food) toxidermia.

22. Specify the clinical manifestations of toxidermia.

Toxidermias are manifested by a variety of rashes: spotty, urticarial, papular, papulovesicular / pustular, bullous. More often, there is widespread toxidermia, less often localized (fixed erythema). Localization is varied; in addition to the skin, the mucous membranes of the mouth, eyes and genitals can be affected.

23. Define and indicate the cause of Lyell's syndrome.

ICD-10: L51.2 Lyell's syndrome (syn. toxic epidermal necrolysis) is an acute, severe toxic-allergic, erythematous-bullous disease of the skin and mucous membranes that threatens the patient's life and is characterized by necrosis and rejection of the epidermis. The cause of Lyell's syndrome is a toxic-allergic reaction to drugs (salicylates, antibiotics, analgesics, sulfa drugs, etc.), foods, infectious triggers. It is assumed that the pathogenesis of Lyell's syndrome is based on a hyperergic reaction leading to pronounced proteolytic processes in the skin and mucous membranes, accompanied by a pronounced syndrome of endogenous intoxication.

24. Describe the clinical picture of Lyell's syndrome.

The process usually begins suddenly, acutely and is accompanied by a severe general condition, arthralgia, myalgia, often nausea / vomiting / diarrhea and fever up to 39-40 ° within 1-3 days. On the skin of the trunk, limbs, face, an abundant, disseminated rash appears in the form of a deep red color of edematous spots, which, growing, merge into large areas of the lesion, a petechial rash is possible. After a few hours (up to 48 hours), multiple blisters of different sizes with a thin, flabby tire, when ruptured, extensive, painful, easily bleeding erosions are exposed.

The entire skin becomes diffusely hyperemic and takes on the appearance of scalded skin. The epidermis easily moves when touched, there are symptoms of "wet clothes", "gloves", "socks." Nikolsky's symptom is sharply positive. On the mucous membranes of the oral cavity, lips, there are painful, easily bleeding erosion, cracks, making it difficult to eat. The process may involve the mucous membranes of the eyes, bronchi, organs of the digestive and urogenital tract. In the stage of recovery (after 3-4 weeks), abundant large-lamellar peeling is observed.

25. Indicate the diseases with which the differential diagnosis of Lyell's syndrome is performed.

Pemphigus vulgaris, Stevens-Johnson syndrome, Dühring's dermatitis herpetiformis, Lever's bullous pemphigoid.

26. List the principles of treatment for Lyell's syndrome.

Requires early hospitalization of patients with Lyell's syndrome and treatment in the intensive care unit - high doses of corticosteroid hormones (100-200 mg / day), antihistamines, drugs that accelerate tissue regeneration, antitoxic drugs, symptomatic drugs, with secondary infection, antibiotics. ointments / creams / gels, antiseptic solutions, with silver, accelerating regeneration, corticosteroid.

27. Give the definition of erythema multiforme exudative.

ICD-10: L 51 Exudative erythema multiforme (erythema exsudativum multhiforme) is an acute, recurrent polymorphic disease of the skin and mucous membranes of an infectious-allergic nature.

28. What is the etiopathogenesis of exudative erythema multiforme?

The etiopathogenesis of exudative erythema multiforme (MEE) is unclear. The disease is considered as a hyperergic skin reaction provoked by infection, drugs, toxic substances with the formation of circulating immune complexes in the blood serum, deposition of IgM and C3-complement in the vessels of the dermis.

29. List the typical sites of exudative erythema multiforme localization.

The rashes are localized symmetrically, mainly on the extensor surfaces of the limbs (more often the hands, feet, forearms, legs), palms and soles, the face and other areas of the skin, as well as the mucous membranes of the oral cavity, nose, genitals, conjunctiva, red border can be affected lips The rash can be limited, disseminated and generalized.

30. List the clinical forms of erythema multiforme exudative.

 ● simple form

 ● vesicular-bullous form

 ● bullous form, including Stevens-Johnson syndrome

31. Describe the nature of the eruptions in exudative erythema multiforme (EEM).

With a simple form of EEM, rashes are represented by inflammatory spots (or papules) of a rounded shape, with sharp boundaries, which within 2-3 days can increase to 1-2 cm in diameter. The edges of the elements are reddish in color, the center is cyanotic, slightly sinking (target / cockade type); sometimes a bubble / bubble is located in the center.

With the vesicular-bullous form of EEM, erythematous plaques with a ring of vesicles along the periphery and a bladder in the center are noted.

In a bullous (severe) form of EEM, the process usually begins with the mucous membranes of the oral cavity; bubbles appear, bleeding erosion, massive hemorrhagic crusts. Blisters, maculopapular target-like elements are also noted on the skin. The bullous form of EEM develops more often in children and adolescents. After 1-2 weeks, all of the above forms of EEM regress spontaneously, leaving hyper- or depigmented areas. Possible positive isomorphic Koebner reaction.

32. Define and indicate the cause of Stevens-Johnson syndrome.

ICD-10: L51.1 Stevens-Johnson syndrome is a severe form of bullous EEM, in which, along with the skin, the mucous membranes of at least two organs are affected. The cause of Stevens-Johnson syndrome is a toxic-allergic reaction to drugs (sulfa drugs, analgesics, antibiotics, iodine, bromine, etc.). In this regard, if earlier Stevens-Johnson syndrome and severe form of EEM were considered as one disease, then recently Stevens-Johnson syndrome, like Lyell's syndrome, is considered as a separate nosological form associated mainly with drug hypersensitivity.

33. Describe the clinical picture of Stevens-Johnson syndrome.

The process usually begins suddenly, acutely, with high fever, arthralgia, myalgia, sometimes with a prodromal flu-like period of 1-13 days. The mucous membrane of the mouth is involved in the process in 100% of cases with the appearance of blisters, erosions with gray-white films, hemorrhagic crusts, often covering the red border of the lips. Due to severe damage to the mouth and lips, speech and food intake are difficult. Eye damage (91%) is characterized by catarrhal and purulent conjunctivitis, uveitis, panophthalmitis, keratitis. The process involves the genitourinary organs (57%) - urethritis, vulvovaginitis; mucous membrane of the bronchi (6%), anus (5%). Skin rash-in the form of large, target-like, maculopapular elements (3-5 cm in diameter), deep red with a purple periphery and sunken cyanotic center, where blisters with serous / hemorrhagic contents are formed, shrinking into coarse hemorrhagic crusts or opening with exposure of painful erosions of a bright red color. The main localization of lesions is on the skin-trunk. Nikolsky's symptom is negative / positive.

34. Indicate the diseases with which differential diagnosis of erythema multiforme is carried out.

Toxidermia, Duhring's dermatitis herpetiformis, Lyell's syndrome, pemphigus vulgaris.

35. List the principles of treatment of exudative erythema multiforme.

 Systemic therapy

 ● in case of a mild form of EEM - antihistamines, vitamins of group B, C.

 ● in severe EEM and Stevens-Johnson syndrome - corticosteroid hormones, antihistamines, in the presence of a secondary infection, antibiotics, acyclic nucleosides.

 Topical therapy

 ● ointments / creams / gels / solutions with antiseptics, silver, corticosteroid.

36. What is the mortality rate for Stevens-Johnson and Lyell syndromes?

Mortality in Stevens-Johnson syndrome is 5-15%, and in Lyell's syndrome - 30% and depends on the area of ​​the skin lesion and the age of the patients. Possible causes of death in Lyell's syndrome-sepsis, gastrointestinal bleeding, severe imbalance in water and electrolyte balance.