Term	Topic content
Skin *(cutis)*	covers the entire surface of the body and transfers to the mucous membrane in the areas of natural openings i.e. mouth, nose, urinary tract and anus. The total area of the skin is 1.5 m^2 There are many folds, depressions, elevations on the surface of the skin. The skin is striated with furrows of different texture, which divide the surface into a number of fields, mostly triangular or diamond-shaped. Rough skin furrows include facial wrinkles, folds of the palms, scrotal folds and furrows on the extensor surfaces of the joints. The color of the skin is defined as flesh-colored. It includes colors of all tissues that compose the skin and mainly depends on the color of blood in the capillary vessels and skin pigment. Healthy skin is dull in appearance.
Morphology of skin and its appendages	The skin consists of three layers i.e. the epidermis, dermis and subcutaneous tissue (hypodermis). These layers differ in embryonic origin: the epidermis is derived from ectoderm, while dermis and hypodermis from mesoderm. Important anatomical constituents of skin include its appendages, which consist of sweat, sebaceous glands, hair and nails. **Epidermis.** Histologically epidermis *(epidermis)* is presented by keratinized stratified squamous epithelium. There are five layers of cells separated from the dermis by basement membrane. Directly on the membrane there is a layer of cylindrical cells located palisade and perpendicular to it. This layer is called the basal or primary *(stratum basale),* as well as malpighian *(germinal),* as this is the place, where mitotic cell division that ensures epidermis regeneration takes place. Above the basal layer there is a ribbed layer *(stratum spinosum)* containing several rows of polygonal cells that are becoming flatter progressively as they are approaching the next layer. Granular layer *(stratum granulosum)* is represented by one or two (sometimes four) rows of elongated spindle-shaped cells located along the surface of the skin. The cell nuclei are poor in chromatin and therefore are bright. The protoplasm contains keratohyalin grains, keratin precursor protein grains and grains of main keroid of skin and its

	appendages. These layers of the epidermis are sometimes combined under the name of Malpighian layer. Translucent layer *(stratum lucidum)* is located above the granular layer and consists of one or two rows of flat non-nuclear cells. Protoplasm of these cells contains a protein eleidin, which is an intermedium in the formation of keratin. Horny layer *(stratum corneum)* is the most superficial layer of the epidermis consisting of flat thin horny plates that lie on the top of each other in several rows. Horny plates are completely dead cells that have lost their nuclei. Keratinization is achieved by substituting the protoplasm with keratin protein. The thickness of the horny layer in different parts of the skin varies greatly. Maximum thickness of the horny layer is on the palms and planta. On the surface of this layer, homy plates are less dense and exfoliate gradually. Their gradual exfoliation occurs constantly and is called physiological desquamation. The epidermis enters dermis with more or less developed processes called dermal ridges. Derma enters the space between the crests of the epidermis with projections, which are called dermal papillae. **Dermis.** Under the epidermis there is the second layer of the skin called the actual skin or dermis *(derma).* It is rich for connective tissue fibers, which form bundles interwoven in different directions. There are rather few cells in the connective tissue of the dermis (fibroblasts, fibroclasts, melanocytes, macrophages, mast cells, mesenchymal cells). There are three types of connective tissue fibers, which include collagen, elastic and argentophilic fibers. The gaps between fiber bundles are filled with the main amorphous substance, which plays an important role in metabolism and in the protective functions of the skin. Argentophilic fibers form the basement membrane at the boundary between the epidermis and dermis, cover sebaceous and sweat glands, hair follicles and skin muscles with fine reticulum. By weaving in different directions, collagen and elastic fibers continuously distribute in the dermis, thereby dividing dermis into two layers - papillary and reticular. Papillary dermis is located immediately below the epidermis. The bundles of connective tissue fibers in the

	papillary layer are quite thin and interweave in different directions. Many bundles are perpendicular to the skin surface and enter the papillae. Reticular layer of the dermis consists of thicker fiber bundles, which when combined, form a dense reticulum. Much of these bundles are parallel to the skin surface. Such structure of the dermis ensures its great strength and elasticity. The thickness of dermis in different areas of the skin varies from 0.5 to 4 mm. Dermis with no clear boundaries moves into the subcutaneous fat layer (hypodermis). **Hypodermis.** The subcutaneous fat layer (subcutaneous adipose tissue, hypodermis) *(hypoderma)* also consists of bundles of interwoven connective tissue fibers. These bundles are the continuation of connective tissue bundles of the dermis; they are loose and form glomerular reticulum *(retinaculum cutis).* The nests of these reticulum contain fat lobules i.e. accumulation of fat cells. Subcutaneous fat layer plays an important role in fat metabolism being one of the most important depots of fat in the body. The thickness of hypodermis in different parts of the body is not the same, thus it is more significant in the abdomen, thighs and buttocks. Dermis and hypodermis are scattered with different cells, which in various stages of differentiation, are divided into connective tissue cells and white blood cells. Dermis and hypodermis include skin glands, hair, as well as blood vessels, nerves and muscles. **Blood and lymphatic vessels in the skin.** The skin has a well-developed system of blood vessels. Blood vessels in the skin can make up to 1/5 of the total human body blood mass. In the process of circulation in the body, that is regulated by central nervous system, the skin acts as one of the major depots. Arterial trunks penetrate into the subcutaneous fat layers from deeper located tissues. Here, they give branches that feed the hypodermis and at the border of dermis form arterial plexus, which is called deep dermal spider veins. From deep dermal spider veins there are vessels that rise up into the dermis. From these vessels and deep dermal spider veins there are arterial branches feeding dermis, sweat and sebaceous glands, hair, muscles and nerves. On the border of the papillary and reticular layers there is the second arterial plexus called superficial skin spider vein.

	Therefrom arteriole goes into every single papilla. Terminal arterial branches are divided into skin capillaries, which gradually merge with each other and give rise to the skin veins. Venous skin vessels run parallel to the blood vessels. The lymphatic system of the skin begins with intercellular gaps of epidermis and numerous lymph slots of dermis. Lymphatic vessels are located along blood vessels. Lymphatic vessels, like blood vessels, form superficial and deep spider veins. Skin blood vessels can quickly change their clearance, which means that they can expand or narrow reflectory under the influence of stimulation of nerve endings, which can be caused by the action of heat, cold, mechanical action (friction, hit) and chemicals. Reflectory expansion or narrowing of blood vessels can also occur due to a variety of neuropsychiatric emotions i.e. joy, fear, anger etc. **Nervous system of the skin.** Nerves form the main plexus in the subcutaneous layer, wherefrom numerous trunks, which give rise to new plexus, go to derma. Particularly dense plexus is formed in the papillary layer. Nerve fibers extending therefrom, give rise to numerous nerve endings in the connective tissue and in the epidermis, thus making the skin sensitive. In the subcutaneous fat layer there are Pacinian and Ruffini's corpuscles; in the papillary dermis there are Meissner's, Golgi-Mazzoni's corpuscles and Krause's bulbs and in the epidermis there are MerkeFs menisci. In addition to the sensory nerves there are secretory glands and nerve plexuses in the skin, which are located along the vessels. ***Pacinian corpuscle*** (Lamellar corpuscles) is a complex encapsulated nerve receptor. It consists of the processes of altered cells of ciliated epithelium with sensory cilia, which are in contact with cell membrane of nerve process end. Cytosomes are separated from contact zone by the capsule consisting of several longitudinally oriented glial cells. Sensory cells cilia are located between external and internal capsule, thus contacting with the inner surface of outer capsule. Pacinian corpuscle acts as: - mechanoreceptor (due to a change of curvature of the outer surface of the capsule, mechanical effect is transmitted to the sensory cells cilia that generate nerve impulses);

	- chemoreceptor (via sulcate channel that is present in the area of corpuscle pole different substances penetrate into the space between the inner and outer capsules, thus inducing nerve impulses); - baroreceptor (change of blood pressure in the network of blood capillaries in the space between the inner and outer capsule alters the state of the sensory cells, thus inducing nerve impulses). Pacinian corpuscles have a large receptive field, i.e. represent a rough sensitivity. *Meissner's corpuscle* (tactile corpuscles) is a receptor, which is an encapsulated nerve ending present in the skin dermis, most often on the tips of fingers, soles, nipples, eyelids, lips and genitals. It is round. In its center there is a gyrate basket of myelin fiber, which passes through the transverse oval cells resembling Schwann's cells of nervous membrane. From the outside the corpuscle is covered with a connective tissue capsule. Meissner's and Pacinian corpuscles belong to receptors that are rapidly adapting, i.e. they fix the skin pressure force. *Ruffini's corpuscle is* a spindle-shaped receptor containing the inner bulb with a dense network of branched nerve cells and supportive lamellocytes. From the outside the corpuscle is covered with a connective tissue capsule consisting of several layers of flattened fibroblasts. Between the inner bulb and the capsule there is a capsule space filled with liquid. Ruffini's corpuscles are skin stretching receptors that are slow to adapt. There is an assumption that they are also heat thermoreceptors. *Golgi-Mazzoni's corpuscles* are thick myelin fibers, «wrapped» around groups of collagen tendinous fibers and surrounded by a connective tissue capsule. Likewise Ruffini's corpuscles, they react to the tension, but their sensitivity threshold is higher. *Tactile MerkeVs meniscus (disk) is* a set of Merkel's cell with nerve ending. Tactile Merkel's cells are round or elongated cells, which are located among the epithelial cells and are larger than the latter. These cells are connected to the epithelial cells by desmosomes and form a contact with reticulated branched nerve endings. Merkel's menisci are slow to adapt (to fix the duration of touch) and have small receptive fields, i.e. fine sensitivity. *Krause's bulbs* are encapsulated nerve endings, which are composed of terminal branches of sensitive nerve fiber,

	inner glial bulb and outer connective tissue capsule. They are located in the connective tissue of mucous membranes and in the dermis, mainly on the hairless areas. They are considered to be cold thermoreceptors. **Hair.** Hair *(pili)* is divided into: 1) long (head hair, beards, mustaches, armpits hair, hair in the area of external genital organs); 2) setaceous (eyebrows, eyelashes, hair in nose nostrils, in the external ear canal); 3) vellus (in all areas of the skin except for the so-called hair-free sites, in particular on the palms, soles, vermilion zone, nipples, breasts, labia, balanus and the inner layer of the foreskin). The hair consists of the area freely located over the skin i.e. the hair shaft *(scapus)* and the area hidden in the skin i.e. the hair root *(radix).* The root ends with extended part, which includes hair follicle, wherefrom the hair grows. From the connective tissue of the dermis the hair follicle is penetrated by dermal papilla, which contains blood vessels that feed the follicle. The hair shaft consists of three layers: the medulla, cortex and cuticle. The medulla is a hair marrow and consists of keratinized polygonal cells. There is no hair marrow in vellus. The cortex is composed of extended cells with elongated nucleus or its fragments. These cells contain pigment melanin that defines the color of the hair. In gray hair pigment is absent, while silver color is achieved by air bubbles that appear in the cortex. The cuticle is the outer layer of the hair represented by plane dead cells, which are arranged in a single layer leaning on one another like shingles. Hair root is located in the hair follicle *(folliculuspili)*, which opens as a small hole in the skin *(ostium).* At the boundary of the inner and middle thirds of the hair the hair follicle is entered by excretory duct of sebaceous gland. Hair follicle is composed of connective tissue and epithelial parts. Starting from the confluence of sebaceous glands duct the connective tissue part is the most developed in the lower part of the root. Epithelial portion of the hair follicle represents an invagination of the epidermis. From the skin to the mouth of the excretory ducts of sebaceous glands (so called hair funnel - *infundibulum)* one may clearly see all the layers of the epidermis. Then, horny layer disappears, and funnel epithelium goes into outer root sheath epithelium, which is composed of cells similar to the cells of the basal and spinous layers. From the mouth of sebaceous glands duct

	and lower between the inner sheath and the hair cuticle there is the inner root sheath. There are three layers of inner root sheath: the inner - the inner root sheath cuticle (one row of dead skin cells), medium - Huxley's layer (one to three rows of semi-dead cells with pyknotic nuclei or completely devoid of them) and external - a layer of Henle (one row of dead skin cells). In the course of desquamation, the cells of all three layers mix with sebum near the mouth of the sebaceous gland. All elements of the component parts of the hair and of the inner root sheath directed to the hair follicle have the cores and at the follicle they blend into the germinal zone of increased cell division, wherefrom the hair grows. Hair life span is from several months to 4 years. **Skin muscles.** Hair is associated with muscular system *(musculi arrectores pilorum),* which consists of a strip-smooth muscles, one end of which is attached via short tendon to the reticular layer of the dermis, and the other end - to the outer root sheath of hair just below the confluence of sebaceous glands duct. When contracting, muscles raise hair (the effect of the so-called «goose bumps») and, thus squeezing the sebaceous gland, induce the release of their secret. Striated muscles are present only in the face skin *(musculi faciales)* They are called mimic, as their contraction makes face movable and expressive and displays changes in mental state of a person. **Sebaceous glands.** Sebaceous glands *(glandulae sebaceae)* are alveolar glands. They are predominantly open in hair follicles. A small number of sebaceous glands open directly on the surface of the skin i.e. on the balanus, the foreskin, on the labia lips, nipples and lips. By secretion type, sebaceous glands are holocrine, which means that secretion is associated with destruction of adenocytes. In secretory regions, adenocytes are arranged in several rows. External cells make up a germ layer where mitosis takes place and deeper rows' cells accumulating fat droplets are formed. Cell maturation is accompanied by filling of the cell with large drops of fat, by pyknotic changes in the nucleus, which disappears with time, thus resulting in the destruction of the whole cell. Cell fragments, mixed with fat, fill in the gland and secrete via ducts to the skin surface. **Sweat glands.** In terms of structure, sweat glands *(glandulae sudoriferae)* are simple tubular glands, which

	consist of a long ductless and secretory region, twisted into a ball, located deep in the reticular dermis at the border with subcutaneous fat layer. Terminal sections are lined with cuboidal epithelium, followed by a series of longitudinally arranged contractile cells (myoepithelial cells) which lie on the basement membrane. Duct in the dermis is straight and is lined with two rows of cells, and within the epidermis, it is corkscrew and is an extension of the intercellular spaces of the epidermis. By the type of secretion sweat glands are divided into eccrine (merocrine), in which secretion occurs without destruction of adenocytes, and apocrine, where secretion is accompanied by destruction of the apical parts of adenocytes. Apocrine glands are bigger than eccrine ones, have less tightly curled ball and tend to appear in the hair funnel. Eccrine glands are evenly arranged across the whole surface of the skin (to exclude vermilion zone, balanus and the inner layer of foreskin). They secretelubrication for horny layer, are involved in thermoregulation and in the selection of products of nitrogen metabolism. Apocrine glands are found primarily in the armpit, around the anus, on pubis and abdomen skin, below omphalus and on the labia lips. They develop at puberty. The secret of apocrine sweat gland has a specific smell and contains sex attractants (pheromones). **Nails.** Nails *(unguis)* are dense horny quadrate plates located on the back surface of distal phalanges of fingers and toes. They lie on the so-called nail bed. Their purpose is to protect terminal phalanges from damage. The front edge of the nail plate is free, and its rear and side edges are surrounded by skin fold and go deep into it. The upper part of the skin fold comes over the nail plate, thus nail folds (rear and side) are formed. The nail has its body *(corpus unguis)* and the root *(radix unguis).* Nail root is the posterior part of the nail plate, which lies deep in the folds of skin at the back of the rear nail fold. Only a small part of the root of nail protrudes from nail fold in the form of white semilunar area (lunula – *lunula unguis).* It is better seen on the thumbnails. The lunula is covered with thin horn rim i.e. nail skin *(eponychion),* which is a continuation of the rear nail fold. Nail root is located on the back of the nail bed, which is called matrix *(matrix).* Matrix is a place where the nail plate is formed. It consists of epithelial cells in character resembling the cells of basal

	and spinous layers of epidermis. Spinous layer contains onychoblasts i.e. cells that form the nail and which turn into horny nail plates. Nail plate itself corresponds to translucent and horny layers of the epidermis. Nails grow slower than the hair. In an average, fingernails grow by 1 mm per week, while feet nails by 0.25 mm per week. **Skin Functions.** The state of the skin depends on a number of functions it performs, namely protective, immune, melanin-forming, thermoregulatory, secretory, excretory, metabolic, receptor, sorption, respiratory, repository etc. damage to the tissues and organs, breach of circulatory and metabolic processes therein. These processes are interdependent and interconditioned and reflect reactive properties of the body the latter had acquired in the course of evolution. **Pathological processes that can develop in the epidermis.** There is a number of pathological processes that can develop in the epidermis. They include as follows: ***acanthosis,*** which is characterized by increased proliferation of spinous layer cells, that results in elongation and expansion of epithelial ridges; ***acantholysis,*** in which atrophy of intercellular epithelial bridges takes place, a strong connection between epithelial cells is disrupted and the cells easily shift to one another, which leads to the detachment of more or less significant layers of the epithelium. For the first time, acantholysis phenomena have been described in pemphigus by Nikolskyi P; ***hyaline degeneration of cells,*** which is characterized by the appearance of dense homogeneous translucent vitreous substance in the cells that is called the hyaline; ***hyperkeratosis*** as a thickening of the horny layer; ***granulosis*** as a thickening of the granular layer of the epidermis; ***parakeratosis,*** wherein stained nuclei are found in the cells of the horny layer; granular layer is absent; ***epidermis atrophy,*** which is observed in a number of skin diseases. The number of epidermis layers is reduced to a minimum, the cells decrease in volume. Atrophy may extend to the entire epidermis, when there is also an atrophy of epidermis ridges i.e. smoothing of the border between the epidermis and dermis or, of their individual layers.

	Fundamentals of diagnostics of cutaneous diseases As in private life of common people such amongst some doctors subsists thought that diagnostics of cutaneous diseases is not difficult on the ground of showing diseases are located all around the skin. And this is as distinct from therapeutic, surgical, neuralgic and other diseases which are connected with pathology of internal organs. If to say truth this thought is mistaken because of different reasons. Firstly, any cutaneous disease can be limited only by affection of coverlets. For example, during red lupus and series of other dermatitis the functional situation of internal organs in most or a lesser degree and series of other infection diseases is conducted with cutaneous efflorescence. Therefore for making right diagnostics and especially to ascribe good and effective treatment, dermatologist must have a deep knowledge of a proximal sciences. The next cause, which can make some complication this is a multiplicity of dermatitis. At the present time in conformity with information what was rendered by different authors is about 2 thousands of types of cutaneous diseases. There is upon a lot of different varieties of some dermatitis. There is, for example, the 5 ground forms of eczema, 18 forms of red flat herpes (hyper-keratotics, atrophied, bubble, coral-liked and others). It is conditioned by necessity to do profound differential diagnostics to good subscribe ration therapy. The third cause is conditioned by fair quantity of dermatitis. It can be showed, at the point of view of clinic, as elements of efflorescence. Therefore it is necessary to diagnosis to take into account the color of efflorescence , its form, quantity, addition of secondary infection, typology of evolution etc.) If to take into account all about was said we understand how difficult is diagnostics of internal diseases. Therefore the dermatologist must have a good common and visual memory. When the question is about general symptomotology of cutaneous diseases is possibility to discern subjective and objective symptoms. For number of subjective symptoms can relate those about patient inform personally by reason of filling of its (itch, burning, pain etc.). As regards the objective symptoms its can be discovered by means of inspection of coverlets and using of additional methods of checkup by dermatologist. As subjective symptoms illness can watch anesthesia, hyposthesia, parasthesia (numbing,

	formication), but some of them can be visualized by doctor (diminution of ability of filling of pain, temperature sensibility and others). It is very important to make inspection all of the coverlets completely in the process of making of objective diagnostics therefore in some causes the illness keeps some staining of disease from doctor (as leavings of chancre on the genitals during auxiliary syphilis or doesn't pay attention to the visualization of peeling amongst finger's spans during epidermiophitia with mycosis). **Stages of diagnostics process** To make a correct creation of diagnostic process are 3 stages: **morphologic**, **clinical, ethnopathogenic.** The morphologic stage is completed by ascertainment of diagnostic which was completed ad interim. It can be put into practice in analytical or synthetic way. First of all in this case is necessary to determine all morphologic elements which are the illness has on hand. Viz is carrying out an analyses. To do it first of all need to determine the availability of fact of rising of element above the clinometer of skin or availability of absence of it: has it any emptiness; in what way is going an inverse process of development of element (retrogression) - in the way of complete disappearance or leaving of incrustation being showed, peeling, scar or other. In what follows the development of analyses is putting into practice into the next way. If an element is inflated above the surface of skin it means that the **blemish** is exclusive initial element without of inflating. In this case need to appoint the pattern of this blemish above the surface of skin and if is necessity to find out and to write information about presence of empty in it and in further process to make analyses amongst initial empties and without empties elements. The typology of morphologic process can determine is not only on the base of inspection but with palpation, diascope, erasure and so on. The execution of morphologic stage of diagnostic process into synthetic way is more typical for work of dermatologist which to adhere to a base of science of French institutions. In such way first of all need to inspect in large all efflorescence, determine an interaction of individual elements, their expandability, localization, grouping, mono- or polymorphonism. For example as during pink Gibber's herpes the efflorescence form is

	oval, is situated on the thorax skin as Langger's lines and as a result seems crow; but during psoriasis the main affection localizes on the elbows, knees, waists. Just so enables to determine correct prudent diagnosis and after that can analyze types of individual efflorescence elements and make an additional methods of inspection. On completion of making of morphologic stage and determination of prudent correct diagnosis can move to the clinical stage of diagnostics process. At this stage first of all is necessary to compare the dates of morphologic analyses with anamnesis of disease. After that can follow additional methods of inspection (diascope, scraping by Krokr, dermagraphism and others). As result we have an possibility in turn except from the prudent diagnosis such diseases which are less possible. This stage of diagnostics is completed with determine of clinical diagnosis (for example: eczema, psoriasis, syphilis and etc.). The most highest stage of diagnostics is aetiopathogenic, which completed by finding of definitive diagnosis. At this stage the form of nosological individuals of diseases are determined and their etiological and pathogenetic matter with all features which are typical for organism of individual illness. At the present stage of diagnostics can determine availability of support diseases and the connection their during presence of dermatosis too. It enables to prescribe to complex rational therapy. Therein after we describe approximate oriental drawing of anamnestic inspection of illness who is diseased with allergic dermatosis . To begin the first stage of diagnostic of dermatosis it is necessary to know the typology of elements of efflorescence. The efflorescence can be divided into 2 categories **: primary cells** and **secondary cells**. Primary cells these are visible on the unimpaired surf efflorescence forms which are primary result of pathologic process. Secondary cells develops as a result of evolution of primary cells or as a result of making of course of treatment. It is important to pay attention to such conception as ratio amongst allocation of efflorescence into the primary and secondary cells. This implies that primary cells can play a role of secondary cells in some cases and it means that primary cells cab be as a result of evolution of one element. The secondary cells can be described as primary efflorescence if to say about series of ones diseases.

	Then, during description of individual cells we will be cite an instance in accordance with which the primary cells play a role of secondary cells and on the contrary. **Blemish** ("makulya"-in Latin) - this is a change of color of skin on the individual part of body. The blemishes can divides into 4 groups: vascular, inflammatory, vascular and non-inflammatory, haemorrhagic and pigmentary. The blemish is single primary cells which is not disposed above the surface of skin. On the clinical point of view all vascular inflammatory blemishes looks like some reddening on the individual parts of skin. But to accordance with hystology they are inflammation dilation of vessels into the derma. **Vascular** inflammatory blemishes differ from others thus at the pushing on its with glass (as diascope, vitrification etc.) they evanesce but can show again after finishing of process of diascope. These blemishes can be different tint of red color – from pink , bright-red to blue-brown during chronic process. Vascular inflammatory blemishes can be irremeable but in some causes on the its places can remain pigmental blemishes or can be covered with scales. In concordance with clinical typology of vascular blemishes they can be divided into 2 subspecies (depending upon size): the **erythema** and **roseola**. **Roseola** – this is a blemish of vascular descent in size of about a nail. **Erythema** – this is blemish descent in size of more than nail. Vascular non-inflammatory blemishes can show up as a result of wrong development of blood-vessels into the skin. They can be divided into inborn (vascular nevus) and after-acquired (telangiectasis). The last are firm dilation of vessels which forms as a result of break of process of innervation of capillaries which are disposed skin-deep and shows up of injurious effect climate factors or as result of nervously-reflex excitation. Such blemishes can show up on the face during diseases of lever (workers of foundry industry with hot technological processes, as welders) or as occupational characteristics of disease (as stigma). There are blemishes which are formed as result of extravasation in the skin in consequence of various traumas, higher fragility or penetrability of vessels. It is an haemorrhagic blemish. They cannot disappear during

	diascope. As a rule such blemishes in a way of changing of color from dark-blue, green to yellow can evanesce. There are 5 subspecies of haemorrhagic blemishes : the PETHEHYA – size of head of math, the purpura – from match's head size to size of nail; the echimosis – from nail's size to size of palm and sigulation - it is a big extravasation. The vibitsesse- is the arcwise extravasation which arise from lashing or cuffing. The fourth group of blemishes it is pigmental which arise from alteration of color of skin's pigment (accretion or reduction). Such blemishes are 3 types: hyperchromic, hypochromic and achromic. The hyperchromic blemishes can be divided into inborn diseases (as pigmental nevus) and acquired diseases. The small parts of hyperpigmentation is called " freckles". Hyperpigmentation inborn blemishes with development of hyperkeratosis is called "lintigo". The big dark parts of skin is called " chloazma". They are arisen from the malfunction of liver or as result of diseases of thyroid gland. The individual category forms the blemishes arise from the injection of coloring agents into the skin into synthetic way (tattooing). The hypochromic blemishes usually form in consequence of evolution of primary or secondary cells and look like parts of skin with reduced number of pigment. The achromic blemishes (depigmental blemishes) can be divided into 2 groups: inborn diseases (albinism) and acquired diseases (vatylogo). Its look like individual parts of skin without any presence of pigment. Pigmental blemishes is a good model of ratio of classification of cells into the primary and secondary. Thus hyperchromic blemishes (freckles) or achromic blemishes (albinism, vatylogo) can play a role of primary cells. Hypochromic blemishes, such as after an evolution of urinary blubber, play a role of secondary cells (abscess, papula etc.) ***Nodule*** ("papula" – in Latin)- it is primary non-cavitated cell which is above the surface of skin, has sharp scopes, doesn't pulp into the crinkle of skin being resorbed, doesn't leave any signs or can leave on place a pigment blemish. The nodule has never been as ulcer or scar on place. As provide by histological structure of papula it can be divided into 3 category: epidermal, dermal and epidermodermal. In the epidermal papula (for example

	during psoriasis) can be observed the initiation of third pathologic processes: hyperkeratosis, parakeratosis and achantosis. As a result of process of keratosis (thickening of corneous coating of epidermis) and process of parakeratosis (absence of cell catenation) the epidermal papula can peel. The akantosis (which is non-uniform distribution of papillas of derma with equal elevation) can be showed up in a way of scraping off. As a result of this process on the surface of papula shows a punctual bleeding. For dermal papula is typical an availability of cellular infiltration into the papillary coating of derma (for example during syphilis). At the expense of it the dermal papula rises above the level of skin. ***Epidermal nodule*** is the mixing of processes which are observed during epidermal and dermal papula (for instance during red flat herpes). At the clinic point of view the nodules are divided into 5 varieties: miliary – size from millet to head of match; urea-liked (lenticular)-size from head of match to 5-copeck coin; coin-liked (nummular)-size from 2-copeck coin to 5-copeck coin; plaque-the big size papulas. There are round, bullet-liked, flat, cone-liked, with correct or incorrect contours. It can be connected with hair follicle , oil-gland, sweat-gland and can be with umbilicate dent into itself , for example during red flat herpes. ***Hump*** - ("tuberkulum" - in latin)-it is primary non-cavitated cell which is above surface of skin, has clear shapes, pulps into the crinkle of skin, always leaves ulcer (deep defect of skin) or scar on place. Size of hump from millet to cedar-nut. The hump can be red, light red, yellow-red and other tints of red color. The type of this hump is characterized of pulping into the crinkles of skin and leaving of scar on place. At the point of view of histology the hump is cellular infiltrate into the deep crinkle of derma. ***Node*** ("nodus" - in Latin) –it is primary non-covitated cell, which is above the surface of skin and has clear shapes. The skin intends into the crinkle above the node because the node is cellular infiltrate in hypodermic adipose cellular tissue. Size of node is from pea to hen's egg and more. In most cases node disintegrates and forms an ulcer or scar on place. ***Bladder*** ("urtyka" – in Latin) –it is primary non-covitated cell which is above the surface of skin and has clear

	cupola-shaped form and doesn't have clear shapes. As a rule often the bladder is itching and doesn't leave any secondary cells on place. The bladder development mechanism is next. As a result of reaction by type " antigen-antibody" (allergic reaction during nettle-rash), toxic irritation (burn with nettle) and irritation with mechanical operation (Winn's symptom during mastocytos) has place degranulation of mastocyts (obese cell) with immunity of active substances (histamine, serotonin and others). As result we have dilation of vessels and during this period can be observed some reddening on the skin. After that is doing a process of increase of transmissivty of vessels and exudation of serous substance. In such way the abscess forms in derma. By sight the bladder will be above the surface of skin. In the middle of the bladder it will been have white color (as a result of pressing and suppuration of vessel) and will be pink about periphery. **Bulla** ("bullya" – in Latin)-it is primary covitated cell which is in epidermis, has round form , is filled with sulfuric substance , is more than head of match. As a in case of evolution of vesicle can form an erosion. Most often the bullas is placed under epidermis. Such bullas is called subepidermal as during red flat herpes. When the bullas is into the basal coating of epidermis is called " interaepidermical "in a consequences of decay of it's cells (for example during pemphigus). The bulla which is under corneous sphere of epidrmis is subcorneal. **Abscess** ("pustula" – in Latin)- it is primary cavitated cell which if filled with pus. The forming of abscesses can suppose different microbe factor. For the most part it is staphylococcus and streptococcus.The abscesses by it's size can be divided into 6 types. Abscesses are situated on the surface of skin (within epidermis) and are connected with nothing , size is not less than head of match (is called impetigo) or more than head of match by name " fliktena". If to take as a model the impetigo or fliktena can give a demonstration of ratio of allocation of cells into the primary and secondary. When these cells show on the unaltered skin they can act as primary cells. But as result of evolution of vesicle the impetigo can play a role of secondary cell and as a result of evolution of bulla the fliktena can play a role of secondary cell. As fliktena so as impetigo leaves erosion and pigment on places. The abscess which is connected with nothing and

	is situated deeply is called "echtyma". As a result of decay of surface of echtyma forms ulcer (deep defect of skin) and always is a scar on place. At in case of connection the abscess with hair follicle it is called " folliculitis" (deep affection of skin) or osteofolliculitis (allocation into the mouth of hair follicle only). Osteofolliculitis is treatable and doesn't leave any signs on place but folliculitis always finishes with scar on a place. The last sixth type of abscess is called "achne". This abscess is connected with oil gland. It is cone-shaped . It can evolve without any signs or as deeply placed can leave a scar on place. **Squama** ("squama"- in Latin)- it is corneous plates which lose a normal touch to one other (parakeratosis) are loosened, colorless, thin and transparent. Under microexamination can observe that they consist of epidermis cells, adipose matters, bacteria and motes. There are little plates squamas (efflorescence-liked), when the squama is very little (as during multicolored herpes). When squamas are big sizes it is active condition of disk-shaped peeling (psoriasis) .The psoriasis is secondary cell but it can act as of primary cell because of showing on the by sight unimpaired skin up (for example ichthyosis). ***Crust***- ("crusta" - in Latin) - it is forming in the issue of drying of serous substance (vesicle, bulla) ,pus, secretion of erosion, ulcers and other defects of skin. The crust is thick, with specified color and light-proof. Crusts can be different colors depending upon which substance it was formed. There are serous, purulent, blood and blending (mixing with matter, blood, motes, squamas and other) types of crust. Sometimes on the such primary cell can be formed multi-layer crust which look like clam-shell. This is a rupiah**.** On the crust's place always leave hypochromic blemishes. At the clinic point of view the crust differs from the squama with presence of thickness and absence of transparency . ***Crust-squama*** - it is secondary cell which represent to be a dry purulent contents of phliptenna (big surface pustula). But by typology it shows all indication of crust (dried matter) and squama (thinness and transparency) up. Such cells can observe, for example, during surface chronic steptodermatosis of ankle (differentiation with eczema). ***Erosion*** ("erozio" – in Latin) - it is secondary cell which are surface defect of skin (within of epidermis) of round or

	oval-shaped. The borders of erosion can be hanging (for example during chancre), undermining (leavings of covering of bulla), regular or sharp in depending on form of previous primary cell. Erosion can be cured of epithelization and doesn't leave any scar on place. With erosion model can demonstrate an effect of relativity of classification on primary and secondary cells. During evolution of papula (papulous syphilid) or bulla an erosion can play a role of secondary cell but during chelit or chankre erosion can act as a primary cell. ***Ulcer*** ("ulcus" – in Latin)-it is deep round or oval-shaped defect of skin. Ulcer it is a result of evolution of deep pastula or nuclear or joint decay. In some cases an ulcer can play a role of primary cell (example of relativity of classification on primary and secondary cells). For instance trophic ulcers which forms as a result of initial necrosis of by sight safe coverlets or as a result of trophic disorder. The borders of erosion can be hanging, undermining, scalloped, regular or zigzag. On the place of ulcer always leaves a scar. ***Abrasion or scratching*** - it is line imperfection of skin as a result of mechanical failure. The abrasion can play as a role of secondary cell so a role of primary cell under injuries of by sight health skin (for example during itching of skin, during mechanical trauma and etc.). There are surface and deep traumas. First doesn't leave any signs on their place. Second always leaves a scar on the place. As a rule the borders of excoriation always is pointed because it intersects a skin's tension lines (Lannger's lines). ***Chap*** ("ragades" – in Latin) –it is secondary cell which form as a result of stretching of skin on the are infiltrated and loosed their tensile ductility parts of skin (dryness of skin). Chaps always are disposed in the lines of Lannger's (stretching of skin) and therefore are equilateral. By that they differ from the excotiation There are surface (within epidermis) which skin over without any signs_and deep which leave a scar on place (inborn papulous syphilid all around the mouth) ***Cicatrice*** - it is effusing of fibrotic connecting burlap in parallel with fibers on the place of deep crippling of skin.(for example derma, hypodermic adipose cellular tissue). For cicatrice is typical an absence of drawing of skin, hair follicle, oil glands and sweat-glands about the surface of cicatrice. At the clinic point of view there are flat cicatrice

	(which is suited at the same level with surrounding covering), atrophic (which is situated under the level of skin) and hypertrophic (which is raised above the coverlets), for example keloidical cicatrice. ***Lichenification*** - it is secondary changing of skin which is characterized by 3 criterions: thickening of skin, intension of drawing of skin and hyper-pigmentation. Most of all lichenification forms as a result of constant scratching during chronic processing of itching dermatosis (neurodermatitis, chronic eczema). Lichenification forms following infiltration all spheres of derma and an infiltration is accompanied with achantosis and papillomatosis. ***Vegetation*** - it is accretion of epithelium and pappilas of derma on the surface of some of elements (papula, bottom of ulcer). Clinically the vegetation have the appearance of fiber accretions owing to which the part of skin is unequel, hump-backed, reminds cook's combs. During determination of type of element it is necessary to fix their color and take into account that during various of diseases type of element has different tint of red color- from bronze (during syphilis) or rich-red (during psoriasis) to blue tints of red color during red flat herpes. The borders of element can be clear or non-clear (bladder). During pulping it can be tight or soft. Morphological elements can be divided particularly (during syphilis) or to be flowing together at the expense of development about circumference (psoriasis), can form as groups which making an arch , ring, garland (During's dermatitis). Localization during some type of dermatosis can be selected (for example on elbows or knee during psoriasis) but in some cases doesn't make localization on the certain parts of skin (scab on the face, blackheads oh the palms and feet). Generally the efflorescence are polymorphic and monomorphic. Monomorphic is such efflorescence which consist from only one type of the primary [nettle-rash] or the secondary morphologic cells (ichtyosis). And that rash is called polymorphic which consists of various efflorescence. The polymorphism can be of two types: the real and the false one. During the real polymorphism the rash consists of a number of the primary cells (for example during an eczema there are erythema, papules, vesicles) and during the false polymorhism it has only one primary cell and some

	secondary ones as a result of its evolution (during the psoriasis following the evolution of papules the secondary hypochromic maculas (Hypochromic maculas are formed). The great role in the diagnostics of dermatosises play additional methods of the inspection of the patient. They can be divided into the clinical and laboratory methods. One of the most widely spread clinical additional methods of such inspection is the morphism or the vitripressing the essence of which is based on the process of pressing on the changed dermal section with a glass. While this doing changes the color of the skin. It can be seen through the glass. In this way the vascular inflammatory maculas (erythema, roseola) can be differentiated from others [hemarrhagic, pigment) and determine the singular brown coloring of the hillocks by the elimination of the inflammatory pink background (the symptom of "apple jelly" during the lupus). The method of scraping is provided with a help of a scalpel. Simultaneously it's possible to determine the typology of peeling – in the presence of parakeratosis it is more friable and during hyperceratosis it's hard to be gotten. For making the diagnostics of eczema apply so-called Brook's scraping system, which gives a possibility to find out the hidden micro-vesicles which are allocated in the prickle-cell layer, at the expense of taking of horny epidermic layer away. With the help of this method it's possible to reveal the typology of hemorrhage [punctated or poured one] under the heightened brittleness of capillaries. By determination of the dermographism character it's possible to define the functional stale of the vascular-nervous system. The dermographism is defined by such method as passing finder, with a little blunt stick or the special dermograph along the skin (the dosed irritation at the expanse of spring). With the help of the method it's possible to distinguish the pink dermographism ,by the vascular dilatation as the paradoxical reactions (during neurodermitis) and the heightened dermographism or the urticarial one (during nettle-rash). The processing of the dermographism gives possibilities to determine the presence of the vegetative-neurotic condition of organism. For making diagnostics of the allergic dermatosis making use of the so-called the dermal test with allergens are applied. These test give possibility to determine the heightened sensitivity (sensitization) to the concrete

	maters which caused allergic reactions of the organism. The cutaneous tests are divided into three types: epicutanic, scarificative and intrudermal ones. The epicutanic tests in their turn are divided into two subspecies – the drop and the compress ones. For carrying out the drop tests the spirituous or the acetone solutions of the definite substance are put on the surface of the clearly seen unaffected skin (more often it is done on the side surfaces of the stomach). After the spirit or acetone steaming the place with a drop of the solution with the allergen is glued over and marked with the name of the substance applied in the test. For carrying out the compress the pieces of gauze in 4 layers measuring 2x2cm. are put on the skin of the back (along the spinal column, between the shoulder-blades and lower). The gauze is wetted by the solution of the allergen. For the allergen solution preparation the special tables are used. These tables indicate the concentration of the examined matter and the name of the investigated material.. The gauze pieces are glued up, fixating them to the skin with some in size more large pieces of court plaster with written indication on its surface. The time of the test conducting and the name of the examined matter. The scarification test is carried out into the following method. On the clearly seen unaffected skin the scarification with Genner's feather (so-called dozen injection in the epidermis localization) and after that one drop of the allergen solution is put on the place of the scarification. As a variety of this test the scarificatative – compress test, proposed by Anton'ev A.A. can be conducted. It is based on carrying out the compress test (see above) on the place of the preceded scarification. For conducting the intradermal test the sterile solution of the allergen in the quantity of 0,05ml. Is injected intra-dermaly into the skin of the citronin surface of the forearm. The name of the examined matter is indicated below the place of the injection. The information about the results of the dermal tests must be given 4 times: after 40 minutes (for the registration of the allergic reaction of the rapid type), and after 24,48 and 72 hours (for the registration of the allergic reaction of slowed type). In the case of the absence of any changes of the skin (or in the skin) on the place where the test was carried out it is considered to be negative or it means that the examining patient doesn't have any heightened sensitivity to the

	given substance. The reaction of quick type shows itself by the bulla appearance which is evaluated according to its dimensions with the help of the special ruler. In the positive reaction of the slowed type the redness of the skin can appear on the place of the testing – that is erythema (its intensity is evaluated AS+), the redness with the turgescence or papule (++), the eczematous reactions on the background of the erythema there are small miliary papules, vesicles or bullas - +++) or the dermal necrosis (++++). For diagnostics of some dermatosis the determination of the functional state of the dermal capillaries with help of capillary-morphism is significant. It is conducted after oiling the examining section with a special capillary-morphism. The capillaries are examined in the section of the nail hillock, where they as a rule are localized across to the dermal surface. This method has (e) special significanse for the early diagnostics of Raynod's disease, for the systemic scleroderma (sclerodactylia) and other diseases that are connected with the disturbances of the peripheral blood circulation. Some other disturbances are also marked during the disease. They are the dilation or spasm of the capillaries, the increase or decrease of their number. The luminescent diagnostics of cutaneous diseases is conducted in the darkened room with help of Wood's lamp and after the doctor's adaptation to the darkness. Wood's lamp is a mercury-quarts lamp with the special filter for stopping the long-wave part of rays (the glass impregnated by nickel salts). The named diagnostics is applied to determ the vitiligo diagnosis on its initial stages) with clear contoured bright-white sections of the depigmentation) the red lupus (the snow-white luminescence of the hyperkeratosis zones), the microscopy (the bright-green luminescence of the affected hair). For making rational therapy is the revealing the nidus of the affection of hair part of the head (the golden-yellow luminescence) during the rash-like herpes is of fundamental importance. The typical coral-red luminescence is observed during the erythrasma (the differentiated diagnostics with the inguintal epidermophytosis). For making the diagnostics of the late purple of the skin a portion (5ml) from the daily urine is inspected in Wood's lamp rays; such urine has the red fluorescence and healthy people has the bluish-

	white one. In some difficult for diagnostic cases the histological inspection of the skin is carried out, which has the decisive importance during the concrete types of dermatosis (dermal growths, Darrier's disease, reticulosis, deep mycosis etc.). The piece of the skin after biopsy must be accompanied with the detailed description of the clinical history of the disease, including the data of the differentiated diagnostics before its sending for the microanatomical examination.
Scabies	is a parasitic contagious skin infestation caused by the itch mite Sarcoptes scabies. **Etiology.** Human scabies is caused by the itch mite Sarcoptes scabiei of Sarcoptidae family. The size of the male mite is 0.2 mm in length, 0.14-0.19 mm in width. Female is somewhat larger, it is 0.4-0.45 mm in length and 0.25-0.35 mm in width. Under the microscope itch mite is like turtle. After fertilization the male dies, and female burrows into the epilayer of the epidermis, where makes tunnels in parallel with the surface of the skin, in which it lays eggs. A mite can be removed from the itch tunnel with an injection needle or by means of thin sections of stratum corneum in the places of itch tunnels made by the female. For the period from one and a half to two months of its life, the female lays up to 50 eggs, of which three or four days later the mite larvae hatch. After two weeks, the mites become mature. **Epidemiology.** Annually up to 300 million cases of scabies morbidity are registered in the world. Fluctuation of scabies morbidity is of sinuous character with rise and fall rates periods in 15-30 years. Mainly, morbidity rate increase is caused by the worsening of sanitary conditions, poverty, migrations, economic crisis, natural disasters, population crowding, especially during the wars. It is observed the parallelism of increase of scabies cases and diseases transmitted predominantly through sexual contact. The source of infection is ill person. The main way of disease transmission is family and domestic. The infection occurs through the direct contact with the sick person, through bed sheets, clothing, gloves, socks and

	other items that he used. The children often become infected through shared toys in the kindergarten. Clinical picture. The clinic of scabies is based on the peculiarities of agent parasitizing, skin reaction and topical distribution of itch mites on the host. The incubatory period at the introduction of infection by the female is virtually absent, as it immediately borrows into the epilayer of the epidermis and starts to gnaw through tunnel and lay eggs, that is, there is the main clinical symptom of the disease. At the introduction of infection by larvae one can talk about the incubation period, which corresponds to the period of larva transformation into the mature female (approximately two weeks). The clinical symptoms of the scabies are itching, which increases in the evening time, the presence of borrows, polymorphism of skin (papulovesicles, papules, scratches, bloody crust), characteristic localization of the rash. The first subjective sign of the disease is intense itching in the places of borrows made by the female. The itching becomes worse in the evening and at night, that is due to the biological female characteristics, (period of agent activity, salivation and substances present in the excrements, irritation of the nerve endings at movement of the itch), tunneling mainly at night, and the development of organism sensitization to parasites and their waste products. Itch can be localized and generalized. Its intensity varies with different people and depends upon the number of rashes and distribution process. On the place of the female penetration into the skin a small papulovesicle (rarely papule) appears, which has infiltrative basis. At the distance of 2-7 mm from this element another papulovesicle appears (that is the exit site of the female onto the skin surface), these are so called conjugated freckles. Between the papulovesicles one can see itch tunnels, which have the form of thin strips of grey color, either straight or curved in the form of S letter. By means of light palpation one can find

	the tunnel relief, this is symptom Cezary. In the result of scratching there appear excoriations or small erosions with bloody crusts. Typical places of scabies localization are areas of the hands between the fingers, flexor surface of the brachium and elbow joints, the front and rear edges of axillary cavities, lateral surface of the chest and abdomen, nipples areola breast of women, navel area, buttocks and inter-gluteal folds, internal surface of the femora and external genitalia, these are areas with thin stratum corneum. The symptom of Hardy-Gorchakov helps in the diagnostics; this is the presence of pustules (impetigo, rarely ecthyma) and purulent crusts on elbows. The eruptions in view of impetigenous elements, papulovesicles, crusts in the area of inter-gluteal fold skin with the transition to the lumbus, were called the triangle symptom or the rhomb of Michaelis. Scabies, as a rule, is not localized on the skin of the head, neck, back, axillary cavities, palms and plantae (except for children and persons with mental disabilities), that is an important feature for the differential diagnostics with some other dermatoses. Clinical presentations of scabies on hand skin can be absent or slightly observable as to neat people and persons working with mineral oils, fuel oil (drivers, fitters, turners and others), turf and asphalt. The peculiarities of clinical presentation of scabies nowadays are light itching and inconsiderable in number eruptions during continuous course. There can be urticarial elements, the absence of rash on the hands due to frequent contact with detergent agents, pastes, chemicals and others. Scabies is often complicated by the secondary pyococcus infection in the results of the scratching (impetigo, ecthyma, folliculitis, boils), and by microbial eczema, especially in the area of breasts as for women. At eczematization there appears rash, which is typical to eczema; on the erythematous ground there appear small vesicles, oozing lesion, excoriations, and crusts. Eczematization, as a rule, develops as a result of irrational therapy or intolerance to some local

	agents (of brilliant green, benzyl benzoate, furacilin and others), less frequently as a result of sensitization of mite waste products. Morbid anatomy. Histologically borrows look like tunnels in the homy layer of epidermis. Cephalic reminds a funnel and slightly opens outwards and the cavity is visualized in the caudal section of the borrow, where the female is situated. Small vasodilatations with a little cellular infiltration around them take place in papillary dermis. Sometimes acanthosis and spongiosis are observed in the epidermis. **Diagnostics.** The diagnosis is based on the characteristic clinical picture of the disease and the identification of scabies mite in the laboratory research. With the traditional method the material for the study is obtained by means of the needle from the papulovesicles, located in the end of the borrow, or by means of superficial slice of the epidermis with a razor in the location of borrow. After putting the obtained material on a glass slide in a drop of 10-20% of alkali solution, the specimen is examined at law magnification under a light microscope. **Differential diagnostics.** Most frequently it is necessary to differentiate scabies from skin prurigo, wherein intense itching and papular elements are observed as well. In contrast to scabies, in indicated disease itching worries patient both in the daytime and at night, and more often it takes priority of rash. The popular elements are not conjugated, are located randomly and can appear on face skin, the itch borrows are absent. Indirect evidence in favor of scabies can be itching and similar rash of family members of the patient. Scabies affection of the penis skin, especially in the form of ecthyma, can be crucial for the suspected syphilitic solid chancre or popular rash, specific to the secondary period of syphilis. The presence of specific

	carnification at the heart of syphilitic solid chancre, the revealing of pale treponemes in serum of chancre or in lymph node aspirates, as well as the absence of scabies signs on other parts of the body and positive serological reactions allow diagnosing syphilis. One type of neglected stage of scabies is so-called Norwegian scabies, which is observed in persons with mental illness and in patients suffering from syringomyelia, multiple sclerosis, leprosy. The skin at this time is covered with thick, as bark, crusts of dark green colour, resembling shell. Under the crusts after their removal on erythematous background a lot of white dots can be seen these are scabies mites. **Treatment.** In order to kill off the scabies mites, local antiparasitic agents, disintegrating the cornel layer of epidermis and killing parasites, are applied. Appropriate antiparasitic agents as ointments, solutions and sprays are necessary to rub in all skin integuments, except for face and scalp, for adults. As infants and young children can have scabies manifestations on the face, scalp plantae and palms, accordingly, the indicated parts of the body subject to treatment with antiparasitic agents as well. For scabies treatment benzyl benzoate is used. This method differs from the others in such a way that along with high efficiency, there is no unpleasant smell that allows the patient to be at work, in public transport etc. Benzyl benzoate (benzyl-benzene carboxylate in form of 20% suspension in soap solution: 20 g of benzyl benzoate, 2 g of green soap and 78 ml of water) is rubbed in with a cotton swab after that the patient puts on clean clothes and change linen. Inflictions are repeated during the period of two days more without washing. In three days after end of treatment the patient takes a shower and changes clothing. Nowadays, 25% benzyl

	benzoate cream is used more often than suspension. The application of the above methods of therapy of scabies, taking into account the toxicity of antiparasitic medicines, is often accompanied by skin irritation (contact dermatitis). In this case, the patients are recommended desensitizing agents and antihistamines, zinc oxide powders, indifferent water magmas, steroid creams and ointments. In case of bacillosis overlay, antibiotics both oraly and topically are used temporarily, and lesion focuses are salved with aniline dyes and 2% salicyl alcohol, as well. If scabies is accompanied by eczema, then 24 hours before the antiscabious therapy, the affected area must be salved with one of the topic corticosteroids. The patients with constant itching after the treatment for a long time are recommended mitigatory and local anti-itching therapy. Prophylaxis and antiepidemic measures for scabies patients are carried out accounting the epidemiology of disease. Early diagnostics and active case detections are of great importance here. Control of curability is executed in three days after the ending of therapy, and then in every ten days during a month and a half. The effectiveness of therapy mostly depends on thoroughness of sanitary and preventive measures.
Staphylococcal skin infections	Staphylodermae are characterized by the development of inflammatory process, mainly in the area of appendages location, such as cutaneous and hair follicles, sebaceous and sweat glands. As a rule, a hair or opening of sebaceous gland is in the center of pustules. Much less frequently, staphylococci cause the lesions of the surface layers the smooth skin that is mainly observed in children. Newborns and infants have got the connection of epidermis with derma insufficiently developed due to the weakness of the basal membrane and dermal papillae smoothness that is why

	during the staphylococci penetration, the morphological elements such as bubbles and phlyctenas develop. The following forms of staphylodermae are distinguished; these are **surface** - ostiofolliculitis and **deep** - folliculitis, furuncle, carbuncle, hydradenitis, sycosis, vesicle-pustulosis in children, neonatal impetigo, multiple abscesses of children (pseudofurunculosis), exfoliative dermatitis, and neonatal bullous impetigo. **Ostiofolliculitis** is characterized by the appearance of small pustule with the size of grain of millet or pinhead, of greenish-yellow or milky-white colour, of spherical shape, surrounded by acute inflammatory hyperemic circle. A pustule is localized in hair follicle and pierced with unaltered hair in the center. The accumulation of pustules is observed in a small area of skin; they do not increase due to peripheral enlargement and do not merge. The process is most often localized on the skin of face, neck, forearms, lower legs, hips. The patients feel little itching. The pustules shrivel forming greyish-yellow crusts in 4-8 days. After crusts falling, insignificant pigmentation remains on the skin, which soon disappears. Ostiofolliculitis appear under the influence of minor skin irritations such as shaving, friction, maceration due to excessive sweating. In some cases, certain ostiofolliculitis can grow at periphery or deathward, becoming deep folliculitis, furuncles and carbuncles. Growing at periphery ostiofolliculitis eventually reaches the size of a pea, especially in children and scabies patients with wrists lesion. These ostiofolliculitis are called BockharVs impetigo. **The diagnosis of ostiofolliculitis** is set in presence of small tight conical pustules, in their center pierced with a hair and surrounded by hyperemic circle. Hystologically, a small cavity, bounded above by the

	horny layer, and bounded below by the callous cells of epidermis, is located in the ostium of the hair follicle. The cavity is filled by the conglomerate mass of polymorphonuclear leukocytes, some lymphocytes, and staphylococci as well. An edema appears around the hair follicle in the derma and capillaries broaden, around which perivascular infiltrate from lymphoid and polymorphonuclear cells is observed. For **the treatment** of ostiofolliculitis, the pustule is pierced with a sterile needle, the tectum and pus is removed, the affected areas are anointed by the 1-2% alcohol solutions of aniline dyes (methylene blue, brilliant green, Castellani liquid). After that the skin is wiped with 2% salicylic or boric spirits and sprinkled with 5-10% of boric powder. With large crusts the affected surface is salved with antibiotic ointments (Fusiderm, Bactroban, Altargo, neomycin, tetracycline, and erythromycin). The topical application of Zineryt lotion (erythromycin zinc complex), OXI, Ugrinum lotions, and Diacneal cream is also effective. **Profound folliculitis** (folliculitis profunda) is a purulent inflammation of the entire hair follicle and the adjacent adipose tissue, arising in the result of pathogenic staphylococci penetration in the depth of follicle. Initially a painful red papule (nud) of size from a pea to a cherry appears on the skin around the ostium of hair follicle. A hair is located in the center of a papule. In a few days, the papules tauten, becoming a follicular pustule of conic form with base induration. A pustule dries out after some time forming the crust, in some cases connective tissue necrosis and intense suppuration can occur. A pustule in the center ulcerates gathering to matter of greenish-yellow or white colour. Profound folliculitis remains pigmented scar. The reasons for the appearance of profound folliculitis are the same as for

	ostiofolliculitis. Hystologically, in profound folliculitis there is infiltrate consisting of neutrophils and lymphocytes around the hair follicle. A hair follicle melts itself, and a cavity filled with matter, forms in its place. **The treatment** of folliculitis is the same as of ostiofolliculitis. **Furuncle (furunculus)** is acute purulonecrotic inflammation of hair follicle and its surrounding connective tissue, caused by pathogenic staphylococci. A furuncle develops in the presence of low immunological reactivity of organism. The contributing factors in furuncle appearing are the cutaneous injuries, scratching of allegrodermatosis, catarrhal and infectious diseases, vitamin deficiencies, hypothermia and other. A typical localization of furuncle is the areas of friction between skin and clothes, such as neck, lower back and buttocks. **The symptoms** of furuncle develop gradually. In the majority cases, the process develops in the setting of ostiofolliculitis, which spreading depthward, leads to the formation of the node of acute inflammatory character. During the period of 5 to 7 days the furuncle becomes soft in the center, the fluctuation appears. The infiltrate ulcerates discharging matter prolifically. In the center of the burst there appears necrotic tissue of green colour (necrotic core). After its separation there is a deep crater-like ulcer. The ulcer bottom is covered with granulations, gradually discharging from the matter, thus the ulcer cicatrizes. The development of the furuncle is accompanied by the pains and burning sensation, and sometimes high temperature. In the case of relapses of furuncle several times in different places they say about the chronic furunculosis. The development of furunculosis is promoted by the dysfunction of internal organs and nerve system, depletion of immunological reactivity, anemia, diabetes, infectious diseases, hypo and avitaminosis, the presence of chronic foci of infection, the use of corticosteroids and other. In

	children the furunculosis develops with gastro-intestinal disorders, hypotrophy, and rickets. The typical **clinical picture** is a massive infiltration, conical shape, redness, pain, the presence of a hair and necrotic core in the center enables quite easy to set a diagnosis of furuncle. Hystologically, a massive infiltration, consisting of polymorphonuclear leukocytes, lymphocytes, fibroblasts and a small number of plasma cells, forms in derma and subcutaneous fat. Collagen and elastic fibers break down completely with hair follicle. In the focus of lesion, a massive argentophil grid appears which forms the membrane, impeding penetration of infection from the focus into the patient organism. **In the treatment** the skin around the furuncle is disinfected with alcohol or ether, after that a hair is pulled out gently from the center of infiltrate with a sterile forceps, pure ichthyol is put on the furuncle, covering it with a thin layer of cotton wool. The procedure is repeated twice a day, until in the center of the follicle the opening forms, on which the gauze folded in several times and moistened with hypertonic solution of sodium chloride is put. After discharge of the core, the ointment with antimicrobial effect and stimulating tissue regeneration is applied, such as (Fusiderm, Bactroban, Altargo), and skin around the furuncle is wiped with 2% boric and salicylic spirits. In the case of multiple furuncles, furuncles in the area of face, hairy part of the head, as well as chronic relapsing furunculosis, antibiotic therapy should be applied in order to prevent the occurrence of septicophlebitis of cerebral vessels and general sepsis. Currently, it is recommended to use the broad spectrum antibiotics from the group of cephalosporins, tetracyclines, macrolides etc. in adequate doses during 7 to 10 days with an obligatory determination of pyococcus sensitivity to antibiotics. In severe cases the antibiotics are administrated parenterally. Concurrently antihistamines, such as suprastin, cetrine,

	claritine, aerius etc. are prescribed. **Carbuncle (carbunculus)** represents a severe inflammatory process, covering several hair follicles, sebaceous glands and subcutaneous fat. As a rule, a carbuncle develops in the result of dissemination of purulent process with numerous profound folliculitis or in conjugating of close furuncles that leads to extensive skin necrosis. Carbuncle is caused by the pathogenic stains of staphylococci. Endogenous factors first of all play an important role in the development of carbuncles. The general condition of the carbuncle patient is usually compromised, there is high temperature, headache etc. Carbuncles are most often localized on the skin of hindhead, back, lumbus, i.e. in the places of friction and irritation of the skin and its frequent pollution. At the beginning of the process there are several openings on the skin surface above infiltrate, and infiltrate is surrounded by edema. After the cores separation and intense discharging of matter, mixed with blood, necrotic mass of green colour can be seen on the infiltration site. After purification of the openings from the necrotic masses, there appear deep ulcers, sometimes reaching up to fasciae or muscles. In the result of filling the ulcers with granulations, their cicatrization occurs, and the process ends with formation of retracted stellar scars. In advanced age, as well as with exhaustion, neuropsychic defatigation and diabetes, the course of the disease acquires malignancy, neuralgic pains and deliration appear and sepsis and erysipelatous inflammation can occur. Hystologically, in carbuncle there is deep necrosis of all layers of derma and subcutaneous fat. Around the necrotic area there is a massive infiltrate, consisting of neutrophils and a small number of lymphocytes. Carbuncle **treatment** requires an obligatory use of antibiotics and other systemic

	drugs, so as in treatment of severe forms of furuncle and chronic furunculosis. A topical treatment is the same as in furuncle. **Hydratenitis** is a purulent inflammation of apocrine sweat glands, located in axillary cavities, on labia majora, mammillae, anal area. It is caused predominantly by staphylococcus aureus. The contributing factor of development of hydratenitis is excessive sweating in axillary folds and perineum, consumption as a result of hypotrophy, infectious, nervous and endocrine diseases. From the external factors, the significant are excessive contamination of skin, microtraumas and cuts resulting from shaving hair in the axillary cavities. Hydratenitis in children is observed only in senior age, when apocrine sweat glands attain full growth and begin to function (period of puberty). Hydratenitis develops gradually. At the beginning the feeling of discomfort and insignificant soreness appear at the sites of localization of apocrine glands. The skin is not changed, and in palpation it is possible to detect small indurated formations. Later the skin at the affected sites becomes red, painful pea-sized nodes begin to extrude, which rapidly increasing reach the size of pigeon egg. Sometimes separate nodes can merge. In one to two days the nodes acquire soft consistency and are perforated with formation of openings, from which a large amount of matter is discharged. Gradually, the abscess cavity is filled with granulations, and the process ends with formation of retracted scar. Maturation of hydratenitis is accompanied by high temperature, severe pains and general weakness. Disease can become chronic, when new nodes are developing one by one. The relapses are especially frequent in people with heavily pronounced sweating, insufficiently observing hygiene. The relapses

	occur mainly in summer in hot period. Hystologically, the pathological process in hydratenitis develops in the deep layers of the skin around the body and excretory ducts of apocrine gland, where there is an infiltrate from neutrophilic leukocytes and purulent fusion of sweat gland. The profound destructive changes of vessels occur in the center of necrosis. The disease is so typical by localization and clinical picture, that the diagnosis is set without much difficulty. The treatment does not differ numerous furuncle, furunculosis and carbuncle; it includes timely application of antibiotics, immunomodulatory, local and symptomatic agents. **Sycosis** (sycosis vulgaris, sycosis simplex, sycosis staphylogenes) is a chronic staphylococcal skin lesion of face in the area of beard and mustache. Sycosis is observed almost exclusively in men. It can rather rare affect also internal surface of nose, eyebrows and pubic area. It is characterized by chronic course, relapsing eruptions of ostiofollicular pustules on the indicated areas of the skin. Contributing factors in the development of sycosis are integrity violation of epidermis, chronic rhinitis, nervous and endocrine diseases, in the first place, hypofunction of testes. The development of sycosis begins with the appearance on the skin in the area of beard and mustache of small pustules the size of a millet grain, placed in the follicle ostium. In a few days, the purulent process affects the entire hair follicle (profound folliculitis). Gradually the skin of the affected site infiltrates, gets bluish discoloration, is covered with mixed crusts, swells. The site of the lesion focus enlarges peripherally due to the formation of new folliculitis. When pressing on the infiltrate, droplets of yellow green pus are discharged from the extended hair follicles. After dropout of crusts, at the sites of lesions small erosions and ulcers appear, from which seropurulent liquid is released. The general state of health of sycosis

	patients is not altered, sometimes the patients can complain about light itching, burning sensation and insignificant sickliness. Prolong course of the disease and its localization on the open skin area sometimes leads to oppression of mental state of patients. Sycosis is rather easy to diagnose on basis of typical localization of lesion areas, chronic course, and presence of infiltrate with follicular pustules. Parasitic sycosis (profound barber's rash) differs by more severe course; the pathogenic fungi are detected during laboratory testing. Hystologically, in the area of hair follicle, the abscesses appear, filled with matter, the infiltrate consists of polymorphonuclear leukocytes and fibroblasts, a small number of lymphocytes and plasma cells. The edema, degeneration of hair follicle and surrounding connective tissue is observed in epidermis and derma. In the acute period of sycosis development the broad spectrum antibiotics are administrated, including tetracyclines or macrolides (azithromycin, doxycyclinum, tetracyclinum etc.). **The topical therapy** of sycosis should be started with removal of all crusts from the surface under purulent process, by softening them with plant oil, then the lotions of 1 % solution of resorcinol, 0.1 % solution of rivanol or furacilin are put on. The affected hairs are tweezed, and the surrounding tissues are wiped daily with 70% ethyl alcohol. Later, the antibiotic and corticosteroid ointments are applied (Fusiderm, Oxycortum, Betaderm, Bactroban, FlucinarN). Vesiculopustulosis in children is a widespread purulent disease, which appears in the first years of life. In the ostium of the sweat glands numerous pustules appear, filled with white yellow matter, the size of a pin head to a small pea, they do not merge with each other and are surrounded by bright edematous circle. **Vesiculopustulosis** is localized at the sites of the greatest

	sweating and skin maceration. Premature infants of asthenic constitution mainly suffer from disease. Diagnosis is set on grounds of typical clinical presentation and process localization. The disease should be differentiated from scabies, in which the papulovesicles are paired. Epidemic neonatal pemphigus (pemphigus neonatorum epidemicus) is a cute infectious disease, differentiating from other pyodermae by very high contagiousness. Often the infection is transmitted to children from the adults (especially from medical personnel), suffering from pyodermae or quinsy, or through household articles. Sometimes, there are epidemic outbreaks of neonatal pemphius in maternity hospitals or day nursery. The disease appears in 7-10 days after the birth. In the setting of erythematous patches, the blisters the size of pea are forming, filled with serous contents, they are rapidly increasing in the periphery, reaching the size of nut and becoming less stressed. The content changes from serous into purulent. The blisters can be placed over the entire the skin cover, especially often on the abdomen near the umbilicus, on the buttocks, hips, back, chest and extremities. They rather quickly go into wet erosions, on the periphery of which the remains of blisters i.e. scraps of epidermis overhang. Drying up, the erosions do not leave crusts and regress with the formation of pink-brown pigment spots without scars. The general condition of the patients is not altered; the disease mostly lasts 4 to 5 weeks. The process in weakened children can rapidly spread, covering new skin areas by autoinoculation (infection transmission from affected skin areas to the health). Children condition significantly worsens, the temperature rises up to 38-39°C, dyspeptic phenomena join. As concerns blood there are leucocytosis, eosinophilia, increased ESR. In some cases the disease can be complicated by conjunctivitis, otitis and even sepsis that sometimes lead to the death of a child. **Exfoliative dermatitis (dermatitis exfoliativa)** presents especially severe form of epidemic neonatal pemphigus. The disease begins with prodromes, such as nausea

	and temperature rise. Bright erythema appears in the folds of skin, around the mouth, umbilicus, anus and genitalia. In the setting of erythema there appear rather big tense blisters, which rapidly erode. In exfoliative dermatitis the positive Nikolsky's sign is observed, i.e. in case of friction of skin at the visible-healthy sites, it flakes off, forming the erosions; when pulling the scraps of blister with the tweezers, the epidermis exfoliates on the surrounding skin areas (the presence of acantholysis). The disease is accompanied by high temperature, dyspeptic phenomena. For several days, the process affects the entire skin cover, and sepsis develops, often with fatal outcome. The diagnosis of epidemic neonatal pemphigus is set on the basis of appearance in children on erythematous acute inflammatory background of stressed blisters, which rapidly erode. The disease is necessary to differentiate mainly from syphilitic neonatal pemphigus and congenital epidermolysis bullosa. Both of these diseases are already observed at childbirth, when epidemic neonatal pemphigus develops only on the 7th to 10th day after the birth. In case of syphilitic pemphigus, the blisters affect the skin of palms and feet, which is not observed in case of epidemic pemphigus. In case of congenital syphilis in children it is possible to observe at one time syphilitic rhinitis, diffuse popular infiltration of Hochsinger, osteochondritis, and in the process of microscopy of blisters content in the dark field of view there are a large number of causative agents of syphilis such as pale treponems, classic serological reactions of blood, treponemal immobilization test and fluorescent antibody test are strong positive. Congenital epidermolysis bullosa is characterized by intrauterine appearance of blisters, which occur most frequently at the sites of birth injuries, such as hairy part of the head, buttocks, upper and lower extremities.

	The treatment of epidemic neonatal pemphigus involves high-priority administration of antibiotic therapy in order to prevent complications and development of sepsis. Multiple abscesses in children (abscessus multiplex infantum), or pseudofurunculosis, is observed in neonates and infants. The disease begins with the appearance of superficial pustules in the ostium of sweat glands (periporihis). The agent is staphylococcus aureus, which penetrates in the depth of the sweat gland and causes the forming of deep indurated painful nodules. The skin over the nodules is not altered at the beginning, but soon it acquires reddish-brown color. The nodules the size of a pea to a nut soon suppurate and dense yellowish-green matter is discharged onto the surface of the skin. The nodules are very similar to furuncles, but they have not got core in the center (hence the name pseudofiirunculosis) and are not connected with pilosebaceous apparatus. Multiple nodules are located on the trunk, hairy part of the head, buttocks, lower and upper extremities. After discharge of a matter, the process ends with cicatrization. The course of the disease is rather soft, often relapses, is accompanied by high temperature, leukocytosis, increased ESR, and can be complicated with phlegmon, septicemia. In the pathogenesis of multiple abscesses appearance a significant role is played by unhygienic maintenance of children, increased sweating, malnutrition, the presence of dyspepsia and enteritis, rickets, tuberculosis and other infectious diseases. The diagnosis is set on grounds of appearance in children of persistent recurrent abscesses not connected with hair follicles and sebaceous glands. Hystologically, the appearance of purulent abscesses, connected with sweat glands and their ducts, are observed in derma and subcutaneous fat. The treatment includes the administration of antibiotic injections. Topically, unmixed ichthyol is applied at the affected sites or the abscess is pierced with a sterile needle after skin disinfection with the following anointment by alcoholic solutions of aniline dyes. After ulceration the antibiotic ointments are applied at these sites. **Bullous impetigo (impetigo bullosa)** is referred by one authors to streptoderma, and the others to the pyoderma,

	caused by staphylococci (benign form of staphyloderma). Clinically, the disease is characterized by the appearance of blisters or phlyctenas the size of a pea to a pigeon's egg, filled with serous nebulous liquid or matter. The elements are not stressed; they are surrounded with hyperemic circle, and quickly erode. The erosions with wet surfaces can enlarge at periphery; they are surrounded with the scraps of epidermis. Bullous impetigo is localized on the trunk, back of the hands, less often on the feet and lower legs. The course of the disease is benign; the general state of the children is satisfactory. The treatment consists of anointment of erosions with the alcoholic solutions of aniline dyes and antibiotic ointments.
Streptococcal infections of skin – streptoderma	**Streptoderma** are caused by streptococci, which unlike staphylococci, do not affect pilosebaceous apparatus and sweat glands and do not infect derma and subcutaneous fat with the following development of necrosis. Streptococci mainly cover the smooth skin, and the diseases caused by them are of superficial character and in majority of cases manifest as elements in the form of blisters or phlyctenas, filled with clear or slightly nebulous contents. Most frequently, streptodermae are observed in women and children due to the fact that their skin is more delicate. The following forms of streptodermae are distinguished, these are streptococcal impetigo, streptococcal intertrigo, syphiloid papular impetigo, superficial panaritium, perleche, lichen simplex, ecthyma vulgaris, and superficial chronic diffuse streptoderma. **Streptococcal impetigo (impetigo streptogenes)** is caused by streptococcus and localized mainly on the face, extremities, sometimes on the trunk. In the pathogenesis of streptococcal impetigo the skin injuries are of certain importance, as well as its unhygienic conditions, metabolic disorder, reduced immunological reactivity. Impetigo is especially common in children. The blisters or phlyctenas with the size of a pea to a nut, not stressed and filled with serous or slightly nebulous liquid appear on the hyperemic, lightly swollen skin, and rapidly increase in size. There is a hyperemic circle on the periphery of phlyctenas. Phlyctenas quickly erode (during the period of several hours) and are covered with thin straw-yellow crust. After the falling of crust away, the pink spot remains and after some time it disappears without any trace. A patient suffers from itching, which

	sometimes can become intense. In some cases regional lymphadenitis can develop. Phlyctenas are located independently, but sometimes they can merge due to peripheral growth, forming arcs, rings, garlands (ring-shaped impetigo). Streptococcal impetigo has benign course and it ends in full recovery after 7-8 days. **Intertriginous streptoderma**, or streptococcal inertrigo (intertrigo streptogenes) is mostly observed in children, especially overfed children, with excessive sweating and gastrointestinal disorders. In the pathogenesis of the disease the dermatoses, accompanied by itching, and diabetes are also important. Intertriginous streptoderma is localized in the skin folds, such as inguinal-scrotal, gluteal, in axillary cavities, behind the ears, under the breasts in women, and in the folds of the abdomen in obese people. This disease is characterized by the appearance of erosive wet surface of bright pink colour, strictly bounded from the adjacent skin and surrounded by epidermal collarette. In the depth of the folds the bleeding folds appear. Subjectively, the patients notice itching and burning sensation. It is possible to notice at the close skin sites the pustules at different stages of development. The disease has long-term course. **Syphiloid papulose impetigo (impetigo papulata syphiloides)** develops predominantly in infants and is localized on the buttocks, posterior surface of femora and lower legs. On the hyperemic surface the phlyctenas appear, at the base of which there is papulous infiltrate. Phlyctenas erode very quickly, leaving erosive papules. Clinically the disease is analogous to papulo-erosive syphilide. For differential diagnostics it is necessary to carry out the analysis of erosion discharge for the presence of treponema pallidum, and serological study of the patient as well. Hystologically, in all forms of streptococcal impetigo there is formation of cavity under the homy layer of epidermis. The cavity is filled with serous exudate with some amount of neutrophilic leukocytes and separate epithelial cells. Spongiosis occurs in the spinous layer of epidermis. Vascular distention with perivascular infiltrate, consisting of neutrophils and lymphocytes, occurs in derma.

	Superficial panaritium, is predominantly observed in adults. The phlyctenas appears on the hands around the nail plates, which contain at the beginning serous, and then nebulous purulent discharge. The disease is associated with injuries of the fingers, burrs, which create favorable conditions for the penetration of streptococci. The affected phalanx of a finger swells and hurts. After breaking of phlyctena there appears erosion, covering the nail wall like horseshoe. The process can lead to the rejection of nail plate. Sometimes there are lymphangitis, general uneasiness and fever. Angular impetigo (angulus infectiosus) is characterized by the appearance of linear phlyctenas at the corners of the mouth, which quickly erode, and the cracks appear on their place, which are especially painful when the mouth is opened. The disease can be localized in the corners of the eyes, in the places of adhesion of ear conches. On the skin around the crack of the angle of mouth there appear melichrous crusts, and maceration of epidermis on the edges of the cracks. The contributing factors to the perleches development are frequent lips licking, dental prostheses wearing, i.e. maceration of the corners of the mouth sites with saliva. The patients complain about itch, pain while eating. **Angular impetigo** should be differentiated with yeast affection of the corners of mouth, in case of which the process is not so vivid and there are no crusts. It must be taken into account the possibility of affection of the corners of mouth with erosive syphilitic papules, which certainly are based on tight elastic infiltrate; eruptions of syphilides are observed on the other parts of the body, as well as positive serological reactions. The treatment of different forms of impetigo, and angular impetigo is generally external. In the case of presence of crusts the ointments with disinfectants or antibiotics are applied. On the erosive wet surfaces the lotions with disinfectants (0,25% solution of silver nitrate, 2% solution of resorcinol etc.) are applied. The healthy skin around the lesion foci is regularly wiped with the 2% salicyl alcohol in order to prevent autoinoculation of infection. At the same time, it is necessary to treat the diseases, which cause the appearance of streptoderma, and eliminate the promoting factors.

	Ecthyma vulgaris (ecthyma vulgare) refers to profound pyodermae, caused by streptococcus, though there are a number of publications, which indicate that ecthyma can be of staphylococcal etiology as well. Micro injuries and excoriations contribute to the penetration of the agents from the external environment. Nervous and mental stresses, diseases of liver and blood (anemia, leucosis), diabetes, thrombophlebitis, vasculitis, vitamin deficiency etc. are of certain importance in the pathogenesis of the disease is played. The disease develops gradually, beginning from the appearance on the skin of usual phlyctena the size of pea to a nut, filled with serous contents, which later acquire mattery hemorrhagic character. Phlyctena is located in the setting of erythematous infiltrate, its contents dry up very quickly in the crust of yellowish-brown colour, which has got multi-layer characteristic. Under the skin, there is deep tissue necrosis, covering not only derma, but subcutaneous fat as well. The crust drops off in several days, and the ulcer with soft uneven congested hyperemic edges and bleeding bottom, covered with dingy pultaceous detritus. After two-three weeks the ulcer is slowly cicatrizing. The scar is surrounded by the zone of hyperpigmentation. There are, as a rule, several ecthymae, and they are most frequently localized on the skin of the lower legs, buttocks, femoris, lumbus, less often they are on the upper extremities. Ecthymae can recur, causing lymphangites and lymphadenites, phlebitis, deep necroses. In the severe course of the disease so-called ecthyma terebrans can appear. Most frequently it occurs in undernourished children, suffering from anemia or rackets. Some authors consider blue pus bacillus to be the agent of ecthyma terebrans. In this case infiltrate and ulcerative defect spread depthward. The disease begins with the appearance on the skin of the buttocks, lower extremities, hairy part of the head of blisters, rapidly evolving into pustules and deeply ulcering. Such ecthymae cause severe pains. Ecthymae terebrans have got malignant course, are complicated by sepsis, and can be fatal. **Ecthyma vulgaris** most frequently should be differentiated with syphilitic ecthyma, which has not got acute inflammatory nature. There are no impetiginous multiple small elements near ecthyma, and the syphilides (especially papulous) can be detected at the other sites of

	the body. The final diagnosis is defined by the positive serological reactions. In case of scabies, complicated by ecthyma, military-papular rash appears on the other typical areas of skin, the borrows are typical; the patient complains about strong itching, especially at night. Hystologically, in derma and subcutaneous fat there is necrosis of tissue. The focus is surrounded with indurated infiltrate, consisting of neutrophilous leukocytes and lymphocytes. Edema and vasodilatation appear around the infiltrate. On the initial stages of the development of ecthyma vulgaris, the phlyctenae are pierced with a needle for removing their contents, the crusts are softened with application of 2% salicyl ointment. In case of formed ecthyma or ecthyma terebrans, antibiotic therapy in accordance with the results of antibiogram, A vitamins and B group vitamins, and disinfecting ointments for topical treatment are put on. The skin around erythema is wiped with 2% salicyl alcohol. **Superficial chronic diffuse streptoderma (streptodermia chronica diffusa superficialis)** is a chronic streptococcal disease, which is characterized by diffuse lesion of significant sites of skin covering. Most frequently it affects the lower extremities, the process can be also localized on the opistheners. The affected areas have got largely scalloped lines, sharply bordered from the surrounding healthy skin by the rim of exfoliative epidermis. The skin of the affected areas is sharply hyperemic, of congestive bluish colour, slightly infiltrative, the surface is eroded in the form of wet disk-like sites. The erosions are covered with many thin lamellate crusty scales of yellowish or greenish colour. After removal of the crusts the surface wets with the release of dense serous or serous yellow exudate. The process spreads over the periphery. With time, staphylococcal infection joins to streptococcal, though there is no lesion of hair follicle and sebaceous gland. The skin of the entire lower leg can be affected on the lower extremities. In the process of development, the lesion area is epithelialized and covered with large lamellate scales. Superficial chronic diffuse streptoderma is often complicated with eczematization, especially on separate skin areas, where against the background of bright red erythema there appear military papules, microvesicles,

	small erosions with release of the drops of serous fluid. In the pathogenesis of the disease development a significant role belongs to congested phenomena in the lower extremities, varicose symptom complex, i.e. prolonged disturbed circulation, development of tissue hypoxia and derangement of metabolic processes in skin. The disease has got a chronic course, with often relapses, especially around non- healing wounds and trophic ulcers. Superficial chronic diffuse streptoderma should be differentiated with eczema, when the erythema is bright red, the foci are without distinct borders, oozing lesion is punctate, there are no crusty scales, and the process has got symmetric character. Hystologically, in the erosion places there are no horny and granular layers. At the sites of epidermis continuity there are parakeratosis, spongiosis, intensively pronounced acanthosis. Vascular distention with perivascular infiltrate, predominantly lymphocytic occurs in derma. In case of acute course of superficial chronic diffuse streptoderma antibiotic therapy in accordance with the results of antibiogram is put on. For topical treatment the lotions of disinfecting and astringent solutions (5% tannic or 2% boric acid, 1 % solution of resorcinol, 0,25% solution of silver nitrate) are applied. At the same time, it is necessary to carry out curative interventions, aiming at the elimination of factors contributing to disease development. **Strepto-staphylococcal skin infections** - mixed pyoderma. Mixed pyoderma combine a number of chronic skin diseases of pyogenic nature, mainly polymicrobial one. Their main etiological cause is combined streptococcal and staphylococcal flora. Possible is the participation in the genesis of these diseases other microorganisms as well, such as colibacillus or blue pus bacillus, Proteus vulgaris etc. In the pathogenesis of mixed pyoderma the essential role belongs first of all to sharp decrease of immunological reactivity of organism and the appearance of sensitization to byproducts of pyoderma agents, especially in children with allergic dermatitis, malnutrition, vitamin deficiency, metabolic disorders, endocrine dysfunctions etc. Mixed pyoderma include impetigo vulgaris, chronic ulcerative vegetating pyoderma, chancriform pyoderma

	and botryomycoma. **Impetigo vulgaris (impetigo vulgaris)** is preceded by the prodromes, such as high temperature and itching at the sites of the following rash appearance. The disease appears at the beginning as streptococcal impetigo with the appearance at erythematous and slightly infiltrated background of phlyctenas, the contents of which due to overlay of staphylococcal infection get muddy quickly, become mattery and acquire yellowish-grey or greenish colouring. The matter dries up into the form of melichrous crust. After the crust drops out, the erosion appears, surrounded with delaminated horny masses of epidermis. Subjectively, the process is accompanied by light itching. **Impetigo vulgaris** is mainly localized on the skin of face at the sites of natural orifices, such as nostrils, mouth, palpebral fissures, in women it can sometimes be localized on the hairy part of the head as well. The process seldom causes inflammation of regional lymph nodes. The evolution of disease lasts 10 to 14 days, after that a temporary hyper pigmentation remains on the skin at the lesion sites. The possible are the lesions of mucous membranes of nostrils. The treatment is predominantly topical and includes the application of 1-2% boric-tar ointment or naphthalani unguentum. The healthy skin areas are regularly wiped around the foci with 1% salicylic alcohol. Ointments with antibiotics are applied (mupirocin). Chronic ulcerative pyoderma (pyodermia chronica ulcerosa) gradually transforms into ulcerative vegetating form. It is caused by the mixed strepto- staphylococcal infection. For the development of chronic ulcerative pyoderma the essential is, on the one hand, the reducing of pathogenicity of the disease agents and immunological response of the organism, and on the other hand, the weakening of the resistance of the microorganism, that leads to prolonged soft course of the disease. Its manifestations are localized exceptionally on the lower legs, and very seldom on the lower part of femora. In the setting of slightly edematous areas of hyperemia the phlyctenas appear, rapidly covered with thick crusts, beneath which the ulcers with callous undermined edges occur. After the dropping of the crusts off, the bottom of

	the ulcers becomes naked, it is covered with necrotic masses and soft grey granulations with significant amount of purulent and serous-purulent discharge. The process spreads over periphery, covering large sites of the skin. Around the ulcers there are pustular multiple small erosions. There is painfiilness at palpation. **Chronic ulcerative vegetating pyoderma** (pyodermia chronica ulcero-vegetans) is characterized by the appearance over the ulcer periphery of vegetations, which are verrucous growths, which can appear over the entire surface of the lesion. The bottom of the ulcers is bleeding. Vegetations can enlarge along the periphery as well; in this case the process acquires serpiginous character. When pressing at the sites of lesion, the drops of dense matter are released from small fistular openings. The disease lasts for months or years and ends with formation of uneven hyperpigmented scars with small islets of unaltered skin. It is necessary to distinguish chronic ulcerative vegetating pyoderma from serpiginous nodular syphilide and verrucous form of skin tuberculosis that requires additional examination of the patient. When there are ulcerative purulent processes, the antibiotic therapy is appointed. In case of intense mattery discharges, the lotions with 2% solution of rivanol, solution of microcide (at a dilution 1:1) are appointed, and in the period of remission 2% gentian violet ointment. Pyoderma, of the type of ecthyma vulgaris, sometimes is located independently on the genital organs, resembling syphilitic chancre, hence the name of the disease of chancriform pyoderma (pyodermia shancriformis). It is very seldom, that chancriform pyoderma is localized on the face, lips and eyelids. The disease is caused by staphylococcus aureus. The disease is typical for untidy persons, who do not look after hygiene of the body, as well as the subjects with the presence of narrow preputial ring, when smegma accumulation causes maceration of the skin of the penis with further suppuration. Clinically, chancriform pyoderma manifests as the appearance of clearly limited superficial ulcer of round to oval form with overlapped edges, located on the inflammatory infiltrate the size up to 2 cm. The bottom of the ulcer is fleshy red, sometimes covered with necrotic masses or purulent releases. It is painful at palpation. As a rule, with chancriform pyoderma there is regional

	lymphadenitis the size from kernel of a cherry to a nut, painful on palpation. The disease lasts from one to three months and ends with the cicatrization. In all cases chancriform pyoderma should be differentiated with syphilitic solid chancre. In solid chancre the subjective sensations (pain, burning, itching) are absent, the infiltrate is of dense-elastic, but not soft consistency, does not overlap ulcer, the acute inflammatory phenomena are absent. As a rule, there are no purulent discharges. Regional lymphadenitis is also painless on palpation, of dense- elastic consistency. In some cases the clinical picture of chancriform pyoderma reminds syphilitic solid chancre so much, that the diagnosis is possible to be set only on grounds of the results of multiple tests for Treponema pallidum and data of serological reactions. For the treatment of chancriform pyoderma the bathes with a weak solution of potassium permanganate, lotions with a physiological solution of sodium chloride or 2% solution of boric acid are applied to the full cicatrization. At the stage of differentiation with syphilitic solid chancre no antibiotics should be applied both topical, and for general therapy. The group of chronic mixed pyoderma includes also pyogenic granuloma or botryomycoma (botriomycoma), which is benign fungiform tumor-like growth, caused by Staphylococcus aureus. Botrycoms is most frequently localized on the skin of vermilion border, nose, ears, on the fingers and toes. Its appearance is preceded by the injuries, cuts, pricks, by means of which pyococci penetrate into the skin. Clinically, botryomycoma manifests as small-lobular tumor on the peduncle the size of a pea to a hazelnut, of round form and soft consistency. Botryomycoma has got intense red colouring and a large number of vessels, which are easily injured and bleed. Botryomycoma with time can be partially necrotized or form an ulcer with discharge of insignificant amount of seropurulent liquid. Botryomycoma can exist without treatment for a long time, not disappearing by itself. The treatment consists in surgical (or with electrocoagulation) removal of the tumor. Sometimes botryomycoma can recur, so it is recommended to remove not only tumor itself, but its base as well, at the same time applying antibiotic therapy up to the absolute regress of the disease. Pyoallergids are secondary allergic diseases, which are

	caused by the sensitization of patient organism to pyococci and their byproducts in the presence of purulent skin diseases with chronic course. Pyoallergids are most frequently observed in case of streptococcal infections (superficial chronic diffuse streptoderma, intertriginous streptoderma and other). Pyoallergids appear mainly at the sites remote from the focus of pyoderma and are symmetrically located. Clinically, they most frequently remind eczematous reaction, as the small miliary papules and microvesicles appear on the bright red background which has not got clear boundaries, and is covered with fine scales. In the result of itch the scratches (excoriations), covered with small hemorrhagic crusts, appear on the surface of pyoallergids. And dense blisters can appear in palpation on the palms and plantae. The treatment of pyoallergids is analogous to that conducted in case of allergic skin diseases. Prophylaxis of pyodermae. Preventive measures are essential in treatment of purulent diseases. Physically healthy and weather-beaten people even in adverse conditions seldom suffer from pyodermae, which attack in general people, who are colds-prone, suffering from gastrointestinal disorders, increased sweating, alcohol abuse. Patients with furunculosis, hidradenitis, ecthyma, multiple abscesses, strepto- staphylodermae should exclude from their diet food rich in carbohydrates (honey, chocolate, sweets, white bread etc.) Personal hygiene of the skin is important for the prophylaxis of pyoderma. The preventive measures, aimed at the preventing of pyodermae spread, include the timely detection and medicamental sanation of people suffering from chronic nasal staphylococcal carriage. This type of nasal infection is directly connected with the risk of appearance of pyodermae and pyoseptic complications in dermatological and surgical practice. Both patients and medical staff can be the carriers of Staphylococcus aureus, as well as the personnel of child care centers and other categories of persons. To eliminate staphylococcal carriage (eradication of staphylococci), the nasal ointments with antibiotics are applied, the ointment of mupirocin, in particular, by smearing of each nasal opening twice a day during 5 to 7 days. Children with pustular skin diseases in children's groups

	must be immediately isolated and treated up to moment of disappearance of all clinical manifestations of disease. The staff of nurseries and kindergartens, suffering from anginas, herpetic eruptions, acute respiratory diseases of the upper airway, as well as pyodermae, must not be allowed to work.