

IMPORTANT!!!

DO HOMEWORK ONLY IN WORD FILE AND ATTACH IT TO MY EMAIL svetlanataneva@abv.bg DO NOT SEND HOMEWORK BY WETRANSFER, GOOGLE DOCUMENTS, ETC. THE NAME OF THE FILE SHOULD CONTAIN YOUR NAME, FACULTY (MF/FDM), GROUP, WEEK NUMBER (8). HOMEWORK CANNOT BE CHECKED AS A PHOTO! FORWARD TO YOUR COLLEAGUES.

TASK: SUMMARIZE THE SECOND PART OF THE PRESENTATION (250-300 WORDS). PAY ATTENTION TO TERMINOLOGY.

❖ **TUBERCULOSIS** – A CHRONIC ONGOING, SPECIFIC INFLAMMATORY DISEASE THAT AFFECTS PREDOMINANTLY LUNGS BUT MAY ALSO AFFECT CENTRAL NERVOUS SYSTEM, LYMPHATIC VESSELS, DIGESTIVE SYSTEM, BONES, JOINTS AND SKIN.

❖ **ETIOLOGY:** THE SPECIFIC CAUSE OF TUBERCULOSIS IS MYCOBACTERIUM TUBERCULOSIS, ALSO CALLED **KOCH BACILLUS**. THERE ARE FIVE BASIC TYPES (HUMAN, BOVINE, AVIAN, MURINE AND BLOOD), OF WHICH THE FIRST TWO ARE OF EPIDEMIOLOGICAL SIGNIFICANCE FOR HUMANS.

- ❖ **THE SOURCE OF THE INFECTION IS TUBERCULOSIS PATIENT. THE MOST AT RISK OF INFECTION AND DISEASE ARE PEOPLE HAVE BEEN IN CONTACT, LIVING AND WORKING IN THE SAME ROOM WITH THE SICK. NOT EVERY PERSON BEEN IN CONTACT GETS ILL. MOST OFTEN PEOPLE WITH SUPPRESSED IMMUNE SYSTEMS BECOME ILL.**
- ❖ **PREDISPOSING FACTORS ARE: STRESS, FATIGUE, ALCOHOL ABUSE, SMOKING.**
- ❖ **AT-RISK PATIENTS ARE PERSONS WITH DIABETES, HIV POSITIVE, CONTINUOUSLY TREATED WITH CORTISONE PREPARATIONS, CHEMOTHERAPY AND RADIATION THERAPY, ETC.**

CLINICAL PICTURE :

- ❖ **COUGH - LASTS FOR WEEKS, INTENSIFIES AND BECOMES MOIST**
- ❖ **EXPECTORATION - SPUTUM IS EXCRETED MAINLY IN THE MORNING, SOMETIMES MIXED WITH BLOOD**
- ❖ **FEVER - SWEATING PROFUSELY, ESPECIALLY AT NIGHT**
- ❖ **CHEST PAIN**
- ❖ **LOSS OF APPETITE - LEADS TO WEIGHT LOSS**
- ❖ **SHORTNESS OF BREATH**
- ❖ **FATIGUE AND DEBILITATION**
- ❖ **IN THE ELDERLY, IT OFTEN RESEMBLES PNEUMONIA**

❖ **CLINICAL MANIFESTATIONS IN THE ORAL CAVITY: ORAL LESIONS ARE RARE AND USUALLY SECONDARY TO THE PULMONARY LOCALIZATION.**

❖ **CLINICALLY: AN ULCER, SLIGHTLY PAINFUL, IRREGULARLY SHAPED, WITH THIN UNDERMINED EDGES AND A GRANULAR SURFACE, COVERED WITH GRAY-YELLOW EXUDATE IS OBSERVED.**

❖ **MOST COMMONLY FOUND ON THE BACK OF THE TONGUE. IT IS ACCOMPANIED BY**

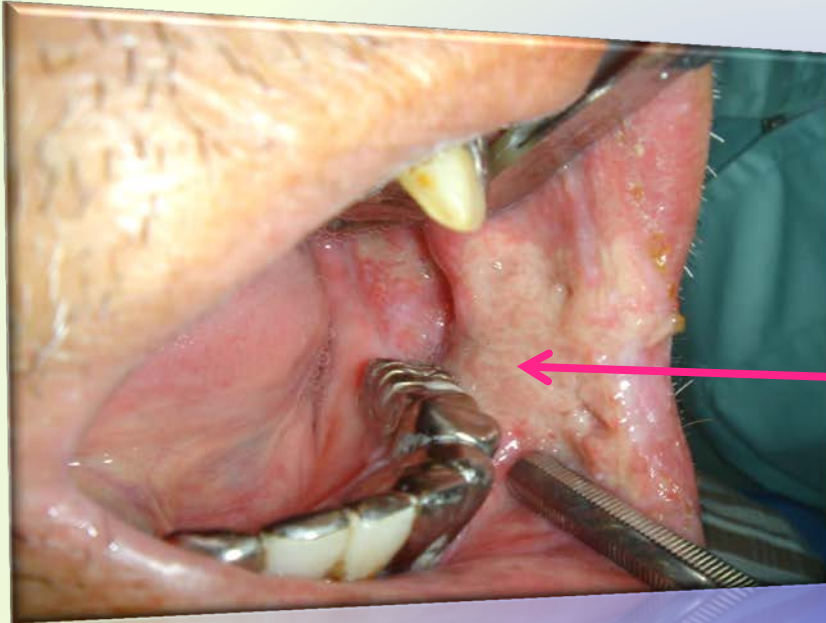
- ❖ **THE DIAGNOSIS IS ESTABLISHED AFTER A BIOPSY SHOWING GRANULOMAS WITH MULTINUCLEATED GIANT CELLS AND THE PRESENCE OF *MYCOBACTERIUM TUBERCULOSIS*.**
- ❖ ***DD: CARCINOMA, SYPHILIS, EOSINOPHILIC GRANULOMA, WEGNER'S GRANULOMATOSIS, SUTTON'S APHTHA***
- ❖ ***TREATMENT: ANTI-TUBERCULOSIS CHEMOTHERAPEUTICS AND ANTIBIOTICS***



**TUBERCULOSIS –
AFFECTED
LYMPH NODE
WITH
FISTULA
FORMATION.**

❖ **A PARTICULAR FORM OF TUBERCULOSIS AFFECTING CERVICAL LYMPH NODES IS KNOWN AS SCROFULA. IT IS CLINICALLY CHARACTERIZED BY SWELLING OF SEVERAL LYMPH NODES, FOLLOWED FREQUENTLY BY THE FORMATION OF MULTIPLE FISTULAS ON ADJACENT SKIN.**

DD: LYMPHOMA, SIALOADENITIS, ACTINOMYCOSIS



**TUBERCULOUS ULCERS ON
THE BUCCAL MUCOSA AND
LIP**



- ❖ ***STREPTOCOCCAL GINGIVITIS* - ACUTE INFECTION AFFECTING THE PHARYNX, GINGIVA AND LIPS, WHICH IS NOT ASSOCIATED WITH PLAQUE. IT IS CAUSED BY STRAINS OF STREPTOCOCCUS THAT ARE PRESENT IN THE ORAL MICROFLORA.**
- ❖ **IT OCCURS MORE FREQUENTLY IN IMMUNOCOMPROMISED INDIVIDUALS. PUSTULES ARE OBSERVED RAPIDLY ERODING AND ULCERATING.**
- ❖ **ADEQUATE TREATMENT WITH ANTIBIOTICS OF THE PENICILLIN GROUP.**
- ❖ **EVIDENCED BY MICROBIOLOGICAL EXAMINATION (CULTURE PROCEDURES) TO ISOLATE AND IDENTIFY THE RELEVANT STRAIN OF STREPTOCOCCUS.**

- ❖ ONE OF THE MOST COMMON STREPTOCOCCAL INFECTIONS IS **SCARLET FEVER**. IT IS CAUSED BY B - HEMOLYTIC STREPTOCOCCUS, GROUP A.
- ❖ CHILDREN ARE MOST PREDISPOSED. CONTAMINATION OCCURS MAINLY BY DROPLET INFECTION.
- ❖ CLINICAL PICTURE: FEVER, VOMITING AND SORE THROAT.
- ❖ PATHOLOGICAL MANIFESTATIONS IN THE ORAL CAVITY.
- ❖ ANGINA IS A COMPULSORY SYMPTOM; THROAT BURNING, SWALLOWING PAIN, SEVERE DIFFUSE REDNESS.
- ❖ WHITISH COATING OVER THE TONGUE WHICH DISAPPEARS COMPLETELY FOR **1-2 DAYS**.

- ❖ **WHITISH COATING OVER THE TONGUE WHICH DISAPPEARS COMPLETELY FOR 1-2 DAYS. IN 4-5 DAYS “RASPBERRY TONGUE” CAN BE SEEN WITH BRIGHT RED COLOUR AND ROUGH SURFACE DUE TO THE PAPILLAE PROTRUSION.**
- ❖ **EXANTHEMA IS TYPICAL FOR SCARLET FEVER.**
- ❖ **IT CONSISTS OF MANY TINY PINK OR RED ROUND SPOTS. THE SKIN IS DRY.**

DIFFUSE REDNESS OF THE CHEEKS CAN BE OBSERVED, WHICH CONTRASTS WITH THE WHITENING AROUND THE LIPS. ONCE THE RASH HAS DISAPPEARED, SKIN FLAKING FOLLOWED.





SCARLET FEVER - ANGINA



**SCARLET FEVER -
COATED TONGUE
WITH A WHITISH
COATING**



**SCARLET FEVER -
RASPBERRY
TONGUE**

❖ 2.2. VIRAL ORIGIN (*COXSACKIE VIRUS*)- CAUSING DISEASE KNOWN AS (HAND-FOOT-MOUTH); CHARACTERIZED BY EXANTHEMA ON HANDS, FEET AND MOUTH.

❖ *ORAL MANIFESTATIONS*: MANY SMALL VESICLES CAN BE OBSERVED WHICH AFTER RUPTURE, ULCERATE. THEY ARE COVERED WITH FIBRIN COATING, LOCATED ON THE TONGUE AND BUCCAL MUCOSA. SOMETIMES *COXSACKIE VIRUS* OCCURS WITH A HIGH TEMPERATURE. IT IS USUALLY OBSERVED IN CHILDREN AND CAUSED BY THE COXSACKIE VIRUS - A 6, A 10 И A16.

HEALING:

- **ORAL LESIONS - 5 -10 DAYS; SKIN LESIONS - 1-2 WEEKS; SYMPTOMATIC TREATMENT.**





❖ ***HERPES SIMPLEX VIRUS 1/2*** (PRIMARY OR RECURRENT) - MOST COMMONLY CAUSES GINGIVOSTOMATITIS, INCLUDING PAINFUL GINGIVITIS, ULCERATIONS, REDNESS AND SWELLING OF ORAL MUCOSA, LYMPHADENITIS, FEVER AND GENERAL MALAISE.

❖ **PRESENCE OF FEW OR MANY VESICLES THAT RUPTURE, FUSE, AND LEAD TO FIBRIN-COATED ULCERS, OFTEN IRREGULARLY SHAPED.**

- ❖ ***HERPES SIMPLEX IS A LOW-INFECTIOUS DNA VIRUS THAT PENETRATES THE NERVE AFTER ENTERING THE EPITHELIUM OF THE ORAL CAVITY AND REACHES THE TRIGEMINAL GANGLION THROUGH THE ENDOPLASMIC RETICULUM, WHERE IT CAN REMAIN DORMANT (LATENT) FOR MANY YEARS.***
- ❖ ***HERPES SIMPLEX VIRUS CAN ALSO BE ISOLATED FROM GINGIVA (AMIT ET AL.).***
- ❖ ***SOMETIMES THIS VIRUS CAN CAUSE RECURRENT ERYTHEMA MULTIFORME.***
- ❖ ***THE INFECTION OCCURS AT AN EARLY AGE. THE BABY IS INFECTED BY A PARENT WITH RECURRENT HERPES LABIALIS AND IS OFTEN MISDIAGNOSED AS A CONDITION FOR “TOOTH ERUPTION”.***

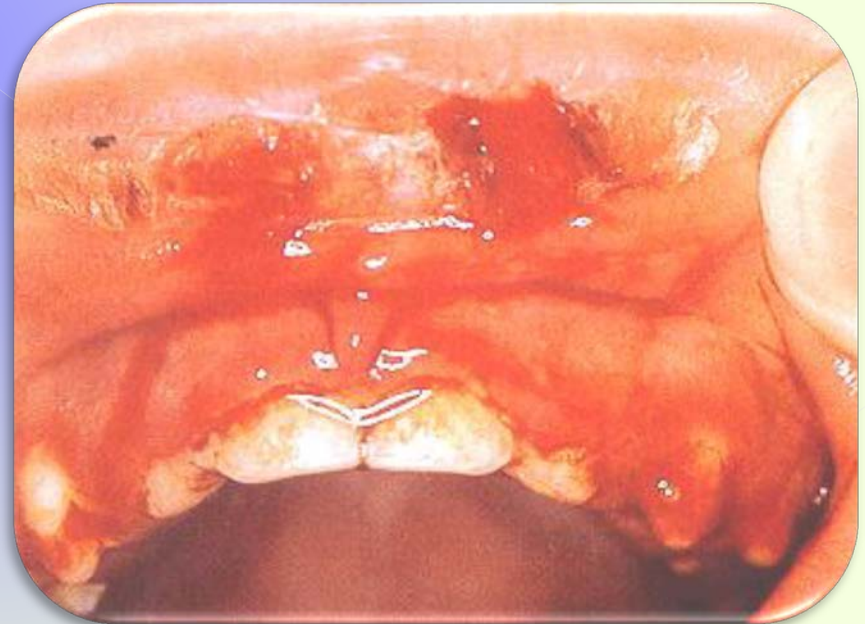
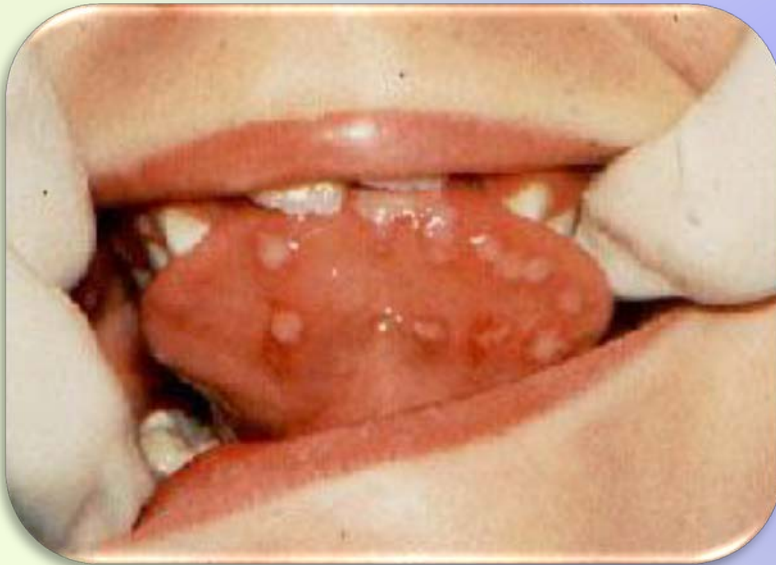
❖ PRIMARY HERPES INFECTION MAY HAVE ASYMPTOMATIC COURSE IN INFANCY, BUT IT MAY MANIFEST AS SEVERE GINGIVOSTOMATITIS, THAT IS OFTEN OBSERVED EVEN BEFORE PUBERTY.

❖ PAINFUL INFLAMMATION OF THE GINGIVA, REDNESS AND SWELLING OF THE ORAL MUCOSA ARE FOUND AND HYPEREMIA CAN AFFECT THE LIPS AND SKIN AROUND THEM. THE INCUBATION PERIOD LASTS FOR 1 WEEK.

❖ OFTEN HEALING IS SPONTANEOUS, WITH NO SCARS FOR 10-14 DAYS. DURING THIS PERIOD, PAIN CAN LEAD TO DIFFICULTY IN EATING. PATIENTS ARE CONTAGIOUS.

❖ RECURRENT HERPES SIMPLEX REMAINS LATENT IN THE GANGLION CELL, PROBABLY BY INTEGRATING ITS DNA WITH THAT OF THE CHROMOSOMAL DNA.

❖ A WIDE VARIETY OF FACTORS TRIGGER REACTIVATION OF LATENT VIRUS - TRAUMA, EXPOSURE TO ULTRAVIOLET LIGHT, TEMPERATURE, ETC.(SCULLY ET AL)





- ❖ **HIV-POSITIVE PATIENTS ARE AT INCREASED RISK OF VIRAL INFECTION (HOLMSTRUP & WESTERGAARD).**
- ❖ **IN IMMUNOCOMPROMISED PATIENTS, RELAPSES FROM HERPES INFECTION ASSOCIATED WITH HERPETIC GINGIVOSTOMATITIS ARE SEVERE AND EVEN LIFE-THREATENING.**

❖ THE TREATMENT OF HERPETIC GINGIVOSTOMATITIS INVOLVES REMOVAL OF THE PLAQUE TO LIMIT BACTERIAL SUPERINFECTION ON THE ULCERATION, WHICH SLOWS DOWN HEALING PROCESS.

❖ IN SEVERE CASES, INCLUDING IN PATIENTS WITH IMMUNODEFICIENCY, SYSTEMIC USE OF ANTIVIRAL DRUGS LIKE *ACICLOVIR, VALACICLOVIR OR FAMACICLOVIR* IS RECOMMENDED (O'BRIEN&CAMPOLI-RICHARDS; MINDEL ET AL; ARDUINO &PORTER).

❖ **VARICELLA** - USUALLY CHILDREN GET SICK. SMALL YELLOWISH VESICLES ARE TYPICAL, RAPIDLY DESTROYED. THE CAUSATIVE AGENT IS **VARICELLA - ZOSTER VIRUS**. THE DISEASE IS ACCOMPANIED BY MALAISE AND SKIN RASH. CLINICAL FEATURES ARE SUBJECTIVE AND OBJECTIVE.

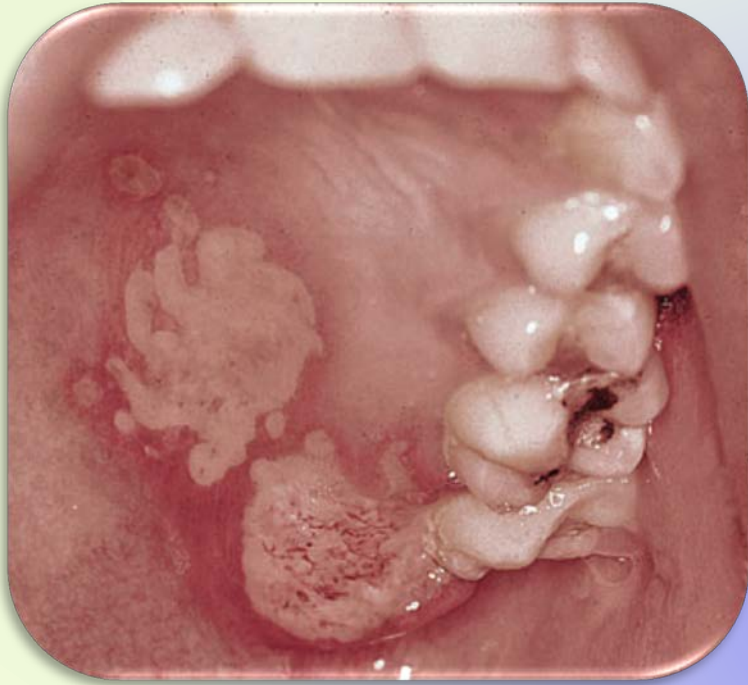
❖ **ORAL MANIFESTATIONS:** SIMULTANEOUSLY WITH THE APPEARANCE OF EXANTHEMA ON THE SKIN OF THE ORAL MUCOSA THERE IS ENANTHEM. MOST PAPULES ARE LOCATED ON THE TONGUE, GINGIVA AND BUCCAL MUCOSA. A SEPARATE PAPULE IS INITIALLY IN THE FORM OF A CIRCULAR RED SPOT. FOR SEVERAL HOURS, IT IS FILLED WITH A CLEAR EXUDATE AND THUS FORMS A TYPICAL VESICLE OF VARICELLA. THEN IT TURNS INTO A ROUND ULCER, SIMILAR TO APHTHA IN HERPETIC STOMATITIS; THE ULCERS HEAL FOR 2 –

❖ **RASH UNITS DO NOT APPEAR SIMULTANEOUSLY BUT GRADUALLY, WHICH IS ALSO TYPICAL FOR SKIN CHANGES.**

❖ **TREATMENT: SELF-HEALING (7-10 DAYS) AND SYMPTOMATICALLY WITH ANTIPYRETICS AND**



- ❖ **HERPES ZOSTER VIRUS** - AFFECTS THE TRIGEMINAL NERVE. UNILATERAL PAINFUL ULCERS ARE PRECEDED BY VESICLE APPEARANCE. LESIONS MERGE AND FORM ULCERS WITH IRREGULAR BORDERS. VARICELLA ZOSTER VIRUS IS OFTEN COMBINED WITH SKIN LESIONS AFFECTING THE SECOND OR THIRD BRANCH OF THE TRIGEMINAL NERVE.
- ❖ IN IMMUNOCOMPROMISED PATIENTS, INCLUDING HIV (+) INDIVIDUALS, INFECTION MAY RESULT IN SEVERE TISSUE INVOLVEMENT WITH TOOTH EXFOLIATION AND ALVEOLAR BONE NECROSIS.
- ❖ THE TREATMENT CONSISTS OF A SOFT OR LIQUID DIET, ATRAUMATIC PLAQUE REMOVAL, RINSES WITH DILUTE CHLORHEXIDINE SOLUTION, SUPPLEMENTED WITH ANTIVIRAL DRUG THERAPY.



- **HUMAN PAPILLOMA ВІРУС** (SQUAMOUS CELL PAPILLOMA, CONDYLOMA AKUMINATUM, VERRUCCA VULGARIS AND FOCAL EPITHELIAL HYPERPLASIA) - ASYMPTOMATIC FLOWING EXOPHYTIC PAPILLOMATOUS, VERUCOUS OR FLAT LESION CAUSED BY HUMAN PAPILLOMA VIRUS (HPV). PROVED BY HISTOLOGY OF BIOPSIED LESION

