

Lecture

Theme Damage of the mucous membrane of the oral cavity from infection (pyoderma, mycosis, virus diseases).

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INFECTIOUS AGENTS OF THE MMOC ARE :

- 1. Bacteria
- 2 Fungi
- 3 Virus
- 4 Spirochaete and other

THE CLINICAL PICTURE OF ANY INFECTIOUS DISEASE DEPENDS ON 3 FACTORS

- 1. The condition of the macroorganism
- 2. Virulence of the agent
- 3. Collaboration with each other

PYODERMA is purulent disease of the skin

- **The leading role belongs to staphylococcus and streptococcus, but may be other agents (pseudomonas, corynebacteria, vulgar protei)**
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- **While practising a dentist comes across superficial streptoderma and mixed pyoderma**

PREDISPOSITIONAL FACTORS:

- Exogenic: trauma, maceration, inflammation
- Skin diseasis
- Endogenic:
 - Caries
 - Tonsillitis
 - Sinusitis
 - Supercooling
 - Disorder of neuro-endocrine system
 - Decrease of immune status
 - Diseases of gastro-intestinal tract, liver and others.
- Take GCS and cytostatics.

PATOGENESIS

- Staphylococcus and streptococcus produce exotoxins:
- hemolysin, leicotoxin, fibronolysin, necrotoxin
- and numerous enzymes melting human tissues.

CLASSIFICATION OF PYODERMA

According to etiology

Staphyloiderma

Streptoderma

Mixedas

● As for the course:

● Acute

● Subacute

● Chronic

For depth:

Superficial

Deep

According to the origin:

Primary

Secondary

FEATURES OF AGENTS

- **Staphylococcus** prefers to damage skin appendages (hair follicles, sebaceous glands, sweat glands) .
- **Streptococcus** prefers smooth skin.
- **Mixed pyoderma**

STAPHYLODERMA IN PRACTISING A DENTIST

SUPERFICIAL

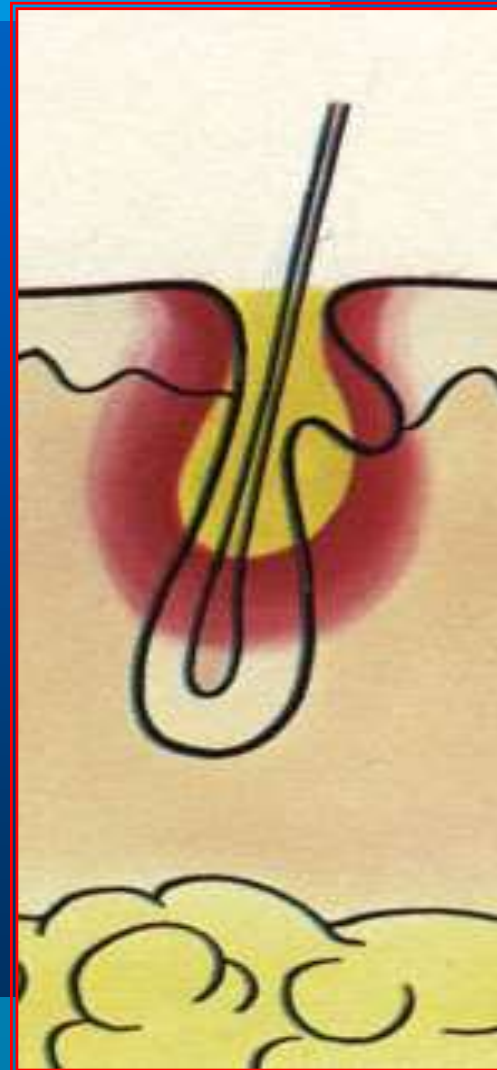
1. Ostiofolliculitis
2. Folliculitis
3. Vulgar cycosis

DEEP

- 1. Furuncle
- 2. Carbuncle

VULGAR CYCOSIS

- Vulgar sycosis is a staphylococcus sycosis with numerous follicles and osteofollicles with expressed inflammatory reaction in the upper dermis layer.



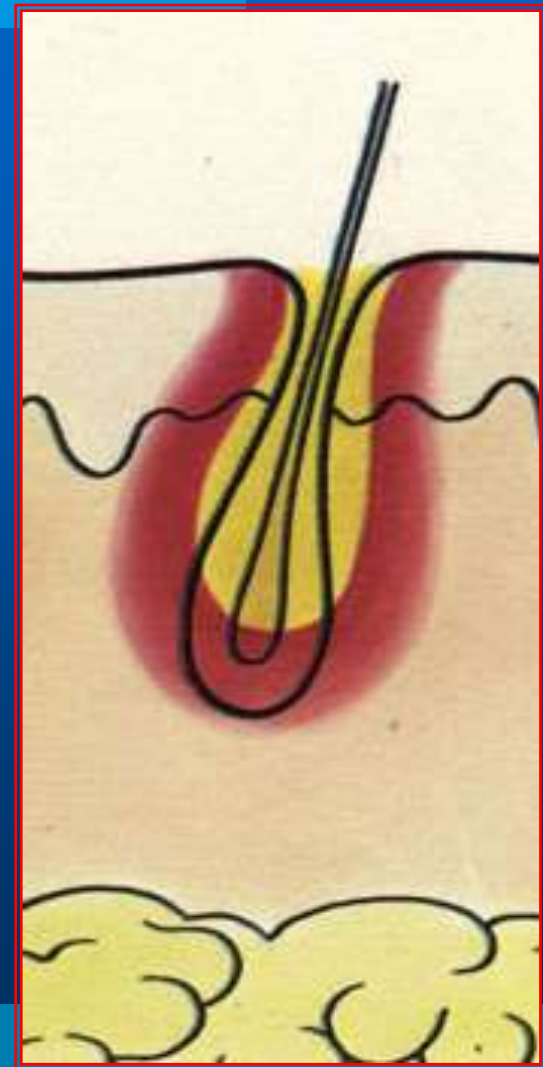
VULGAR CYCOSIS



- **Location:**
- **Beard**
- **Moustache,
Subaxillary cavity**

FURUNCLE is a acute purulent-necrotic inflammation of the hair follicle and perifollicle of the connective tissue.

- The primary element is an inflammative- congestive hyperemia node, cone in the form, painful. After fluctuation you witness autopsy and formation of necrotic shaft and ulcer.
- Course of the disease depends on its location.
- Furuncles on the face are dangerous.
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- Furunculoses is when there are numerous furuncles on the skin.
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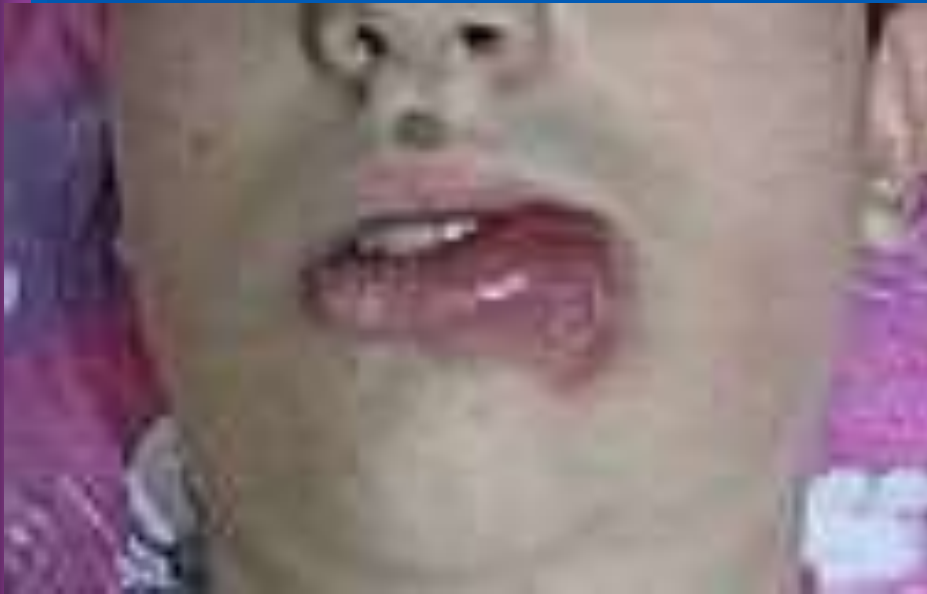
Complications

- Lymphangit
- Regional lymphadenitis
- Flegmon
- Osteomyelitis,
Metastasizing
Abscesses
- Sepsis
- Meningitis and
others.



CARBUNCLE

- **CARBUNCLE** is purulent-necrotic inflammation in the deep derma layers and hyperderma involving a lot of hair follicles during the process



CARBUNCLE

- **Carbuncle** is a deep and severe form of staphylocoderma.
- Clinical picture is red infiltrate?
Very painful
- The black colouration because of necrosis.
- After dissection it was called carbo in LATIN COAL.
- There are signs of intoxication, pains.
- After dissection there remains a scar of irregular form.



CLINICAL MANIFESTATIONS OF STREPTODERMA

SUPERFICIAL

- 1. Streptococcus impetigo
- 2. Dry streptoderma
- (vulgaris facial lichen)

DEEP

- 1. Vulga ectima
- 2. Erysipilas

Streptococcus impetigo

-
- The primary element is a flabby blister - FLUCTENA
- FLUCTENA contains serous exudate with a corolla hyperemia.
- It can increase in size
- After breaking they form erosions.
- It is contagious and inclined to autoinoculation
- It can be in several forms — annular, slit, bullous pararitium. there remain no scars.



Erysipilas

- Erysipilas is deep acute streptococcus damage of skin accompanying by fever and intoxication.
- Streptococcus gets into through damaged skin and affects lymph vessels of the skin.
- Incubation period can be of several days.
- Clinically it looks like a red hydropic spot.
- It is painful and hot if you touch it.
- It increases in size, the borders are festoon like fire flames.
- The patient suffers from high temperature and headache.



Contagious impetigo



Botriomicoma or pyogenic granuloma

- Botriomicoma or pyogenic granuloma arises in 1-2 weeks after injection or trauma.
- Full development is in 10-12 days.
- It is a edunculated tumour.
- Its size can be from a pea to a walnut.
- THE surface looks like a raspberry.



Botriomicoma or pyogenic granuloma



- WHEN touched it easily bleeds.
- The location is hands, feet, face and seldom mucous membrane.
- It will not become malignant.
- It can become ulcerated, necrotic and keratinised.

Chancreform pyoderma

- Chancreform pyoderma looks like a lues.
- Its location is on lips, MM — ON TONGUE.
- Pustule obducts fast and forms an ulcer with scanty secretions rounded outlines,
- smooth edges
- without any inflammation around,
- pains are weak or there is no pain at all.
- Regionar nodes can be
- increased,
- they are dence(firm) and painless.
-



Cronical ulcer face pyoderma.

- Ulcer pyoderma is characterised by hard ulcerated skin.
- It is often caused by inflammatory diseases of the
- Intestines/
- The real cause of ulcer pyoderma is not clear but the disease has been thoroughly studied.



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- Язвенная пиодермия – характеризуется тяжелым изъязвлением кожи, очень часто обусловлена воспалительным

заболеванием кишечника

How to diagnose pyoderma?

Secondary pyoderma



- 1. The clinical picture presence of pustules, blisters, node.
- 2. Microbiological research
- 3. Bacteriological research

Treatment

- **1. Topical** (for superficial - Aniline dyes, spiritus with antibiotics, disinfectant solutions, **ointment with antibiotics, for deep damage- ihtiol, dimecsid**)
- **2. The general** (surgical treatment- removal of botriomycome, antibiotecs, immunotherapy- specific and non-specific, GCS (small doses))

Indications for general pyoderma therapy

- 1. Signs of intoxication
-
- 2. Deep face pyoderma
-
- 3. Chronical pyoderma
-
- 4. When the local therapy fails.

Dermamycosis is fungul skin diseases

- **CLASSIFICATION**

- **1.Keratomycois**

- **2.Dermamycosis**

- **3.Candidiasis**

- **4.Deep mycosis (aktinomycois and others)**

Candidiasis. The agent of candidiasis is an yeast-like fungus-candida albicans-saprophyte.

Exogenic reasons

- are long traumatic action by artificial(prosthetic)
- device,
- irritating food.
-

Endogenic reasons

- - taking antibiotecs, corticosteroids, cytostatics
- DISEASES of gastro-intestine tract,
- diabetes mellitus,
- a shortage of group B,C VITAMINS,
- Oncology and others.



Clinical picture candidiasis of oral caviti:

- 1. Candida stomatitis
- 2. Candidiasis of gingivae
- 3. Candidiasis of tongue
- 4. Candidiasis of angular.
- Hyperemia and white patch can be easily removed.
- there are symmetrical cracks in the corners of the mouth.
- Subjectively - pain

Diagnosis and differential diagnosis

- **DIAGNOSIS:**
- 1. Clinical pictures.
- 2. Microscopic examination: Smears show yeast-like fungi.
- **Differential diagnosis:**
- **Leukoplakia** is a white film without inflammation, cannot be removed by spatel
- **LRP— a white net cannot be removed.**

Direct microscopy



KOH preparation of candida showing pseudohyphae

Treatment of candidiasis:

- **1. Investigations**
- **2. Local treatment:** aniline dyes,
disinfection remedies- betadine solution, 10-20% borax solution in glycerol,
Lugol solution, cream Candid (Clotrimazol), nystatin and leverin ointment on the lips.
- **3. General treatment: systemic antimycosis-** fluconasols, amfoterisin B

Actinomycosis is a disease caused by radiant fungi - actinomisetamy

- Any organs and tissues can be damaged.

- More than 70% are affected by MM and face.

These fungi locate:

- in various teeth,

- periopical focuses

- gingivai pockets

- tonsils

- salivary

- Endogenic way of fungus invasion.

- The reasons are traumas, inflammation.



Actinomycosis of MM

- Primary (after trauma)
- Secondary (from submucous п/ж periosteum, bones).
- Typical area of location: MM of the lower lip,
- cheek, under tongue,
- side surface of the Tongue.
- Clinics: inflammation infiltrate of congestive-red colour, then softening, more bright
- Color, abscess formation
- Subjective feeling : painful



Diagnosis of actinomycosis

- **Hystologically: a specific granuloma around mycelium**
- **Criteria of diagnosing:**
 - **1. Clinics**
 - **2. Microbiological investigation**
 - **3. Hystological research**
 - **4. Skin-allergic reaction with actinolisate.**

Treatment of actinomycosis

- **General treatment:**
- 1. Actinolisat or actinomisetetic polyvalence vaccine
- **Locally:**
- 1. Autopsy of focus, curretage of granulation, antiseptic solutions.
- 3. **Physic treatment:** electrophoresis of calcium, the iodine, lidasum (depends on the stage)
- **Prevention: avoiding traumas, removal of foreign body, keeping mouth cavity in order.**

Viral dermatoses

- 1. Simplex herpes
- 2. Zoster herpes
- 3. Contagious molluscum
- 4. Warts

Types of simplex viruses

- **The first type** affects the upper part of the body and persist in ganglion of the trigeminal nerve.
- **The second type** affects the lower part of the body and persist in sacral ganglion.

Ways of passing:

- 1. Airborne
- 2. Contactive(direct and indirect).
- 3. Transplacental
- 4. Transfusionall

Simplex herpes - skin disease caused by vulgar viruses

- Clinics:
- Erythema
- Edema
- Grouped vesicles
- Erosions are formed, They dry
- Up and crusts are formed.



Pathogenesis

- VV intrude into DNA cells and turn them into balloon. There appears ballooning degeneration in the cells of prickly layer.
- Blood and lymph vessels expand.



Laboratory diagnosing of simplex herpes

- 1. Serological method- detection of antibodies JgG
- JgM tells us about primary infection
- 2. Polymerase chain reaction (ПЦР) or DNA diagnosing

CLASSIFICATION OF SIMPLEX HERPES

- **1. Easy** (relapse 1-3 times a year)
- **2. The average degree of gravity** (4-6 times a year)
- **3. Severe** (more than 7 times a year)
- **4. Extremely severe** (more then 19 relapses times a year)
- **5. Constantly relapsing herpes**

Topical treatment of SIMPLEX herpes

- Aniline dyes: diamond green, methylene blue, Hentiavill, betadin solution
- Antiherpetic cream,
-
- 1. Frequent exacerbation(more than 4 times a year Particular circumstances (vacation, wedding, jubilee and other important events). Psycho-
- sexual disorders.
- 1. Synthetic nucleosides: aziclovir, Zovirax,

Indications for general SIMPLEX herpes therapy

- 1. Frequent exacerbation(more than 4 times a year
- 2. Particular circumstances (vacation, wedding, jubilee and other important events).
- 3. Psycho-sexual disorders.

General therapy **SIMPLEX** herpes

- **1. Synthetic nucleosides:** Aciclovir, Zovirax, Famvir, Valaciclovir.
- **2. Specific immunotherapy:** herpes vaccine – vitaherpavak
- **3. Non-specific:** interferon or inductors of interferons

– Herpes zoster

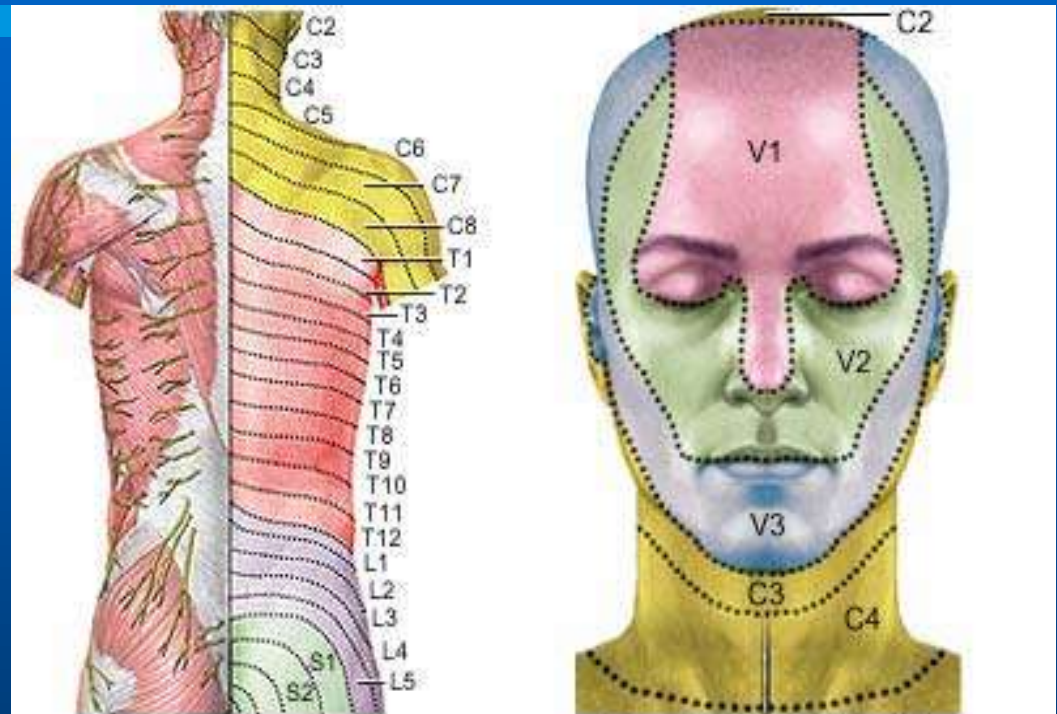
- The virus varicella zoster (VVZ)
- causes 2 different diseases:
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- 1. Chickenpox.
- 2. Herpes zoster

Clinics herpes zoster

- Pain in one side on one or two branches of trigeminal nerve or face nerve,
- Clinics:
- Erythema
- Edema
- Grouped vesicles
- May be one focus, may be more

Herpes zoster

- Typical location:
- Asymmetric
- Face
- MM
- Back
- Chest
- Extremities



Dermatomes are areas on the skin supplied by sensory fibers of the spinal nerves

Treatment for herpes zoster

- 1. **General therapy**
- 2. **Topical treatment**
- 3. Physiotherapy

General therapy

- 1. Synthetic nucleosides (aziclovir, valtrex, famvir, panavir)
- 2. Anesthetic medicines: phynlepsin according to the scheme
- 3. Antiflammatory remedies: salizilats, antibiotics

Topical treatment and physiotherapy

- **Local treatment:** aniline dyes, anti-virus creams, gel, spray.
- **Physiotherapy:**
- Ultraviolet irradiation
- Bernar toque (electricity)

Warts

- Warts are caused by human papilloma.
- Types of warts:
 - 1. Vulgar
 - 2. Flat.
 - 3. Plantar
 - 4. Pointed condylomas (warts)



Treatment for warts:

- 1. Cytotoxic medicines
- 2. Destructive method(cryodestruction, laserdestruction,
- 3. Immunological: interferon, inductors of interferon
- 4. Combined
- There are no specific anti-virus remedies to treat warts
-



Contagious molluscum

- Contagious molluscum caused by viruses.
- Clinic:
- papules,
- noninflammation,
- small size
- Meet of child more often



Contagious molluscum

- Location:
- Face
- Neck
- Eyelids
- Chest
- Hand



Treatment for contagious molluscum

- 1. Destructive method
- 2. Iodine



Thanks

