

MINISTRY OF HEALTH OF UKRAINE
POLTAVA STATE MEDICAL UNIVERSITY
 Department of general surgery

METHODICAL INSTRUCTIONS
FOR INDEPENDENT WORK OF THE STUDENT
IN TIME FOR PREPARATION TO THE PRACTICAL STUDY
(auditorium work)

<i>Academic discipline</i>	general surgery
<i>Module number 2</i>	Surgical infection. Mortification. Fundamentals of transplantology and clinical oncology. Methods of examination of surgical patients
<i>Content Module 1</i>	Surgical infection. About death .
<i>Theme of lesson №22</i>	Acute purulent diseases of the soft tissues of the boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas.
<i>Course</i>	III
<i>Faculty</i>	International

Poltava

1. A topic of relevance

The high frequency of development of pus of non-inflammatory diseases makes the problem of their prevention and treatment one of the most relevant in modern clinical surgery. Today, patients with purulent-inflammatory diseases make up 35-40% of patients with a surgical profile.

. Difficulties in treating patients with purulent surgical infection are caused by both the increase in the multiresistance of modern microflora to antibacterial drugs and the weakening of the general and local protective reactions of the macroorganism to infection. All this indicates the need to study the etiology, pathogenesis of surgical infection, methods for its diagnosis, taking into account modern scientific achievements, integrated (systemic) and local treatment.

2. Specific goals:

1. To acquaint with the definition, pathogens, classification, basic principles of treatment of acute purulent diseases of the soft tissues of furuncle, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas.

2. To illuminate diagnostic methods and characterize the features of the differential diagnosis of acute purulent diseases of the soft tissues.

3. To acquaint with methods of treatment of various purulent diseases of soft tissues.

4. To acquaint with the main forms and clinical manifestations of mastitis, paraproctitis, erysipelas.

5. Prevention of acute purulent diseases of soft tissues.

6. Complications of acute suppurative soft tissue diseases lymphangitis, lymphadenitis, thrombophlebitis.

3. Basic knowledge, abilities, skills necessary to study the topic (interdisciplinary integration).

disciplines	acquired skills
Normal anatomy	Skin structure, osteology, myology, syndesmology. Anatomy of the circulatory and nervous system.
Histology	Cytology, morphology and function of the skin, blood, internal organs
Physiology	Physiology of the skin, circulatory organs. The structure and functions of the microcirculatory vascular bed. General concepts of central and peripheral blood flow. Physico-chemical mechanisms of fluid exchange between blood and tissues (according to Sterling).
X-ray and radiology	X-ray semiotics of damage.
Operative Surgery and Topographic Anatomy	Topography neurovascular formations, cellular spaces.

Propaedeutics	Methods of examination of the patient. Caring for bed patients.
Microbiology	The main causative agents of surgical infection.
Pathological physiology	Disruption of microcirculation, ischemia, stasis, thrombosis, impaired water-electrolyte metabolism, hypoxia, metabolic disorders
Pathological anatomy	Have the ability to interpret the symptoms of inflammation and identify the phase of the wound process

Intrasite Integration

Desmurgy	Have the ability to apply dressings on the upper and lower limbs, scarves, medical dressings.
Aseptic and Antiseptic	Types of antiseptics. Use antiseptic drugs in various phases of the wound healing process. Types of asepis.
Bleeding	Methods of temporary and final stop of bleeding.
Infected wounds	Stages of the wound healing process. Treatment depending on the stage of the wound process.

4. Tasks for independent work in preparation for the lesson and in the lesson .

4.1. The list of basic terms, parameters, characteristics that a student must learn in preparation for the lesson:

<i>term</i>	<i>definition</i>
surgical infection	they understand inflammatory diseases, the treatment of which is carried out mainly by surgical methods.
pus	exudate containing protein, enzymes, tissue degradation products, a large number of white blood cells, most of which died from the action of toxic substances.
detritus	a gummy tissue breakdown product.
necrosis	g an ideal of individual cells, tissue sites, parts, or an entire organ in a living organism.
thrombophlebitis	in the culling of veins, through which the outflow of blood from the area of inflammation is carried out.
furuncle	conical hyperemic infiltrate on the skin with tissue necrosis and accumulation of pus along the hair.
carbuncle	extensive inflammatory infiltrate in the skin and surrounding tissues, the surface of which contains several purulent pustules.
hydradenitis	limited inflammatory infiltrate (usually in the axillary region), which protrudes above the skin acquires a purple-gray hue.

lymphangitis	to red stripes on the skin along the lymphatic vessels, with palpation have a consistency of dense and painful cords.
lymphadenitis	local signs of purulent inflammation in the areas of localization of regional lymph nodes, which can be felt in the form of painful rounded formations.
erysipelas	eritematoznaya form: a clearly delimited area of skin redness (similar to the "geographical map") Bullous form: exfoliated epidermis blisters filled with exudate and necrotic abscess forms: presence of local symptoms of cellulitis subcutaneous tissue and the appearance of areas of skin necrosis.
mastitis	breast infiltrate with local signs of inflammation - painful nosta, edema, hyperemia. With progression purulent inflammation - symptoms of an abscess or phlegmon of the mammary gland.
Acute paraproctitis	purulent inflammation around the rectum fiber

4.2. Theoretical questions before class .

1. Classify acute suppurative soft tissue diseases boils, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas.
2. Clinical manifestations of a boil, carbuncle, hydradena , mastitis, paraproctitis, erysipelas .
3. Complications of acute suppurative soft tissue diseases lymphangitis, lymphadenitis, thrombophlebitis.
4. Bacteriological examination for purulent-septic diseases. How to carry it out?
5. What anatomical and physiological features of the structure of the skin and subcutaneous tissue contribute to the spread of the inflammatory process?
6. Bacteriological examination for purulent-septic diseases. How to carry it out?
7. What are the symptoms of a local reaction in acute purulent infection?
8. What is basic and the principles of local treatment of boils, carbuncle, hydradena , mastitis, paraproctitis, erysipelas .

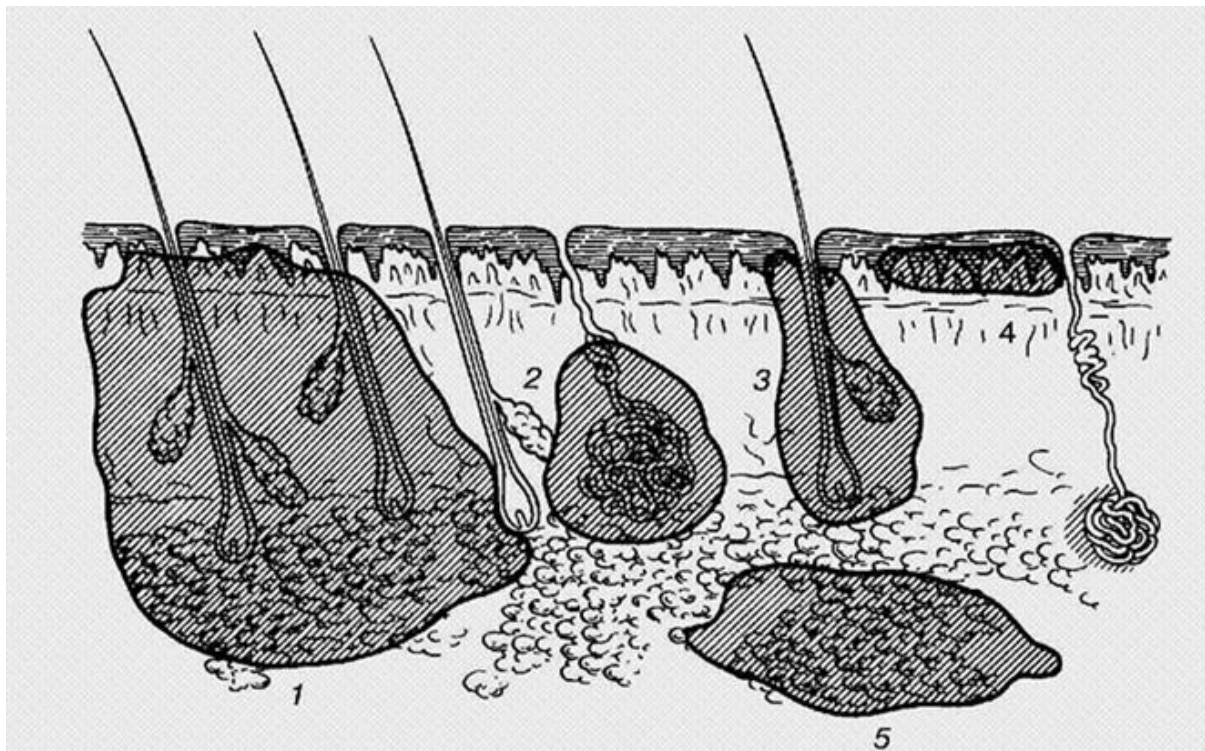
4.3. Practical work (tasks) that are performed in class:

1. Definition of a symptom of fluctuations;
2. Metodika of local anesthesia and novocaine (vagosympathetic, perirenal, paravertebral, intercostal, intrapelvic by L.G.Shkolnikovim and V.P.Selivanovim, futlyarnoy, wires , retroma m Marne)
3. Technique for performing secondary surgical treatment, necrectomy;
4. Bacteriological examination for purulent-septic diseases;
5. Diagnose a boil, carbuncle, hydradenitis, mastitis, paraproctitis, erysipelas , erysipeloid.
6. Empirical use of antibiotics.
7. Dezintoksikatsion therapy.
8. Make a treatment plan for patients with various types of abscesses, phlegmon, and various forms of erysipelas.

5. The content of the topic:

Infection (infectio) in surgery is one of the leading places in mortality and determines the essence of many inflammatory diseases and postoperative complications.

Acute surgical infection, depending on the causative agent and the clinical nature divided into purulent, putrefactive (putrid), , non-specific anaerobic (gas gangrene), a particular anaerobic (tetanus, diphtheria wounds, anthrax).



Localization of purulent processes in the skin and subcutaneous tissue (scheme).
1 - carbuncle; 2 - hydradenitis; 3 - a boil; 4- erysipelas ; 5 - phlegmon subcutaneous tissue.

Acute purulent infection is an acute inflammatory process of various localization and nature caused by pyogenic microflora.

For its development, the presence of three elements is necessary:

1. The causative agent of infection (the place and method of penetration of the microorganism into the patient's tissue): *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Enterococcus*, *Enterobacter*, *Streptococcus*, *Proteus vulgaris*, *Pneumococcus*. Pathogens are characterized by resistance to traditional drugs, which complicates the treatment of purulent diseases. An important role in the course of purulent surgical infection is played by the biological characteristics of microorganisms: invasiveness, toxicity and virulence.

2. A macroorganism with its reactions - local and general, protective and pathological.

3. The entrance gate is most often damage to the skin and mucous membranes - various types of random wounds. The penetration of infection is possible through bruising, scratches, scuffs, bites. In addition, microorganisms can penetrate through the ducts of the

sebaceous and sweat glands. The foci of infection present in the body can also cause infection (endogenous infection).

According to D. Arenholz e (1991), the following forms of soft tissue damage are distinguished :

I level - by expressions dermis (erysipelas, erizepiloid etc.);

II level - damage to the subcutaneous tissue (carbuncle, hydradenitis, mastitis, etc.);

Level III - damage to the superficial fascia of the body: fasciitis of various etiologies (with treptococcal necrotizing, non-clostridial, Fournier gangrene, etc.);

I V level - damage to muscles and deep fascial structures (clostridial and non-clostridial myonecrosis, etc.).

The rapid spread of microorganisms is facilitated by a large number of necrotic tissues in the area of the entrance gate, circulatory disorders, hypothermia. Local immunological features of tissues also affect the incidence and severity of purulent processes.

Local reaction in acute purulent infection manifested symptoms, characterizing the development of an inflammatory reaction: rubor (redness), calor (local heat), tumor (swelling), dolor (pain), function laesa (disturbance of function).

Redness is easily determined upon examination. It is associated with the expansion of blood vessels (arterioles, venules and capillaries), then there is a slowdown to the current flow up to an almost complete stop - stasis. Such changes are associated with the action on the vessels of histamine and sharp acidophilic shifts in the area of inflammation. The described changes are otherwise indicated by the term "hyperemia".

Local heat is associated with increased catabolic reactions, with the release of energy. Local increase in temperature is usually determined with the back surface of the palm, comparing the sensations obtained with sensation during palpation outside the painful focus .

Tissue swelling is caused by a change in the permeability of the vessel wall for plasma and blood cells, as well as blood elements and increased hydrostatic pressure in the capillaries. The increased permeability of the vascular wall concerns mainly capillaries and small veins. The liquid part of the plasma enters the blood vessels along with migrating white blood cells, and often the red blood cells that have come out through diapedesis form an inflammatory exudate. The bulk of it is made up of neutrophilic white blood cells. Swelling is usually determined visually. In doubtful cases resort to measurements (for example, limb circumference).

The presence of pain and soreness during palpation in the focus of inflammation is a characteristic sign of purulent diseases. It should be remembered that palpation should be done carefully enough so as not to hurt the patient .

Dysfunction is associated with both the development of pain and edema. It is most pronounced in the localization of the inflammatory process on the limbs, especially in the joint area.

The accumulation of pus is determined using clinical symptoms: symptoms of fluctuations (Fig. 1) and softening, additional research methods and diagnostic puncture. tissues that become motionless. The process can go into a destructive form, up to the development of adenophlegmon.

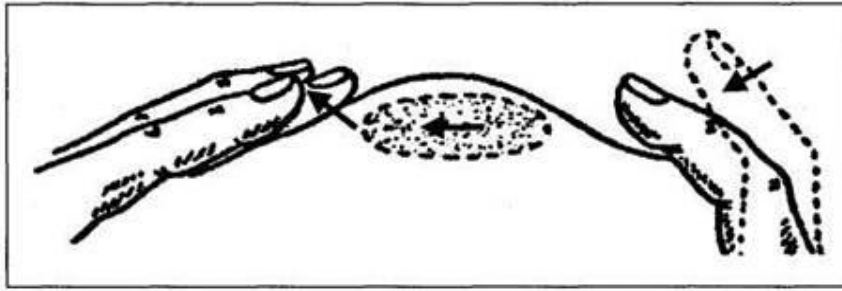


Fig. 1 Definition of a symptom of fluctuations

The development of lymphangitis, lymphadenitis and thrombophlebitis are the first signs of a generalization of the infectious process.

The main clinical manifestations of the general reaction in purulent diseases are symptoms of intoxication in varying degrees of severity.

The main principles of local treatment are:

- opening of the purulent focus;
- adequate drainage of the abscess;
- topical antiseptic WHO action;
- immobilization.

General methods of treating a surgical infection can be divided into four types:

- antibacterial therapy;
- detoxification therapy;
- immunocorrection;
- symptomatic treatment.

A furuncle (furunculus) is a purulent-necrotic inflammation of the hair sac, sebaceous gland and subcutaneous fatty tissue, the causative agent of which is a purulent infection, mainly staphylococcus. Furunculosis (furunculosis) is a multiple, often recurring boil. Furunculosis can be local with skin lesions of one zone or disseminated with lesions of several zones.

Etiology. Any areas of the skin are affected, except for the palms and soles, but mainly those areas whose skin has many sebaceous glands and which are more often injured: face, neck, lower back, back, limbs. This is facilitated by the systematic contamination of the skin with dust particles, microtrauma, scratching, scuffing of the skin, squeezing out blackheads, as well as a decrease in the body's defenses in chronic diseases, diabetes mellitus, hypothermia, overwork.

The clinical picture and diagnosis. The disease begins with the formation of a small inflammatory nodule around the hair sac - osteo-folliculitis. Infiltrate cone-shaped, with an average size of up to 1 cm; the skin above the infiltrate is hyperemic, painful. On the third or fourth day, the pustule, which first formed at the top of the infiltrate, dries up, but fluctuation begins to appear in its center. The boil is opened and a small amount of pus is secreted from its base. As a result of the melting of the hair sac, sebaceous gland and subcutaneous fat, a necrotic core is formed. The latter is either rejected on its own, or it has to be removed promptly. On the 8-10th day, the wound heals with the formation of a slightly inverted small scar. Thus, in the development of the boil, as well as other purulent-necrotic processes, three phases should be distinguished: infiltrative, purulent-necrotic and granulation with epithelization.

Pain is insignificant, with the exception of boils localized in areas of the nose, external auditory canal. In the case of rare uncomplicated boils, general manifestations of infection are usually absent. However, they are expressed in the localization of boils on the face, especially in the area of the upper lip, nasolabial fold, in the orbital region. In these cases, they are accompanied by significant swelling of the skin, subcutaneous fat, local pain, flushing of the skin, headache, fever up to 39 ° C, leukocytosis up to $12 \cdot 10^9 / L$ with a pronounced shift of neutrophils to the left. In the case of localization of the boil on the face, there is a threat of the most dangerous complications: the spread of infection through the veins through the branches v. facialis, plexus pterigoideus, v. angularis that anastomose with v. ophthalmica, on the cavernous sinuses of the dura mater with the development of basal meningitis. Clinically, this is manifested by a sharp deterioration in the patient's condition, an increase in body temperature up to 40 ° C, the development of thrombophlebitis of the veins on the face, intense headache, double vision, swelling of the eyelids, blurred vision, bulging eyes, stiff neck muscles.

The prognosis in such cases is unfavorable, mortality reaches 60%. Other complications of furuncles include lymphangitis, lymphadenitis, thrombophlebitis, peri-arthritis, arthritis with localization on the extremities, less commonly abscesses, phlegmon of subcutaneous fat, sepsis (in case of furunculosis).

The treatment of individual uncomplicated boils, except for boils of the face, should only be local in a clinic setting. The hair around the boil is carefully cut, but does not shave, wipe with 70% alcohol or 2% salicyl alcohol, or smeared with oddicerin. You can use 2% iodine solution, 0.5% chlorhexidine solution (in 70% alcohol), 1% dioxidine solution for this. In the infiltrative phase, topically solux, quartz, and UHF should be used. Less commonly, in this phase, etc. imenyayut bandages with levomekol levosin, yodopironovoyu ointment th odditserinom. According to the location of the boil on the limbs, their immobilization is shown.

In the purulent-necrotic phase, a boil is opened, which is best performed under general anesthesia, especially on the face. In the rod making limited skin incision, mosquito clip then it is removed. The cavity is washed through a thin vinyl chloride catheter with a 3% solution of hydrogen peroxide. iodicerin or a 1% solution of dioxidine. Wide cutting of the infiltrate should not be performed due to the possibility of the spread of infection. Then they resort to the general principles of open treatment for infected wounds.

Facial boils, complicated boils and furunculosis should be treated in conditions of a surgical hospital. In addition to local treatment, such patients are shown the general, which consists in the parenteral administration of antibiotics, sulfa drugs, vitamins, antihistamines, and the appointment of detoxification therapy. In case of recurrent furunculosis, immunotherapy is widely used - anti - staphylococcal plasma, anti-staphylococcal gammaglobulin, immunomodulators (timogen, thymalin, cycloferon). For the prevention of relapse, staphylococcal toxoid is immunized. The complex of therapeutic measures includes fortifying agents: vitamins (C, A, B, E), iron preparations, fresh brewer's yeast, 1 tablespoon 2-3 times a day. Prevention of furunculosis includes compliance with the rules of personal hygiene at work and at home, hardening the body.

Carbuncle (carbunculus) - acute purulent-necrotic inflammation of several adjacent to the hair sacs and sebaceous glands with skin necrosis and subcutaneous fat. Pathogens and developmental factors infections are the same as in the case of boils. Carbuncles are

localized more often on the back of the neck, back, buttocks, less often on the face, perineum, limbs.

A feature of the carbuncle is the rapid progression of in-depth infiltration with thrombosis of small vessels and subsequent necrosis.

The clinical picture and diagnosis. The disease begins with the formation of an inflammatory infiltrate up to 6-7 cm in size, protruding above the surface of the skin. The skin above the infiltrate is first hyperemic, but soon becomes purplish-cyanotic, sharply painful on palpation. Subsequently, numerous necrotic foci appear on the surface of the carbuncle, which cover the skin, subcutaneous fatty tissue, and sometimes pass to fascia covering the muscles. The fusion of foci of necrosis forms an impressive size zone of necrosis with many small holes, from which green-gray pus stands out. After rejection of the necrotic masses, a deep wound forms, which under favorable conditions is performed by granulation and covered with epithelium. A rough scar forms at the site of the wound. Carbuncles, particularly localized in the face, are accompanied by symptoms of intoxication: general weakness, insomnia, increase in body temperature to 39 ° C, leukocytosis to $20 \cdot 10^9 / L$ with a pronounced neutrophilia and shift leukocyte Ana to the left, increasing ESR of 30-40 mm / h .

To the carbuncle more often than boils, they are complicated by lymphangitis, lymphadenitis,

thrombophlebitis, according to localization on the face - basal meningitis.

The treatment of carbuncles is carried out in a surgical hospital. In the infiltrative phase, antibiotic therapy is prescribed (semisynthetic penicillins with aminoglycosides or cephalosporins of the II-III generation), fluoroquinolones, sulfonamide drugs. Locally - exposure to UHF, quartz, dressings with iodicerine, dioxidine or a mixture (furatsilin 1: 5000 - 5 parts, dimexide - 1 part, heparin - 5000 IU, gentamicin - 80 mg). In the presence of intoxication phenomena, detoxification therapy is prescribed in combination with immunocorrection: infusion therapy, antistaphylococcal plasma, antistaphylococcal gammaglobulin, immunomodulators. In patients with diabetes, carbohydrate metabolism disorders are corrected. In the purulent-necrotic phase, surgery is indicated. Under general anesthesia, a cruciate incision of the skin, subcutaneous fatty tissue to viable tissues is performed. Necrotic areas after mobilization of the flaps are cut out, the wound is washed with a 3% solution of hydrogen peroxide or th oddicerin . Sometimes use a pulsating stream of liquid, vacuum aspiration. Then, the wound of the loosened is swabbed with cloth napkins moistened with ioddicerin or a 0.05% solution of chlorhexidine with furacilin 1: 5000 . Further local treatment is carried out according to the general principles of open treatment of purulent wounds.

By localization of small carbuncles in the areas of the buttocks, thighs , back radical excision of the affected area within healthy tissue and overlay primary sutures followed by antibiotic therapy .

Hydradenitis (hydradenitis) is a purulent-inflammatory disease of the apocrine sweat glands, the causative agent of which is more often staphylococcus, mostly golden. It is localized in areas whose skin has many sweat glands: axillary cavities, perianal , genital areas , in women, the subareolar zone of the mammary glands. Infection penetrates into the sweat glands through their excretory ducts or lymphogenously in the presence of abrasions, maceration of the skin. The factors that lead to the development of hydradenitis

include hyperhidrosis, skin infection, microtrauma during shaving, clothing rubbing, endocrine disorders (diabetes mellitus) and so on.

To the clinical picture. In the case of hydradenitis, the general manifestations of the infection are mild. The disease begins with the formation in the subcutaneous fat of a dense spherical shape of a painless nodule with a diameter of up to 1 cm. The skin above it is not changed at first. The seal gradually increases, becomes painful, the skin above it swells, acquires a purple-red hue. At the stage of abscess formation (10-15th day), softening appears in the center of the infiltrate with fluctuation. Soon, a hole forms in the center of the skin, from which pus is released.

The treatment of hydradenitis in the infiltrative phase of the disease is conservative. After hair cutting the skin of the affected area several times a day 2% boric, 10% camphor alcohol or 2-3% formalin solution with the purpose of tanning the skin and preventing the spread of infection. Compresses with dioxide and antibiotics are also used. Prescribe local exposure UHF, quartz, sollux. In the case of multiple lesions, the subcutaneous fatty tissue of the corresponding zone is infiltrated with a 0.5% solution of novocaine with an antibiotic (oxacillin, cefazolin). Together with local treatment, patients are prescribed antibiotics, sulfa drugs.

In the event of signs of abscess formation - fluctuations in the center - surgery is performed. Under local infiltrative anesthesia, an abscess is opened, necrotic tissues are cut out. After hemostasis, washing the wound with 3% hydrogen peroxide solution, apply ointment dressings (iodine, levomekol, iruxol). Further treatment of wounds is carried out according to the treatment of infected wounds under a bandage. In the presence of relapses of the disease, in addition to the above measures of local and general treatment, general strengthening and immunocorrigal therapy are carried out.

Prevention hidradenitis sup- lies in personal hygiene, care of the skin armpits, treatment of hyperhidrosis, diaper rash, use of deodorants that inhibit perspiration.

Acute mastitis (mastitis acuta) is an acute purulent inflammation of the mammary gland that occurs in women, usually after childbirth, during lactation (postpartum, lactational mastitis). The incidence of lactational mastitis remains high, up to 5% of women in childbirth. The causative agent of purulent inflammation is most often staphylococcus, less commonly in association with other pathogens of purulent processes: E. coli, Proteus, non-clostridial anaerobes, pathogenic fungi.

Etiology and pathogenesis. Sources of infection can be women in labor with non-mothers new foci of chronic infection; medical personnel with erased forms of purulent-inflammatory diseases, from which women in labor are infected through care items, underwear, during medical procedures; less commonly, newborns with pyoderma, umbilical sepsis.

Among the pathways of infection, lymphogenous is most often noted, with nipple cracks in the lymphatic vessels into the gland tissue, less often galactogenic - along the ductal system of the gland under lactic pelvis, and even less so - hematogenous, from the foci of endogenous infection in the woman in labor (tonsillitis, sinusitis, carious teeth, infection of the birth canal, etc.).

The factors that lead to the occurrence of mastitis include, first of all, lactostasis - stagnation of milk with breast engorgement, which occurs with improper breastfeeding, untimely expressing of milk, in case of mastopathy and inverted nipple, etc. Usually one breast is affected. but often there is a bilateral defeat.

Pathological anatomy. The pathomorphologically inflammatory process in the case of infection penetrating into the gland tissue has a phase-wise course: first, the affected area of the breast is impregnated with serous fluid with leukocyte infiltration around the vessels (serous mastitis) In the future, the cell grows full-time infiltration of the focus of serous inflammation with sharper boundaries and density, which is determined by palpation (infiltrative mastitis). As the purulent fusion of a focal character spreads to new parts of the gland, it resembles a pus soaked in pus or a "honeycomb" (phlegmonous mastitis). At a lesion portion in a limited degradation phase purulent cavity formed in the mammary gland. Purulent infection spreads with perforation of the abscesses in the subareolar zone, anteriorly subcutaneously, into the retro-mammary tissue (Chassignac bag). Rarely in a non-clostridial lesion th anaerobic inf projection of thrombosis due to vascular necrosis occurs separate sections or entire breast. The breast tissue in such cases looks gray, with slight discharge, sometimes with an unpleasant odor. On the skin of the gland - areas of necrosis, hemorrhagic vesicles (gangrenous mastitis). Such forms of mastitis can be complicated by phlegmon of the chest wall, sepsis.

Classification.

According to the stages of acute inflammation in the breast, such forms of mastitis:

- a) serous;
- b) infiltrative;
- c) abscessed ;
- d) phlegmonous;
- g) gangrenous.

The following forms are distinguished according to the localization of abscesses in case of destruction of the breast

mastitis:

- a) subareolar;
- b) subcutaneous;
- c) intramammary ;
- d) retromammary ;
- d) panmastitis.

Possible complications: lymphadenitis, lymphangitis, thrombophlebitis, sepsis.

Chronic mastitis - tuberculosis, syphilitic, cancer - are observed rarely.

The clinical picture and diagnosis . Acute color occurs most often during the first month after giving birth; it is often preceded by acute stagnation of milk (lactostasis), which is difficult to distinguish from serous mastitis. In the case of lactostasis, there is a feeling of heaviness, tension in the mammary glands, engorgement of the entire gland, sometimes its segment. But the main thing that distinguishes lactostasis from serous mastitis is the absence of an increase in body temperature and an increase in the number of leukocytes, an improvement in the well-being of the woman in labor after the complete expression of milk.

Mastitis begins with chills, an increase in body temperature to 39-40 ° C, the appearance of a feeling of tension, chest pain, headache, insomnia, anorexia. In the case of serous mastitis, the breast is enlarged compared to healthy, painful on palpation, the seal is diffuse at first, without clear boundaries, the skin above it is not changed. In the clinical analysis of blood moderate leukocytosis up to $10-12 \cdot 10^9 / L$, erythrocyte sedimentation rate of 25-30 mm / h. In the case of infiltrative mastitis after resorption diffuse seal gland

is clearly demarcated, painful, with clear contours infiltration with constant skin over it, a little enlarged painful axillary lymph nodes. With destructive forms of mastitis (abscessing, phlegmonous), softening with fluctuation appears in the places of compaction, the skin above these areas is edematous, hyperemic. During the puncture of the softening sites, pus is obtained. Destructive form mastitis, especially gangrenosum first, followed by severe toxicity manifestations: body temperature to 40-41 ° C, agitation or apathy, pulse 130 in 1 min, leukocytosis to $Z 0 \cdot 10^9 / L$, white blood cell erythrocyte index rises to an average of 10 and above, protein, red blood cells, and white blood cells are found in clinical urine tests. For diagnosis, in addition to laboratory tests, bacteriological examination of milk from the affected and healthy glands is used. They also use skin electrothermometry, ultrasound, thermal imaging.

treatment.

Patients with acute mastitis should be treated under surgical conditions a hospital. In the serous and infiltrative stages, antibiotics are prescribed (semisynthetic penicillins with aminoglycosides or cephalosporins), sulfonamide preparations, infusion therapy with the introduction of saline solutions, 5% glucose solution, protein preparations. At the same time, it is necessary to perform novocaine blockade of the breast with A.V. Vishnevsky, the essence of which is the infiltration of the retromammary fiber from four sides; 120 ml of a 0.5% solution of novocaine with 0.01 g of trypsin, 2-3 g of oxacillin or 2 g of cephalosporin are introduced. Such a blockade can be repeated after 2-3 days.

Locally apply cold to the area of inflammation - bladder applications with ice for 15-20 minutes at intervals of 1.5-2 hours. Calm for the affected gland is ensured by a supporting scarf or bandage. Breastfeeding is not recommended; milk should be pumped regularly. To suppress lactation, if further breastfeeding is not provided prescribed folikulin (100,000 IU) sinestrol 2 ml of 0.1% solution intramuscularly for several days, hydrobromic camphor 0.33 g of 3 times per day in the form of powder. For this purpose, the ergot drug bromocriptine (parlodel) is also used 2.5 mg 3 times a day by mouth.

Destructive forms of mastitis are treated promptly. Surgery is performed under general anesthesia. The opening of the intramammary abscesses located in the upper quadrants is performed with wide radial cuts, not reaching the nipple areola by 0.5 cm. The section should be sufficient to allow the opening of ulcers, pockets, swims, destruction of partitions, removal of sequestrae, cutting out non-viable tissues. In the case of numerous abscesses, several similar incisions are performed; contrapertural incisions are used to drain pockets. Retromammary and localized in the lower quadrants reveal abscesses semilunar incision Bardengeyer - the lower transitional fold breast skin. Exfoliating the mammary gland from the pectoral fascia covering the pectoral muscles, they penetrate into the retromammary space and to the posterior surface of the mammary gland, providing sufficient access to the abscesses. Subareolar abscesses must be opened by arched incisions in the subareolar zone. After cutting the surface leaf of its own fascia, which covers the front of the mammary gland, the focus is opened with a clamp or forceps, so as not to damage the excretory ducts of the milk.

After surgical treatment, further treatment of the wound can be carried out in several ways. Use the open method of managing an infected wound under a dressing. Before applying the wound dressing washed well with one of the antiseptic solution (3% hydrogen peroxide or chlorhexidine dioxide). Recently, methods of local

Actions: ultrasonic cavitation, treatment of the walls of the cavity with a pulsating jet, vacuum aspiration. In the first phase of the wound healing process in the presence of necrotic masses, necrolyzing substances (salicylic acid, trypsin, chymotrypsin, teriline) are used. In order to accelerate the repair of wounds after opening the abscesses, their cleaning, and the appearance of full granulations, the use of secondary sutures is used, which ensure not only the closure of the wound, but also the maximum preservation of morphological structures and functions of the breast.

Apply mindoor treatment also wound drains ation its two vinyl chloride perforated drains, derived through counteropening. Through one of the tubes, the wound is constantly washed with solutions of antiseptics, proteolytic enzymes, antibiotics, and through the second, vacuum aspiration. Tubes are removed after obliteration of the abscess cavity, as evidenced by minor serous hemorrhagic discharge.

In the case of infiltrates that do not resolve for a long time, or delimited abscesses of small size, it is advisable to apply the method of excision surgery proposed by A.V. Melnikov. The affected sector is removed radically within healthy tissues with layered wound closure and drainage with perforated vinyl chloride tubes, preferably with vacuum aspiration behind Redon, for 1 - 2 days. In severe cases of gangrenous mastitis, sometimes to stop the effects of intoxication and prevent sepsis, amputation of the affected breast should be performed.

In the postoperative period, complex conservative therapy is continued, the intensity of which depends on the prevalence of breast lesions, the degree of intoxication. This complex contains antibiotics taking into account the sensitivity of microflora, sulfonamide drugs, vitamins, the introduction of saline solutions, 5% glucose, blood products (antistaphylococcal gammaglobulin, antistaphylococcal plasma), detoxification therapy (plasmapheresis, hemosorption, ultraviolet ultraviolet), hyperbaric oxygenation, immune - actin, thymalin, myeloid, thymogen, decaris, etc.).

The prognosis for a timely start and proper treatment tactics is favorable.

After radical surgery, rehabilitation of patients lasts an average of 2 weeks.

Fatal outcome is very rare with gangrenous and phlegmonous

forms of acute mastitis, which were complicated by common phlegmon, sepsis.

In the prevention of mastitis, the detection of foci of purulent infection in pregnant women under conditions of female consultation and their timely rehabilitation, teaching future mothers the technique of breastfeeding, caring for the mammary glands, and preparing the nipples are of great importance. It is also important to observe the sanitary-hygienic regimen in maternity hospitals, and to identify bacterial carriers among employees of maternity hospitals, which can be a source of purulent infection.

Erysipelas (erysipelas) - acute serous-exudative inflammation of the skin or mucous membranes membranes with the involvement of lymphatic vessels and lymph nodes, the causative agent of which is streptococcus. Refers to contagious diseases. The pathogen enters the lymphatic system of the skin and mucous membranes through wounds, abrasions, cracks. Sometimes erysipelas occurs as a complication of a purulent wound, abscess, phlegmon.

It is localized mainly on the lower extremities, face, less often on other parts of the body. There serosanguineous inflammation of lymphatic vessels, nodes (lymphadenitis). The accumulated exudate causes detachment of the epidermis and into pronounced edema of the surrounding tissues. Vials filled with

serous fluid appear. Due to edema, blood vessels of the skin are compressed, which leads to its necrosis. The penetration of infection into the subcutaneous fatty tissue causes the occurrence of phlegmon. Under adverse conditions, the inflammatory process spreads to other areas of the skin and tissue. Pathologic Signs of distinction erythematous, bullous, abscess, gangrenous form of erysipelas.

The clinical picture and diagnosis. The disease begins with chills, fever up to 39-40 ° C, general weakness, headache, vomiting, dizziness often join. The fever is ongoing. A swelling of a bright red color appears at the site of damage to the skin or mucous membrane, painful, clearly separated from the unaffected area, and tends to spread rapidly. Roughness of edges with notches looks like a geographical map. Locally, with an erythematous form, pain and a burning sensation are noted.

In the presence of a bullous form of erysipelas, the general manifestations of intoxication are greater expressed. At the site of the lesion, vesicles of different sizes appear, filled with serous fluid; after their disclosure, yellow crusts and scabs form in these areas. Sometimes the vesicles have a hemorrhagic or pustular character with a murky purulent exudate.

The phlegmonous form of erysipelas is manifested by edema, serous-purulent inflammation (phlegmon) of subcutaneous fat. Intoxication phenomena increase - body temperature rises to 40 ° C, tachycardia increases, nausea, vomiting join, tongue becomes dry, hollow dizziness is observed. In the clinical analysis of blood - marked leukocytosis ($15 \cdot 10^9 / l$), the shift leukocytes to the left, increasing the index of leukocyte 5 intoxication.

In the case of the gangrenous form of erysipelas, necrosis of the affected areas of the skin and subcutaneous fat occurs. In the clinical picture, pronounced endogenous intoxication predominates.

Erysipelas are often complicated by lymphadenitis, thrombophlebitis, subcutaneous creeping and intramuscular phlegmon, arthritis. A terrible complication is sepsis. In the case of erysipelas of the skin of the face, scalp, secondary meningitis may occur. Erysipelas have a tendency to relapse.

Treatment. Patients with erysipelas should be treated in surgical hospitals. Prescribe a high-calorie dairy and vegetable diet with a high content of vitamins, antibiotic therapy (semisynthetic penicillins), sulfa drugs (sulfadimethoxin, bisseptol). It is sometimes advisable to administer endolymphatic antibiotics. Assign immunotherapy (levamisole, t-aktivin). In case erythematous and bullous forms or used erythema suberythemal dose of ultraviolet irradiations on the affected skin. After that, the affected skin on the extremities is irradiated with 4-5 biodoses, and on the face - 3 biodoses. Conservative therapy is carried out until the disappearance of hyperemia and a decrease in body temperature.

In the case of a bullous form, an autopsy is carried out, emptying of the bubbles, after which apply ointment dressings with antiseptics.

Phlegmonous, gangrenous forms of erysipelas require radical surgical treatment, which consists in cutting out necrotic tissues, in the context of ulcers, sagging, followed by open treatment of purulent wounds according to generally accepted schemes.

Paraproctitis (paraproctitis) - this is an inflammation of the peri rectal fiber in the form of a limited abscess or diffuse phlegmon.

Etiology and pathogenesis. In the occurrence and development of acute paraproctitis, the infection of the rectal glands of the tubular structure is of great importance. These glands, as a rule, break through the fibers of the internal muscle-closure at the level of the transitional epithelium and open into the posterior crypts with their excretory ducts (6-8 glands open in each crypt, 70% of the glands have branches - from 1 to 46). Infection through the crypts enters the glands, infects them, as a result of which the duct that connects the gland to the crypt swells and becomes clogged, and a retention cyst with suppuration is formed. After opening it, the infection spreads to the perianal and pararectal spaces. Infection from these cysts can spread by hematogenous and lymphogenous pathways, which also leads to the formation of an abscess in pararectal tissue.

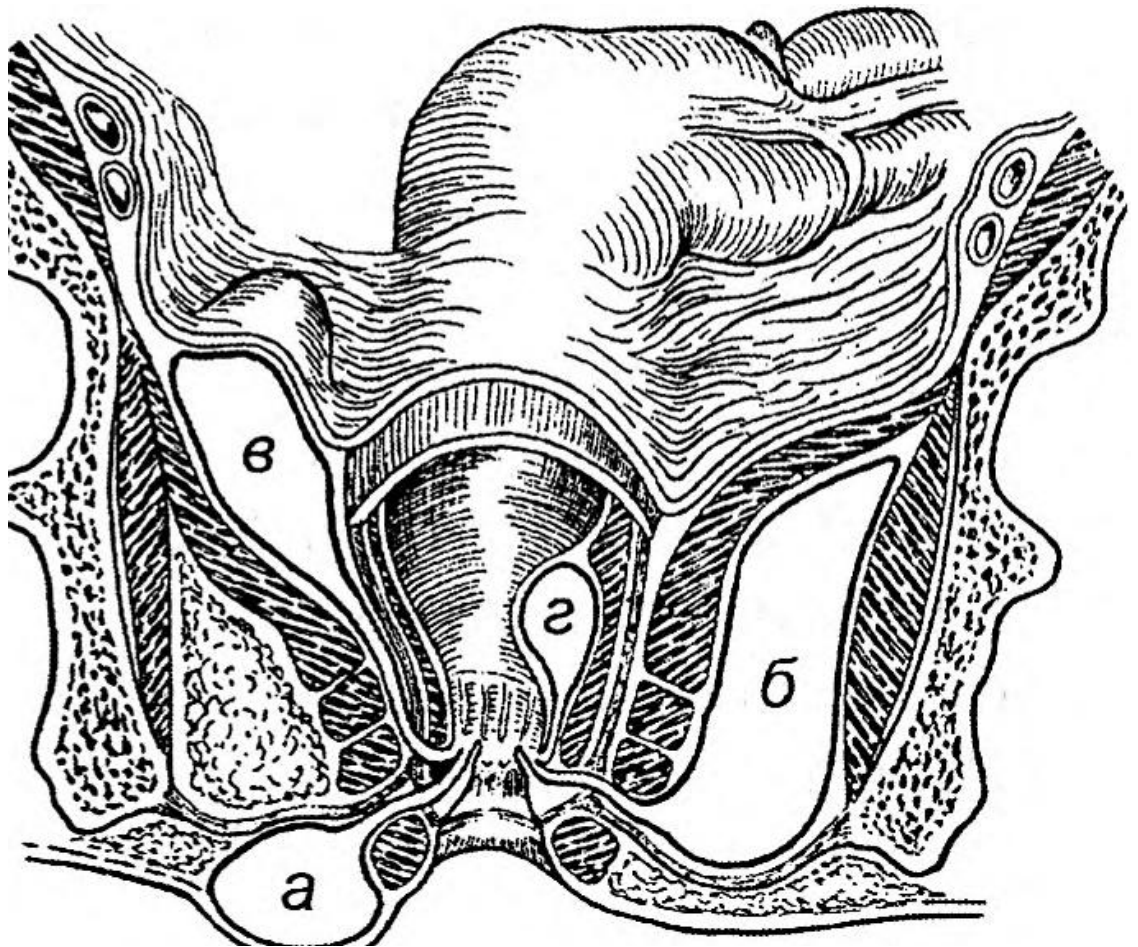


Fig. Pararectal abscesses

a) subcutaneous; b) ischiorectal; c) pelviorectal; d) submucosal

An important role in the development of paraproctitis is played by various diseases of rectum (hemorrhoids, cracks, cryptitis, papillitis, ulcerative non-specific colitis and Crohn's disease, localized in the rectum, etc.) and trauma to the mucous membrane. The

penetration of infection into the wall of the rectum and adjacent fiber causes the accumulation, stagnation and prolonged stay of feces in the rectum with constipation.

Microtrauma of the mucous membrane is also possible with a nose, proctitis, proctosigmoiditis .

Cases of acute paraproctitis resulting from damage are described intestinal walls during medical manipulations (enemas, blockades, injections, erroneous the introduction into the rectum of ammonia, solutions of chloramine, potassium permanganate, etc.), with injuries during surgery, gunshot wounds, etc.

Hematogenous and lymphogenous pathways of infection into the pararectal fiber should be recognized as extremely rare in the development of paraproctitis. In most patients, acute paraproctitis is caused by a wide variety of microorganisms. In the crops of pus, polymicrobial microflora is found: Escherichia coli, streptococcus, protea , staphylococcus, less often anaerobes, mycobacterium tuberculosis.

Classification. Among the large number of proposed classifications of acute paraproctitis common is a classification based on the localization of the inflammatory process:

- 1) subcutaneous paraproctitis;
- 2) submucosal paraproctitis;
- 3) sciatic-rectal (ischio-rectal) paraproctitis;
- 4) pelvic-rectal (pelvic rectal) paraproctitis.

The clinical picture and diagnosis . Features of the course of acute paraproctitis or its clinical forms are determined by the location of the purulent process in the pararectal cellular spaces.

subcutaneous paraproctitis is the most common form of the disease (50% of all types of acute paraproctitis). It usually begins acutely. appears and pain in the perineum, anus , and aggravating with bowel movements, is rapidly increasing . At the same time, body temperature rises, reaching 38-39 ° C in the evening. The temperature reaction is accompanied by chills. The pain is acute , throbbing, aggravated by movements, changes in body position, tension and anterior abdominal wall, coughing . Patients walk slowly, legs wide apart, they can only sit and lie on a healthy side. There is a delay in bowel movements, dysuria . The perineal skin on the affected side becomes hyperemic, the radial folding of the anus is smoothed. Gradually, swelling of the skin and if the abscess is located in the immediate vicinity of the anus , the latter is deformed: the canal becomes slit-like, sometimes gapes. In these cases, patients note incontinence of gases and liquid feces, leakage of mucus. On palpation, sharply painful infiltration, local hyperthermia are determined. In the center of infiltrate a, softening may form . A digital examination of the rectum is very painful. But careful insertion of a finger along the wall, opposite to the location of the abscess, it is quite possible. In this case, it is possible to determine the upper boundary of the infiltrate, which does not extend above the comb line.

mucosal paraproctitis is rarely diagnosed (1.9-6.3% of cases). This is the mildest form of paraproctitis, which is manifested by subfebrile body temperature and often severe pain in the rectum, which intensifies with defecation. During the first week, pus usually breaks into the intestinal lumen and the disease ends in recovery. External manifestations of submucosal paraproctitis are detected if pus falls below the crest line and passes to subcutaneous fat. During this period, edema of the

corresponding semicircle of the buttocks is noted. When a digital examination of the rectum is first found round, tight elastic formation, located under the mucous membrane above the crest line. Diagnosis of submucosal paraproctitis is not difficult and is based on complaints (dull pain in the rectum, low-grade fever) and data from a digital examination of the rectum (expulsion of the abscess from the submucosa into the intestinal lumen).

Sciatic-rectal paraproctitis accounts for 35-40% of cases wasp of three paraproctitis. The disease develops gradually, starting with a deterioration in general condition, chills, general weakness, and a disorder. Then there is a constant dull pain in the rectum or in the pelvis. By the end of the first week, the patient's condition worsens significantly, rises rapidly body temperature up to 39-40 ° C, chills appear. The pain becomes acute, throbbing, worse with bowel movements, various movements. In the case of localization of the inflammatory process in the zone of the prostate, urethra observed dysuria phenomenon, pus quickly spreads to adjacent fiber and more often falls down. less often pus extends to the opposite side with the formation of a horseshoe-shaped abscess or up to the pelvic-rectal tissue.

External signs of ischiorectal paraproctitis manifest towards the end of the first weeks. First, the skin is not changed, then there is a slight swelling, sometimes swelling, then mild hyperemia of the perineal skin. palpation of the perineum in the early days, it is impossible to determine any signs of the disease. Only with the appearance of edema and hyperemia of the skin of the perineum, the tissues become doughy, pasty, but even then soreness with ordinary palpation can be absent.

Valuable diagnostic information can be obtained with a digital examination of the rectum. In the early stages, it is possible to detect first a flattening and densification of the intestinal wall above the anal canal, smoothness of the folds on the affected side. By the end of the first week of the disease, an abscess

it opens into the lumen of the intestine. Diagnosis of acute ischiorectal paraproctitis is based on the clinical picture of the disease, data on deep palpation of the perineum and digital examination of the rectum. Diagnosis is often delayed due to the absence of external signs of paraproctitis at the onset of the disease, although in the early stages of the disease with deep palpation of the perineum with jerky movements, it is possible to establish an increase in pain in the pelvic region.

Pelvic-rectal paraproctitis - a rare and severe form of acute paraproctitis (1.9-7.5% of the total number of observations) and complex for diagnosis.

The disease begins gradually. The condition is slowly getting worse: first fever, chills, headache, malleable joint pain, then there are sensations of heaviness and vague pain in the pelvic area or in the lower abdomen. Sometimes it is insignificant, radiating to the uterus, the urethra, causing an acceleration of urination, and does not increase with movements and bowel movements. With the appearance of an abscess, the disease acquires an acute course: dull pain in the rectum and pelvic region is accompanied by intoxication, hectic fever, delayed stool discharge, which is changed by tenesmus, eventually a breakthrough of pus and the formation of a fistula.

External signs of acute pelvic rectal paraproctitis appear only when the purulent process spreads to ischiorectal, and then to subcutaneous fatty tissue (not earlier than 2-3 weeks after the onset of the disease). fusion occurs purulent fusion of the walls of the rectum, is formed high fistula, abscess through which emptied into the lumen. About a week before this, the patient develops painful tenesmus, mucus with streaks of blood in the

stool is secreted. Breakthrough of the abscess in the rectum is possible with a pelvic rectal form of paraproctitis.

In the initial stages of the disease, the symptoms are so nonspecific, often does not give a reason for examining the rectum with a finger or rectoscope.

However, it was during this period that only a thorough digital examination of the intestine makes it possible to identify the initial signs of pelvic rectal paraproctitis: soreness of one of the walls to the mid-ampule or upper ampullar part of the rectum, test-like consistency, intestinal wall infiltration, or solid infiltration beyond.

The treatment of acute paraproctitis can only be surgical. Operational treatment consists in its wide autopsy.

When opening abscesses of any localization, an arcuate incision relative to the anus. In case of subcutaneous paraproctitis, the incision is performed above the softening site, the abscess cavity is examined with a finger to identify jumpers, washed and drained.

The abscess cavity is drained by a drainage tube.

Submucosal paraproctitis is opened from the side of the rectal lumen by incision of the mucous membrane at the site of greatest protrusion.

After opening paraproctitis, treatment is carried out according to the treatment principle purulent wounds.

6. Materials for self-control:

Tests for self-control (initial uro Wen knowledge) .

1. What clinical signs are not characteristic of hydradenitis?
 - a) the presence of a follicular pustule , the presence of a necrotic center ;
 - b) the formation of a dense painful node;
 - c) the release of creamy pus;
 - d) fluctuation;
 - e) the occurrence of dense infiltrate.

2. In which part of the body does hydradenitis not occur?
 - a) on the palmar surface of the brush ;
 - b) on the scalp;
 - c) in the perianal and genital zones ah;
 - d) in the armpit;
 - f) in the near - nasal area .

3. When the serous stage of acute mastitis is not shown:
 - a) opening the inflammatory focus;
 - b) the appointment of antibiotics;
 - c) retro-mammary procaine blockade;
 - d) preventing stagnation of milk by decantation;
 - e) compresses.

4. What is cut at necropsy performed retroma m resultant angular mastitis:
 - a) semi-oval , in the transitional fold of the molar gland ;

- b) paraareolar ;
- c) over the upper edge of the gland;
- d) quadrantectomy;
- d) radial.

5. Which pregnant women are at high risk for developing mastitis?

- a) with an abnormality in the development of mammary glands and purulent infection of various types of history;
- b) athletes;
- c) waiting for a second birth;
- d) not examined;
- e) immunized with staphylococcal toxoid.

6. Inflammation with erysipelas extends to:

- a) all layers of the skin, lymphatic vessels ;
- b) nasal spectacle layer;
- c) epidermis;
- d) lungs;
- e) subcutaneous tissue.

7. Most often affected by erysipelas:

- a) face, lower limbs;
- b) mucous membranes;
- c) forearms ;
- d) fingers;
- f) the body.

8. In the treatment of erysipelas are contraindicated:

- a) wet dressings, baths;
- b) antibiotics;
- c) UV irradiation;
- d) mobilization;
- f) treatment of the lesion with a 1% solution of brilliant green.

9. How is lymphangitis different from erysipelas?

- a) the absence of sharp boundaries of hyperemia ;
- b) the presence of bubbles;
- c) severe swelling of the skin;
- g) itching of the skin;
- e) the presence of small abscesses.

10. The characteristic clinical manifestation of lymphangitis:

- a) the presence of red bands on the course of the lymphatic vessels ;
- b) flushing of the skin with clear boundaries;
- c) swelling of the skin;
- d) small-point rash;

f) an increase in lymph nodes.

11. The following types of inflammation of the lymph nodes are distinguished:

- a) serous, productive;
- b) putrefactive;
- c) necrotic;
- d) anaerobic;
- e) specific.

12. If the capsule of the lymph node and surrounding tissues are involved in the purulent process, then it develops:

- a) adenophlegmon ;
- b) an abscess;
- c) adenoids;
- d) carbuncle;
- f) phlegmon.

13. In acute paraproctitis, the following are first affected:

- a) anal glands, crypts of Morgagni;
- b) the external sphincter of the anus;
- c) the internal sphincter of the anus;
- d) perianal skin;
- e) anal veins.

14. In relation to the fibers of the external sphincter of the anus, the purulent passage with acute paraproctitis may be located:

- a) externally, through the sphincter ;
- b) medially;
- c) ahead;
- d) behind;
- e) from

15. What is the radicalism of surgery for acute paraproctitis?

- a) opening and drainage of the abscess;
- b) suturing of the postoperative wound with catgut;
- c) the introduction of a vent tube into the rectal lumen;
- d) rectal tamponade;
- d) the imposition of a sigmoid.

B. Tasks for self-control:

1. A patient came to see a surgeon with complaints of pain in the right axillary region, aggravated by movements in the right shoulder joint. Sick the third day.

When viewed in the axillary region, three dense limited infiltrates with a diameter of 0.8 to 1.2 cm protruding above the skin, with hyperemia of the latter above them, were found. In the center of infiltrates softening areas.

What happened to the patient? What should be the treatment tactics?

2. In the evening, a young woman was hospitalized in the surgical hospital 16 days after delivery with complaints of pain in the right mammary gland, fever.

Sick for more than a week. She was self-medicating, but it had no effect.

Body temperature 39.9 ° C. The rights of the mammary gland are increased. In the lower quadrants, it is deeply palpated by an extensive, dense, painful infiltrate with softening in the center . Axillary lymph nodes are enlarged and painful.

What is your diagnosis? What should the surgeon on duty do? What to do with feeding a baby ?

3. A patient with complaints of pain in the left mammary gland, which has been disturbed for 6 days, was hospitalized in the surgical department . Breastfeed. The child is 12 days old. The skin is pale.

In the upper outer quadrant of the left mammary gland, painful seals up to 6-7 cm in diameter are determined , with softening in the center.

What diagnosis do you make? Your diagnostic and treatment tactics?

4. A woman came to the surgeon with complaints of pain in the nipple of the left breast in 22 days after birth.

Areola edematous. There is swelling, infiltration in the lower semicircle with a clear fluctuation in the center.

What is your diagnosis and treatment tactics?

5. A 45-year-old woman came to the hospital's emergency room with complaints of pain in the right leg, headache, weakness, and weakness. It is sick 2 days. Body temperature rose to 39 ° C every evening.

On the front e-outer surface of the lower and middle third of the tibia there is an extensive , bright red color spot with several small blisters filled with serous-hemorrhagic exudate. The boundaries of hyperemia are clear, uneven (in the form of a geographical map). At the site of hyperemia, the skin is testy , sharply painful on palpation.

Blood test: white blood cells - $15.1 \times 10^9 / l$, stab neutrophils - 7%, ESR - 34 mm / hour.

What is your diagnosis? Should the patient, upon admission, be isolated from the remaining patients in the ward? What treatment do you prescribe?

6. Patient D., 26 years old, called to the local doctor's house about a sore throat , fever, and fever. Ill 1 day ago.

On examination, the tonsils are significantly enlarged, protrude from the palatine arches, are brightly hyperemic, when pus is pressed with a spatula, pus is released. Palpation both submaxillary areas determined dense, rounded, movable, not soldered Skin formation painful to 2 cm in diameter. The skin above them is not changed.

What happened to the patient? Does he need emergency surgery?

7. A soldier came to see a doctor, complaining of pain in the right foot, the cat was bothering for 3 days.

When viewed from the rear of the II-III toes of the right foot, there are scratches with a purulent coating. The foot on the back surface is edematous, there is also hyperemia in the form of red longitudinal stripes, painful when touched. In the right inguinal region, a moderately painful, elastic consistency, up to 1.5 cm in diameter, is palpated. The skin above it is not changed.

What is your diagnosis and treatment tactics?

8. A 64-year-old patient was admitted to the hospital with complaints of pain in the anus, aggravated during the act of defecation, an increase in body temperature in the evening at 37.6-38.0 ° C. It is sick for 5 days.

With a digital rectal examination, a painful infiltrate with softening in the center is determined along the left side wall of the anal canal with a transition to the intestinal ampoule.

Blood test: moderate leukocytosis with a shift in the formula to the left, ESR - 19 mm / hour.

What diagnosis will you make to the patient? P exerted whether to surgery? If so, how will you conduct the operation?

9. Patient M., 79 years old, complained of pain, swelling and the presence of blisters in the left leg and foot. He became ill sharply 8 days ago after receiving scratches (he collected gooseberries). The disease began with a rise in temperature to 40.1 ° C, redness of the skin around the scratches, which had clear boundaries.

On examination, swelling of the left lower leg and foot is noted, in the lower third of the left lower leg there are three bubbles 3 × 5 cm in size, filled with straw-colored liquid, a localized area of blanching of the skin up to 6 × 8 cm, which does not respond to pain when irritated.

Your diagnosis. What treatment is indicated for the patient?

10. Patient G., 38 years old, came to the surgeon's office with complaints of pain and the presence of a tumor-like neoplasm in the anus, an increase in body temperature to 38 ° C.

At 7:00 o'clock. by situation Nome dial the rear passage is camping infiltrate pyriform dimensions of 3 × 5 cm, the tip of one hundred Ron rear crypts. Perianal skin folds are smoothed, palpation infiltration causes increased pain, Pal feasting camping site in the center of softening.

Formulate a diagnosis. provided if the patient thermal treatments? What is the radicalism of surgical treatment in the given clinical case?

11. A woman 43 years 2 days ago accidentally tore a pimple located in the lower third of the right forearm. After 1 day, a dense, painful swelling appeared in this area.

Locally: on the front surface of the lower third of the right forearm a tumor-like neoplasm is determined up to 1 cm in diameter in the center of which there is hair, hyperemia is observed in the proximal direction in the form of red longitudinal stripes, painful when touched. In the center of the infiltrate softening area. In the right axillary

region, a moderately painful, elastic consistency, up to 1.0 cm in diameter, is palpated. The skin above it is not changed.

Your diagnosis. What treatment is indicated?

12. Patient K., 19 years old, 2 days ago noted the appearance of a painful tumor-like infiltrate in the left axillary fossa. Palpation of the clinic surgeon found that infiltration on the surface of the skin, a tight-elastic consistency, local hyperthermia above it, and movements in the joint lead to increased pain.

Formulate a diagnosis. When should surgical treatment be performed?

13. Patient V., 29 years old, turned to the surgeon of the clinic with complaints of fever and pain in the depths of the lower abdomen and during bowel movements.

The patient was sequentially treated by a therapist, urologist, gynecologist.

Upon examination and external examination of the abdomen, pathological changes were not detected. Pressing in the anus does not cause pain. When examining with a finger inserted into the anus, high, through the wall of the rectum, along the front wall, a dense, painful infiltrate is determined, which protrudes somewhat into the lumen of the rectum. It is not possible to examine the upper edge of the infiltrate with a finger.

Formulate a diagnosis. Why did doctors of other specialties have difficulties in diagnosing?

14. When performing surgery for acute abscess in a patient D., 48 years old, entered by a syringe into the cavity of the abscess dye solution came in the back of the crypt. When an abscess was cut, 30 ml of gray liquid pus was obtained. The button probe inserted into the perianal wound passed outside the sphincter (extrasphincterically) and also emerged in the region of the posterior crypt.

What should be the further tactics of the surgeon?

15. Patient L., 67 years old, turned to the clinic with complaints of the presence of a tumor-like neoplasm in the upper outer quadrant of the left mammary gland, which she discovered during self-examination 1 month ago and which is gradually increasing in size. Body temperature is 36.6 ° C. On palpation of the neoplasm up to 1.5 cm in diameter, it is dense, tuberous, fused with surrounding tissues, the skin above it is of normal color and temperature, changed in the form of a "lemon peel". Left-side axillary lymph nodes are enlarged to 1.5 cm in diameter, moderately painful.

Is it possible to say that the patient has acute purulent surgical pathology? List the signs of inflammation formulated by Hippocrates in Ukrainian and Latin.

Stational tasks

1. A woman in labor complained of persistent bursting pain in the right mammary gland, an increase in body T₀ to 39.0 ° C. Childbirth 2 weeks ago. The mammary gland is enlarged, tense. Above the areola, a painful infiltrate is palpated, the skin above it is not changed. What is your diagnosis? What treatment tactics do you suggest?

2. A woman in labor contacted the CRH with complaints of intense pain in the left mammary gland, an increase in body T₀ to 39-40 . 0 ° C, chills . The mammary gland is enlarged, tense. In its thickness, on the verge of the upper quadrants, a painful infiltrate is palpated, the skin above it is hyperemic. In the center of infiltration posted softening d to 4 cm. Your diagnosis? How to act as a surgeon?

3. The patient complained of the presence of a painful tumor formation in the left groin, which arose suddenly a few days ago. On the front surface of the left lower leg, a purulent wound, which he received about a week. In the left axillary-femoral region, slight swelling and hyperemia. A sharply painful formation with uneven contours, dense texture is palpated. What is your diagnosis? How to act as a surgeon?

4. Machine delivered to the patient complaining of intensity of arching pain in the right tibia, increase in body temperature to 40 . 0 ° C, the inability to move it . The right shin is significantly increased in size, the back flexion of the foot increases pain. Sharp soreness when compressing the tibia in the anteroposterior direction and the cuff of the tonometer. What is your diagnosis? What is the treatment?

5. A patient came to see a surgeon with complaints of pain in the right axillary region, aggravated by movements in the right shoulder joint. Sick the third day.

When viewed in the axillary region, three dense limited infiltrates with a diameter of 0.8 to 1.2 cm protruding above the skin, with hyperemia of the latter above them, were found. In the center of infiltrates softening areas.

What happened to the patient? What should be the treatment tactics?

6. In the evening, a young woman was hospitalized in the surgical hospital 16 days after delivery with complaints of pain in the right mammary gland, fever.

Sick for more than a week. She was self-medicating, but it had no effect.

Body temperature 39.9 ° C. The rights of the mammary gland are increased. An extensive, dense, painful infiltrate with softening in the center is deeply palpated in the lower quadrants. Axillary lymph nodes are enlarged and painfule.

What is your diagnosis? What should the surgeon on duty do? What to do with feeding a baby?

7. A patient was admitted to the surgical department with complaints of pain in the left mammary gland, which has been disturbing for 6 days. Breastfeed. The child is 12 days old. The skin is pale.

In the upper outer quadrant of the left mammary gland, a painful compaction with a diameter of up to 6-7 cm is determined , with softening in the center.

What diagnosis do you make? Your diagnostic and treatment tactics?

8. A woman came to the surgeon with complaints of pain in the nipple of the left breast in 22 days after delivery.

Areola edematous. There is swelling, infiltration in the lower semicircle with a clear fluctuation in the center.

What is your diagnosis and treatment tactics?

9. A 45-year-old woman came to the hospital's emergency room with complaints of pain in her right lower leg, headache, weakness, and weakness. It is sick 2 days. Body temperature rose to 39°C every evening.

On the anterior outer surface of the lower and middle third of the tibia there is an extensive, bright red color spot with several small blisters filled with serous-hemorrhagic exudate. The boundaries of hyperemia are clear, uneven (in the form of a geographical map). At the site of hyperemia, the skin is testy, sharply painful on palpation.

Blood test: white blood cells - $15.1 \times 10^9 / l$, stab neutrophils - 7%, ESR - 34 mm / hour.

What is your diagnosis? Should the patient, upon admission, be isolated from other patients in the ward? Which treatment do you prescribe?

10. Patient D., 26 years old, called to the district doctor's house for a sore throat, fever, and fever. Ill 1 day ago.

On examination, the tonsils are significantly enlarged, protrude from the palatine arches, are brightly hyperemic, when pus is pressed with a spatula, pus is released. On palpation in both submaxillary areas, dense, round, mobile, painful formations up to 2 cm in diameter are not soldered to the skin. The skin above them is not changed.

What happened to the patient? Does he need emergency surgery?

11. A soldier came to see a doctor and complains of pain in the right foot, which has been disturbing for 3 days.

When viewed from the rear of the II-III toes of the right foot, there are scratches with a purulent coating. The foot on the back surface is edematous, there is also hyperemia in the form of red longitudinal stripes, painful when touched. In the right inguinal region, a moderately painful, elastic consistency, up to 1.5 cm in diameter, is palpated. The skin above it is not changed.

What is your diagnosis and treatment tactics?

12. A 64-year-old patient was admitted to the hospital with complaints of pain in the anus, aggravated during the act of defecation, an increase in body temperature in the evening at $37.6-38.0^{\circ}\text{C}$. It is sick for 5 days.

With a digital rectal examination, a painful infiltrate with softening in the center is determined along the left side wall of the anal canal with a transition to the intestinal ampoule.

Blood test: moderate leukocytosis with a shift in the formula to the left, ESR - 19 mm / hour.

What diagnosis will you make to the patient? Is surgical treatment provided? If so, how will you conduct the operation?

13. Patient M., 59 years old, complained of pain, swelling and the presence of blisters in the left leg and foot. He became ill sharply 8 days ago after receiving scratches (he collected gooseberries). The disease began with a rise in temperature to 40.1°C , redness of the skin around the scratches, which had clear boundaries.

On examination, swelling of the left lower leg and foot is noted, in the lower third of the left lower leg there are three blisters 3×5 cm in size, filled with straw-colored

liquid, a localized area of blanching of the skin up to 6×8 cm, which does not respond to pain when irritated.

Your diagnosis. What treatment is indicated for the patient?

14. Patient G., 38 years old, came to the surgeon's office with complaints of pain and the presence of a tumor-like neoplasm in the anus, an increase in body temperature to 38°C .

At 7:00 o'clock, according to the conditional dial, the anus has a pear-shaped infiltrate measuring 3×5 cm, with the apex towards the back of the crypt. The perianal skin folds are smoothed, palpation of the infiltrate causes increased pain, the softening area is palpated in the center.

Formulate a diagnosis. Are thermal procedures indicated for the patient? What is the radicalism of surgical treatment in the given clinical case?

15. A woman 43 years 2 days ago accidentally tore a pimple located in the lower third of the right forearm. After 1 day, a dense, painful swelling appeared in this area.

Locally: on the front surface of the lower third of the right forearm a tumor-like neoplasm is determined up to 1 cm in diameter in the center of which there is hair, hyperemia is observed in the proximal direction in the form of red longitudinal stripes, painful when touched. In the center of the infiltrate softening area. In the right axillary region, a moderately painful, elastic consistency, up to 1.0 cm in diameter, is palpated. The skin above it is not changed.

Your diagnosis. What treatment is indicated?

16. Patient K., 19 years old, 2 days ago noted the appearance of a painful tumor-like infiltrate in the left axillary fossa. Palpation of the clinic surgeon found that infiltration on the surface of the skin, a tight-elastic consistency, local hyperthermia above it, and movements in the joint lead to increased pain.

Formulate a diagnosis. When should surgical treatment be performed?

17. Patient V., 29 years old, turned to the surgeon of the clinic with complaints of fever and pain in the depths of the lower abdomen and during bowel movements.

The patient was sequentially treated by a therapist, urologist, gynecologist.

Upon examination and external examination of the abdomen, pathological changes were not detected. Pressing in the anus does not cause pain. When examining with a finger inserted into the anus, high, through the wall of the rectum, along the front wall, a dense, painful infiltrate is determined, which protrudes somewhat into the lumen of the rectum. It is not possible to examine the upper edge of the infiltrate with a finger.

Formulate a diagnosis. Why did doctors of other specialties have difficulties in diagnosing?

18. When performing surgery for acute abscess in a patient D., 48 years old, entered ny with a syringe into the cavity of the abscess dye solution came in the back of the crypt. When an abscess was cut, 30 ml of gray liquid pus was obtained. The button probe inserted into the perianal wound passed outside the sphincter

(extrasphincterically) and also emerged in the region of the posterior crypt. What should be the further tactics of the surgeon?

19. Patient L., 67 years old, turned to the clinic with complaints of the presence of a tumor-like neoplasm in the upper outer quadrant of the left mammary gland, which she discovered during self-examination 1 month ago and which is gradually increasing in size. Body temperature is 36.6 ° C. On palpation, the neoplasm is up to 1.5 cm in diameter, dense, tuberous, fused with surrounding tissues, the skin above it is of normal color and temperature, changed in the form of a "lemon peel". Left-side axillary lymph nodes are enlarged to 1.5 cm in diameter, moderately painful.

We can but we say that in a patient with acute purulent surgical pathology? List formulated the Hippocrates signs of inflammation in the english and Latin.

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