**Azerbaijan Medical University**

**Department of Dermatovenerology**

***Structure and function of the skin. Primary and secondary morphological elements. Dermatological patient examination features***

**Practical training №1 (dermatology)**

The structure and function of the skin. Primary and secondary morphological elements. Dermatological examination features of the patient.

The purpose of the training is to evaluate dermatology as the largest branch of clinical medicine, to acquaint students with the alphabet of dermatology - primary and secondary morphological elements, their pathomorphological features and examination features.

**The student should know**

• *anatomical structure of the skin and skin growths*

*• The function of the skin and skin growths*

*• histological characteristics of the epidermis, dermis and hypodermis*

*• histological characteristics of skin growths (hair, nails, sebaceous and sweat glands)*

*• primary and secondary morphological elements*

*• The main pathomorphological signs of epidermis, dermis and skin growths*

*• Features of examination of dermatological patients*

**The student must be able to**

**From dermatological patients**

• *Distinguish between primary and secondary morphological elements*

*• to palpate morphological elements*

*• master the method of diascopy*

*• master the method of shortening*

*• to determine dermography*

*• determine the sensitivity of the skin*

*• Collect anamnesis*

*• Describe the status localization*

**The level of self-preparation of students**

**questions / answers for identification**

**1.** Indicate which two embryonic derivatives form the skin.

 Ectoderm and mesoderm

**2.** List the layers that make up the skin.

 Epidermis, dermis, subcutaneous fat layer.

**3.** Note the layers of the epidermis.

The epidermis is a layer of skin directly adjacent to the environment and is composed of numerous squamous epithelium. The following layers are distinguished in the epidermis:

• basal (basal stratum)

• thorny (stratum spinosum)

• granular (stratum granulosum)

• transparent (stratum lucidum) - only on the epidermis of the palm and heel

• horn (stratum corneum)

**4.** Indicate the layer of the epidermis bordering on the dermis.

Basal or embryonic layer.

**5**. Mark the layers of the drug.

The dermis is a layer of connective tissue located directly under the epidermis. The following layers are distinguished in the dermis:

• stratum papillare

• reticular (stratum reticulare)

**6.** Note which layer is the main part of the drug.

 Lattice layer.

**7.** Indicate which sensations are perceived as cold and hot.

 Krause flasks and Ruffini bodies.

**8**. List the skin growths.

• feathers

• nails

• sebaceous glands

• sweat glands

**9**. Show the distal part of the hair root.

 Onions.

**10**. What types of sweat glands are there, depending on the type of secretion?

Mesocrine (eccrine) and apocrine.

**11**. List the types of sebaceous glands, depending on the type of secretion.

Hollokrin.

**12.** Mark the areas without sebaceous glands on the skin.

 Palms and mats.

**13**. List the main functions of the skin.

 Immune, defense, secretion, respiration, resorption, heat regulation, metabolism, receptor.

**14.** Indicate the reasons for patients to seek dermatological care.

 Changes in the skin and visible mucous membranes, often accompanied by subjective sensations.

**15**. Indicate the causes of the emergence and intensification of subjective symptoms of the disease.

Severity of the disease, individual characteristics of the patient, reactivity of the nervous system.

**16**. What are the main subtleties of the correct diagnosis of dermatology during the clinical examination of patients?

Properly collected anamnesis and accurately performed examination of the patient.

**17.** List the methods of special clinical examination of dermatological patients.

 To determine vitropression, itching (palpation), palpation and isomorphic reaction, dermographism, sensory reflexes.

**18.** When dermatoses are suspected, the method of itching is used.

 Parapsoriasis and scabies.

**19.** Which clinical examination method can be used to differentiate hemorrhagic spots and vascular rosacea in dermatologists?

 Diascopy.

**20.** Indicate additional examination methods that confirm the diagnosis of allergy dermatitis.

Skin allergy tests.

**21.** Name the laboratory diagnostic method, which is considered the "gold standard" in dermatoses.

 Pathomorphological examination of the biopsy lesion.

**22**. What is not a reflex in patients with ichthyosis and Gebra itching?

"Goose skin".

**23.** In which diseases there is a stagnant red urticarial dermographism lasting 40-60 minutes?

Velvet. Don't itch.

**24**. In what diseases white dermography is observed.

Neurodermatitis / Atopic dermatitis.

**25**. List the primary morphological elements.

Macula, papule, tuberculum, nodus, urtica, vesicle, bulla, pustule.

**26**. Name the first simple element.

 Stain.

**27**. List the first exudative elements.

 Bubbles, bubbles, pus, foam.

**28.** Note the elements with the first space.

 Bubble, bladder, pus.

**29**. Name the exudative element without space.

 Bubble.

**30.** What is the primary ephemeral element, which disappears for several hours and is always accompanied by itching?

 Bubble.

**31**. Name the primary elements that are similar in clinical form.

Knots and bubbles.

**32**. Name the largest primary element.

Knot.

**33.** Define the stain.

 A macula is a focal change in skin color without changing the relief and consistency of the skin.

**34.** Indicate the types of spots.

 Vascular, (inflammatory, hemorrhagic), pigmented.

**35.** Indicate the types of inflammatory vascular spots (by size).

Spotted (up to 0.1 cm), roseola (0.1-1.0 cm), erythema (greater than 1.0 cm), erythroderma - covers the entire skin surface.

**36.** Indicate the types of spots of hemorrhagic vessels.

Petechiae (0.1cm-0.2cm), purpura (0.2-1.0cm), ecchymosis (greater than 1.0cm), vibises-hemorrhagic linear spots.

**37**. Indicate the types of pigment spots.

 Hyperpigmented and depigmented.

**38**. Define the bubble.

Foam (urtica) is an ephemeral derivative that rises from the level of exudative, hollow skin, has a dense elastic consistency, smooth surface, pinkish-red color, round or irregularly shaped, prone to peripheral growth and fusion. It develops against the background of acute edema of the nipple.

**39.**Define the bladder and bladder.

Bladder (vesicula) / bladder (bulla) - a serous, serous-hemorrhagic element formed as a result of accumulation of exudate in the epidermis, up to 0.5 cm in size (bladder) and larger than 0.5 cm (bladder). Intracellular, intercellular keratinocytes develops as a result of swelling and loss of contact between keratinocytes.

**40.** Give the definition of laziness.

Pustule is an inflammatory element with a purulent exudate cavity. It develops during the degeneration and destruction of keratinocytes as a result of the action of pathogenic microorganisms.

**41.** Give the definition of a knot.

 Nodules (papules) - without cavities, dense or soft consistency above the level of the skin, covered with smooth or scales, in different sizes, shapes and colors of normal skin, in different colors - pink-red, bluish, yellowish-gray and black. It develops as a result of limited dermis or deposition of epidermis, dermis derivatives and dermal metabolic products.

**42**. List the types of knots (by size).

 Miliary (0.1-0.2 cm), lenticular (0.2-0.5 cm), numular (1.0-2.0 cm), fibrous (2.0 cm large).

**43.** Give the definition of a bubble.

 Tuberculum is a morphological element similar to a nodule. It develops against the background of granulomatous infiltration of the deep and superficial layers of the drug.

**44**. Give the definition of rice.

 Node - the largest primary morphological element. It often develops against the background of granulomatous-type infiltration of the deep layers of the dermis and hypodermis or enlargement of skin structures.

**45**. List the secondary morphological elements.

Squama, crust, erosion, ulcus, excoriatio, fissurae, rhagades, lichenificatio, scar, cicatrix, vegetatio, secondary dyschromia dischromia).

**46. ​​**What skin defects do you know?

 Erosion, ulcer, crack, excoriation.

**47.** Indicate the secondary morphological element formed during pruritus.

Excoriation.

**48.** List which secondary elements are formed by the collapse of the primary hollow elements.

Aging, erosion.

**49**. Note what is called a large layered aging.

 Rs.

**50**. List which secondary elements develop from the knot and the bubble.

 Ulcer, scar.

**51**. List the types of scars.

Flat (at skin level), atrophic (below skin level),

Hypertrophic (above skin level).

**52.** Indicate in which diseases dry atrophy is found.

Red worm, scleroderma.

**53**. Give the definition of acanthosis

Acanthosis is a thickening of the thorny layer of the epidermis.

**54.** Give the definition of hyperkeratosis.

Hyperkeratosis is a thickening of the stratum corneum of the epidermis.

**55**. Define parakeratosis.

Parakeratosis - incomplete horny process is the detection of nuclei in the stratum corneum of the epidermis, and the absence or incomplete development of the granular layer.

**56**. Give the definition of dyskeratosis.

Dyskeratosis is a premature autonomic horning of different keratinocytes, during which so-called dyskeratotic cells are formed.

**57.** Define hypergranulosis.

Hypergranulosis is a thickening of the granular layer of the epidermis.

**58.** Define sponge.

Spongiosis is the accumulation of fluid in the intercellular spaces of the malpighian cells of the epidermis.

**59.** Give the definition of acantholysis.

Acantholysis is the loss of intercellular communication between the thorny layer of the epidermis.

**60**. Give the definition of epidermolysis.

Epidermolysis is the loss of contact between the epidermis and the dermis in the area of ​​the basement membrane.

**61**. Define papillomatosis.

Papillomatosis - epid The elongation of the nipple-like layer of the drug, which raises the arm unevenly, is a rare branching.

**62**. Give the definition of fibrosis.

Fibrosis is an increase in the amount of collagen located chaotically in the dermis.

**63**. Define cell infiltrate.

Cell infiltrate is the accumulation of inflamed cells in the dermis (hypodermis).

**64.** Define exocytosis.

Exocytosis is the transfer of infiltrated cells of dermal origin to the epidermis.

Practical training plan (timeline) №1. Dermatology

Stages of the lesson Resources Teacher's activity Students' activity Duration of the stage (min)

The organization section reads the names from the Journal List and pays attention to the students' appearance 2`

Teacher's introduction Slides Atlas describes the skin as the largest free organ of the human body. After a brief description of the anatomy, histology, physiology of the skin, it focuses on the characteristics of primary and secondary morphological elements. is. They listen, ask questions, make notes in a notebook.

45`

Break 5`

Independent work of students (clinical analysis)

**a)** polyclinic admission

**b)** solution of photo problems