Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

Inflammatory bowel diseases

Coeliacia

Ulcerative collitis

Crohn's disease

Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

Inflammatory bowel diseases

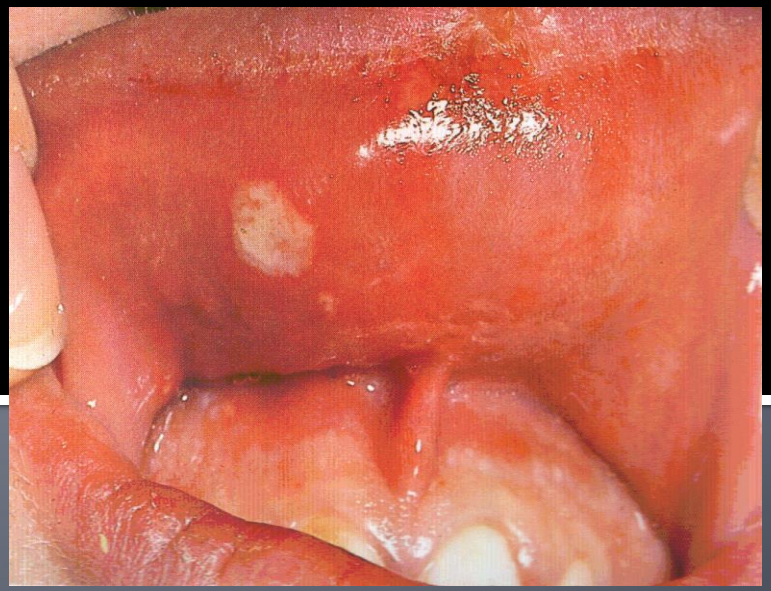
Coeliacia

Ulcerative collitis

Crohn's disease

Recurrent Aphthous Stomatitis (RAS)

RAS is a disorder characterized by recurring ulcers confined
to the oral mucosa in patients with no other signs of disease.



Recurrent Aphthous Stomatitis (RAS)

Recurrent oral ulcers (Mikulicz)

RAS

Herpetiform ulcers (Cooke)

Periadentitis necrotica recurrens mucose oris (Sutton)

Recurrent Aphthous Stomatitis (RAS)

Minor ulcers,

- 80% of RAS cases,
- less than 1 cm in diameter
- heal without scars.

Major ulcers

- over 1 cm in diameter
- heal often with scar.

Herpetiform ulcers

- dozens of small ulcers throughout the oral mucosa

"severe" minor ulcers.

- continual episodes of many multiple lesions,
- each lesion is under 1 cm in

Recurrent Aphthous Stomatitis (RAS)

Etiology and Pathogenesis

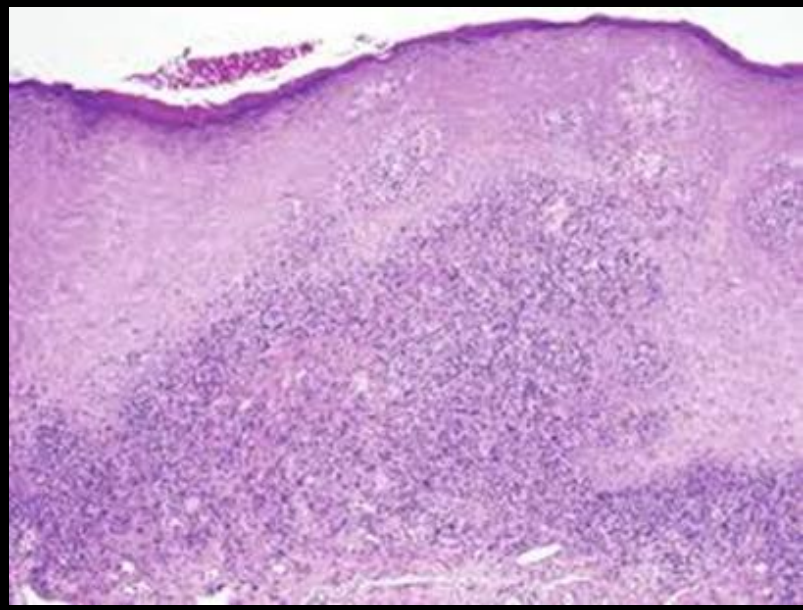
The major factors linked to RAS

- genetic factors,
- hematologic deficiencies,
- immunologic abnormalities,
- local factors,
- trauma and smoking.
- local immune dysfunction ,
  - ✓ lymphocytotoxicity,
  - ✓ antibody-dependent cellmediated cytotoxicity,
  - ✓ defects in lymphocyte cell subpopulations, alteration in the CD4 / CD8 ratio.

Immune mechanisms that appear to play role with genetic predisposition to oral ulceration include:

Helper Th1 cells are, predominant in the early RAS lesion
+ NK cells.

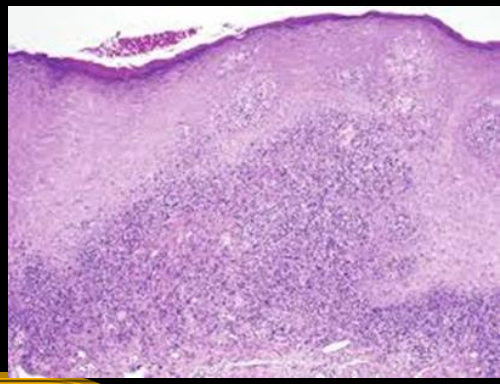
Cytotoxic Th8 cells then appear in the lesion and there is evidence for an ADCC reaction.



ADVANCED LESION

Mononuclear cells, T cells, neutrophils and NK cells .

Aphtha

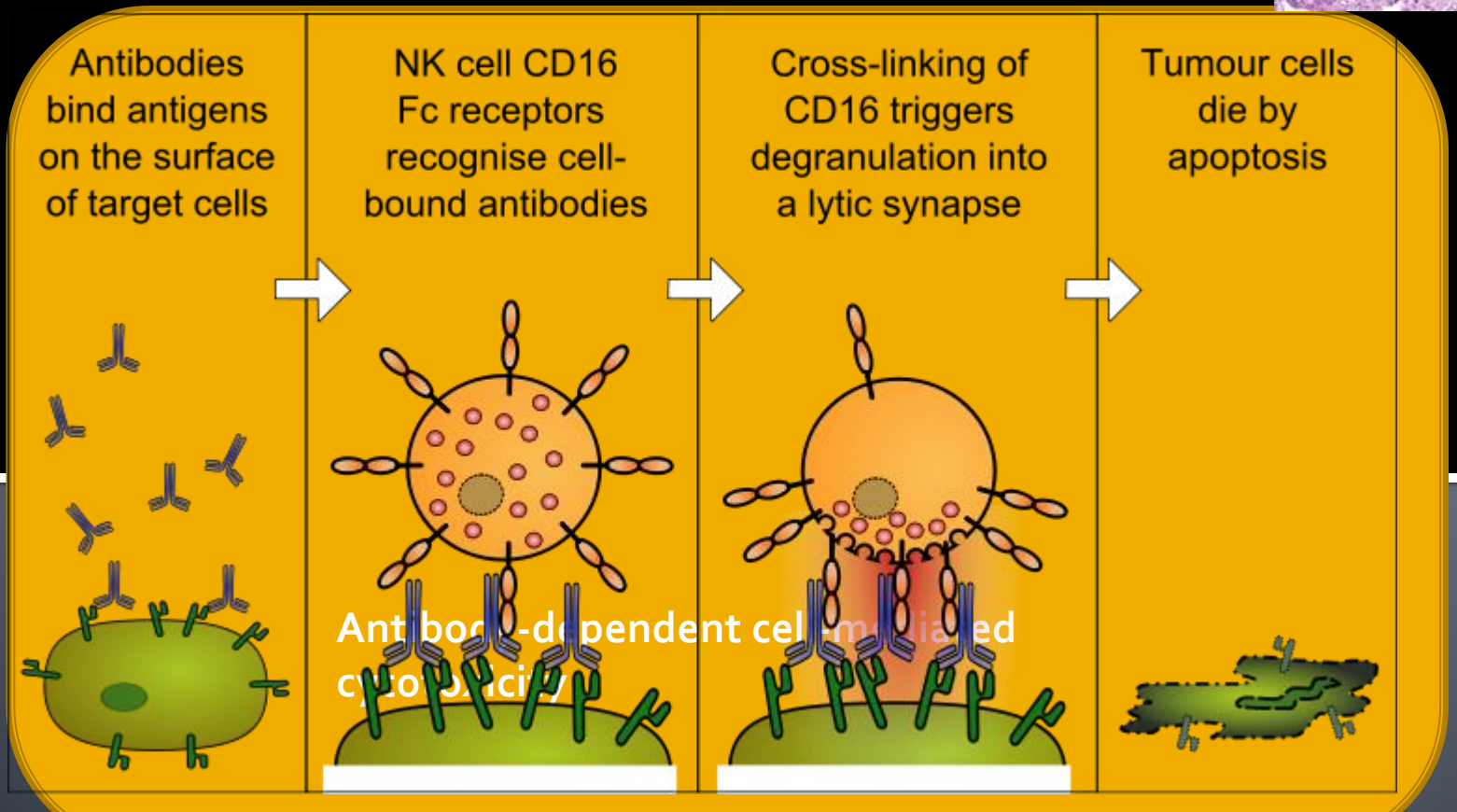


Immune mechanism

.

Antibody-dependent cell-mediated cytotoxicity

T- cells - PMN NK cells.



Recurrent Aphthous Stomatitis (RAS)

Etiology and Pathogenesis

It was once assumed that RAS was a form of recurrent HS V infection,
have been confirmed that RAS is not caused by HSV
there are no data linking RAS to a specific microorganism.

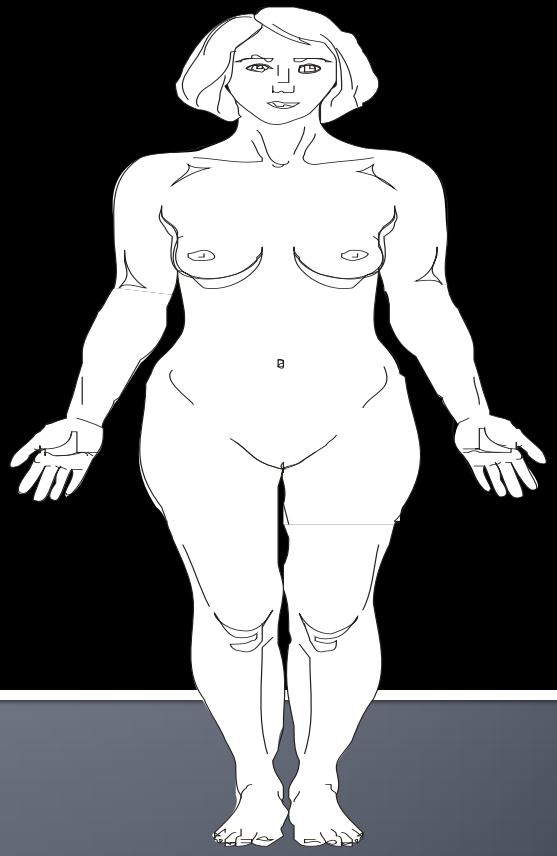
- streptococci,
- Helicobacter pylori,
- VZV, C MV,
- Human herpes virus (HHV)-6 and HH V-7,.

Cross-reacting antigens between the oral mucosa and microorganisms may be involved.

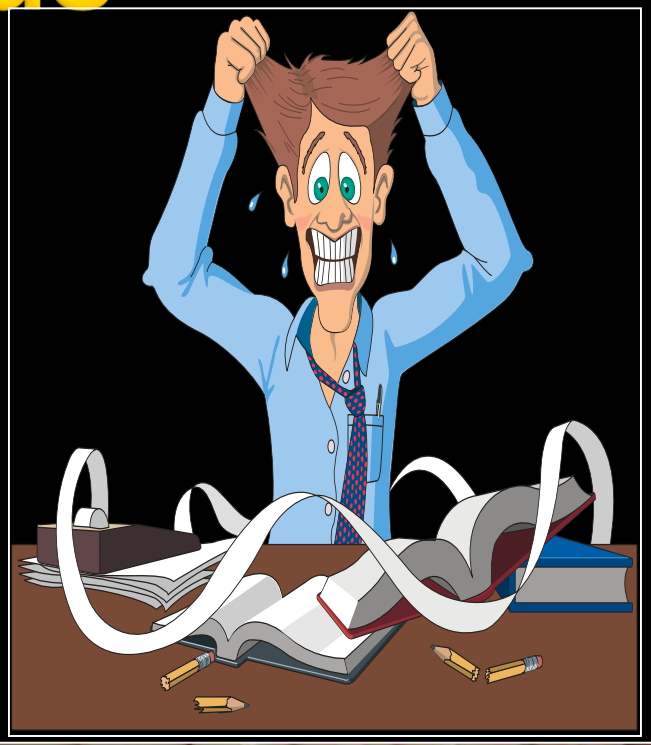
Etiology and Pathogenesis

Patients with RAS
have no clinically detectable
systemic symptoms or signs:

if ulceration affects the genitals
or other mucosae, the
diagnosis can not be of RAS
alone.



Recurrent Aphthous Stomatitis (RAS)



Other factors with RAS

- anxiety,
- psychological stress,
- localized trauma to the mucosa,
- menstruation,
- upper respiratory
- infections,
- food allergy.

PREDISPOSING FACTORS

Trauma:

biting the mucosa

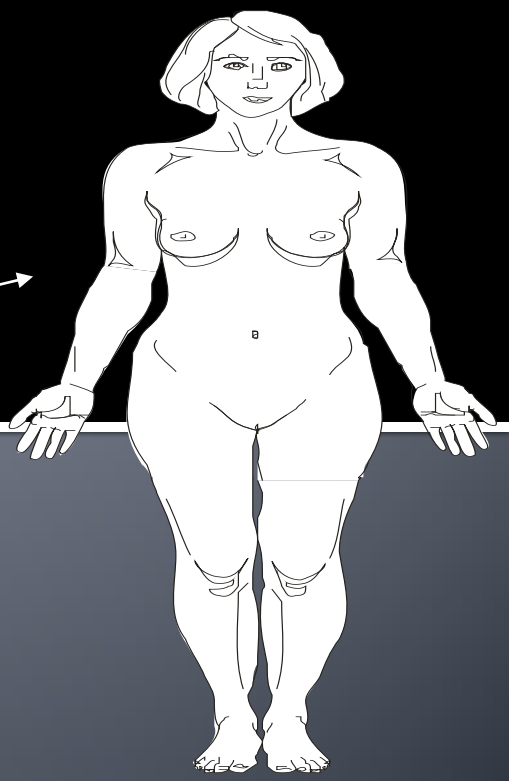
trauma from dental appliances

Endocrine factors :

may be relevant in some women.

RAS are clearly related to the fall of progesterone level in the lutheal phase of menstruation cycle,

may regress temporarily in pregnancy.



Recurrent Aphthous Stomatitis (RAS)

Hematologic deficiency,

- serum iron,
- folate,
- vitamin B12,
- 75% of patients with RAS a specific hematologic deficiency was detected

Some cases of nutritional deficiency,
celiac disease,
malabsorption syndrome.

PREDISPOSING FACTORS

Allergy

Allergies to food
there is a high incidence of
atopy.

PREDISPOSING FACTORS

Sodium lauryl sulphate (SLS):
a detergent in some toothpastes and other oral healthcare product may produce oral ulceration.
.

PREDISPOSING FACTORS

.

Drugs:

mainly NSAID-s may produce RAS-like lesions.

Recurrent Aphthous Stomatitis (RAS)

- there is a negative correlation between RAS and a history of smoking,
-
- RAS is exacerbated when patients stop smoking.
- the incidence of RAS is significantly lower among smokers

Recurrent Aphthous Stomatitis (RAS)

Oral Findings

The lesions are confined to the oral mucosa
begin with prodromal burning
area of erythema develops.

Within hours, a small white papule forms,
ulcerates,
gradually enlarges

The lesions are round, symmetric, and shallow
.
.

Diagnosis of RAS

based on

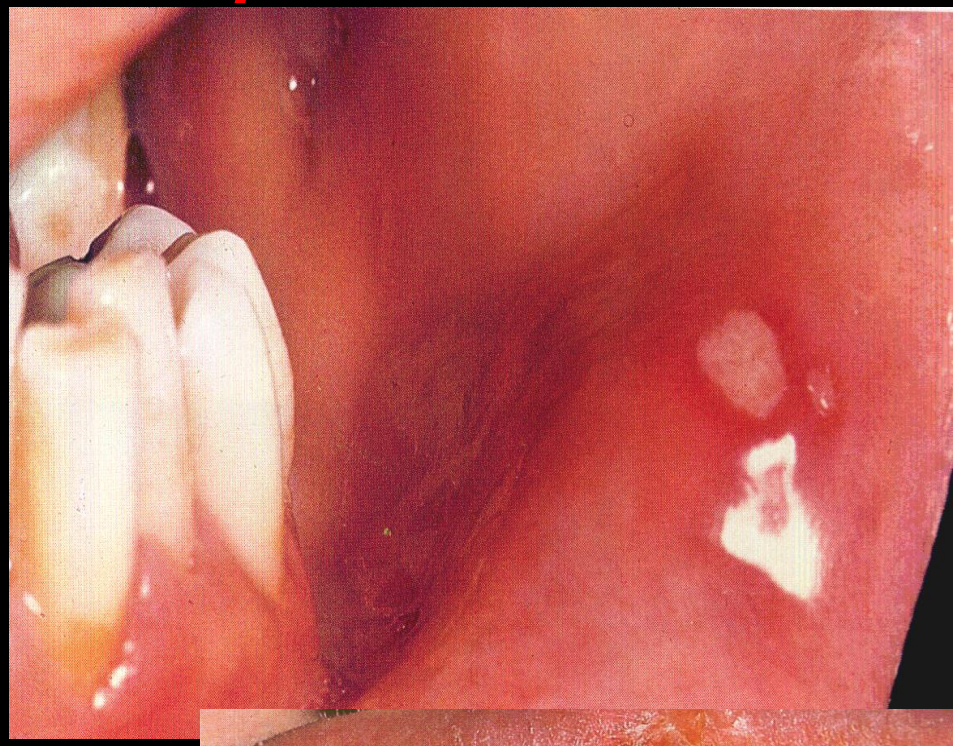
- the history
- clinical features,
- no specific tests are available.

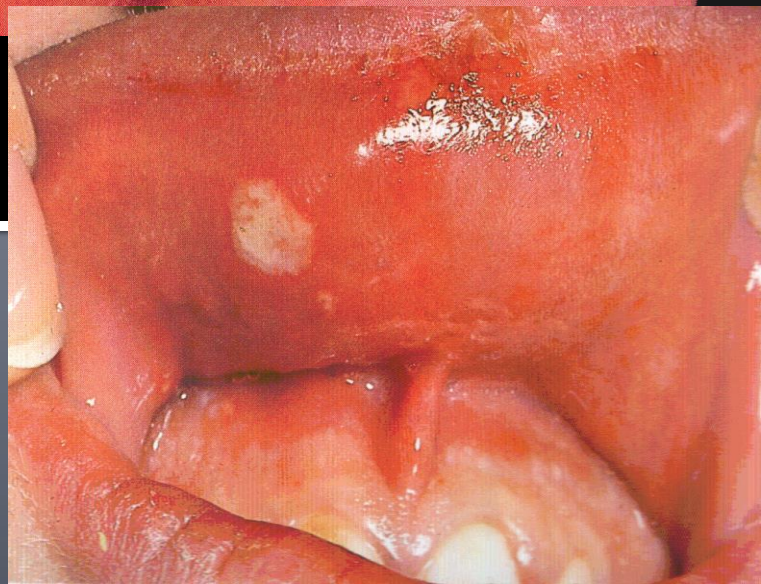
Biopsy is rarely indicated

but to exclude the systemic disorders is often useful to undertake

Minor aphthous ulcers,

- It was described by Mikulicz and Kummer (1898)
- On the non-keratinized, mobile oral mucosa,
  1-5 ulcers
- Develops in younghood
- Autoantibody can be shown out against oral epithelial cells
- 70-75% of the total RAS cases
- Heals in 8-10 days, without scar





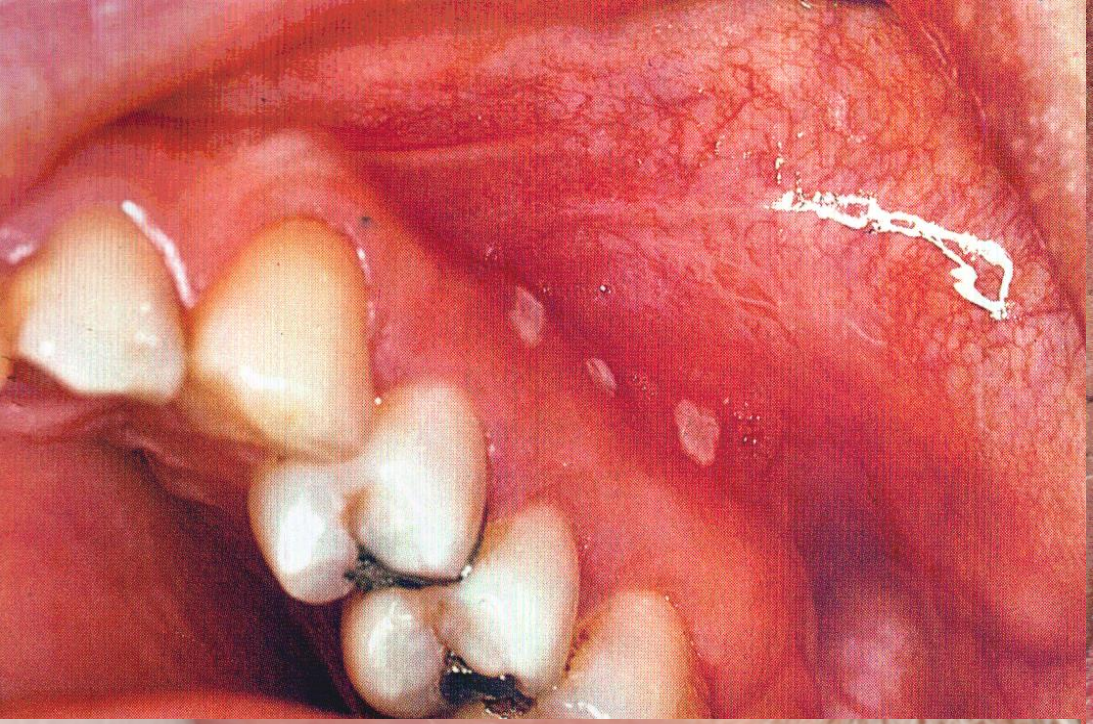
RAS are characterised

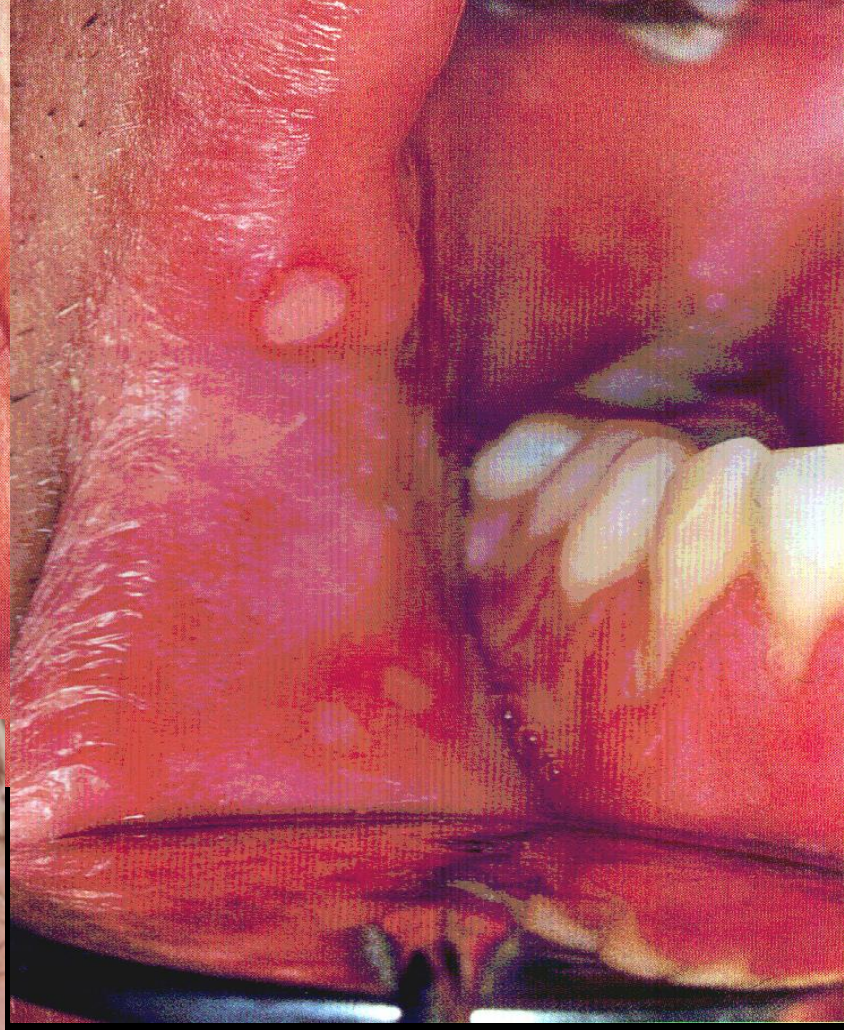
- With multiple recurrent, small, round or ovoid ulcers,
- circumscribed margins,
- erythematous halos
- yellow or grey floors.

- On non-keratinized, mobile mucosa, !!!!!!!!
- rare on gingiva and palate.
- First manifestation in childhood or adolescences.

MIKULITZ APHTHA

Minor aphthous ulcers,





- Minor aphthous ulcer (Mikulitz)

MIKULITZ APHTHA A NYELVEN

MIKULITZ APHTHA A BUCCAN ÉS AZ AJKON

Aphthous Oral Ulcers

Major aphthous ulcers, Sutton's

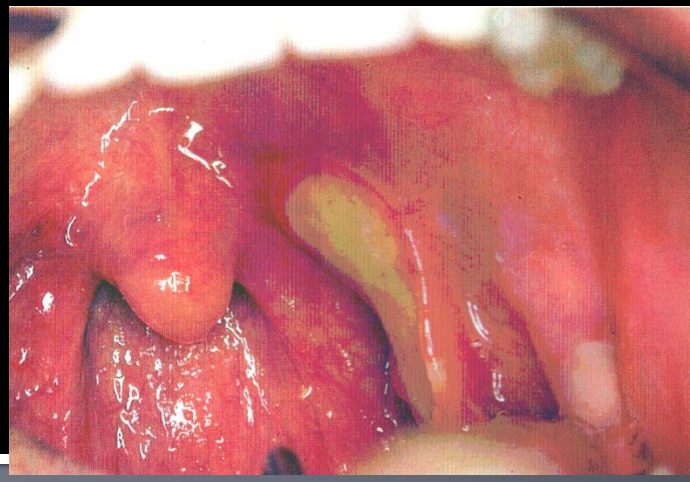
- It was described by Sutton 1911
- On the non-keratinized, mobile mucosa
- Develop rather in elder age
- Auto antibodies against the oral epithelial cells can shown out
- 5% of the total RAS cases
- Spontaneous heal in 40 days with scar

Recurrent Aphthous Stomatitis (RAS)

Major aphthous ulcers, Sutton's

- deep lesions that are larger than 1 cm in diameter
- last for weeks to months.
- extremely painful and disabling,
- interfering with speech and eating,
- may require hospitalization
- treatment with high doses of corticosteroids.

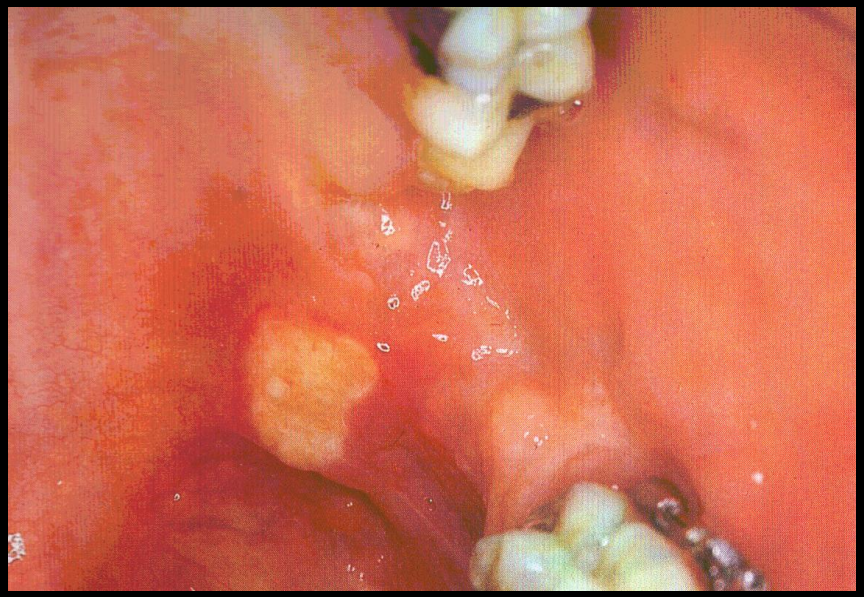
leave scars that may result in decreased mobility of the uvula and tongue.

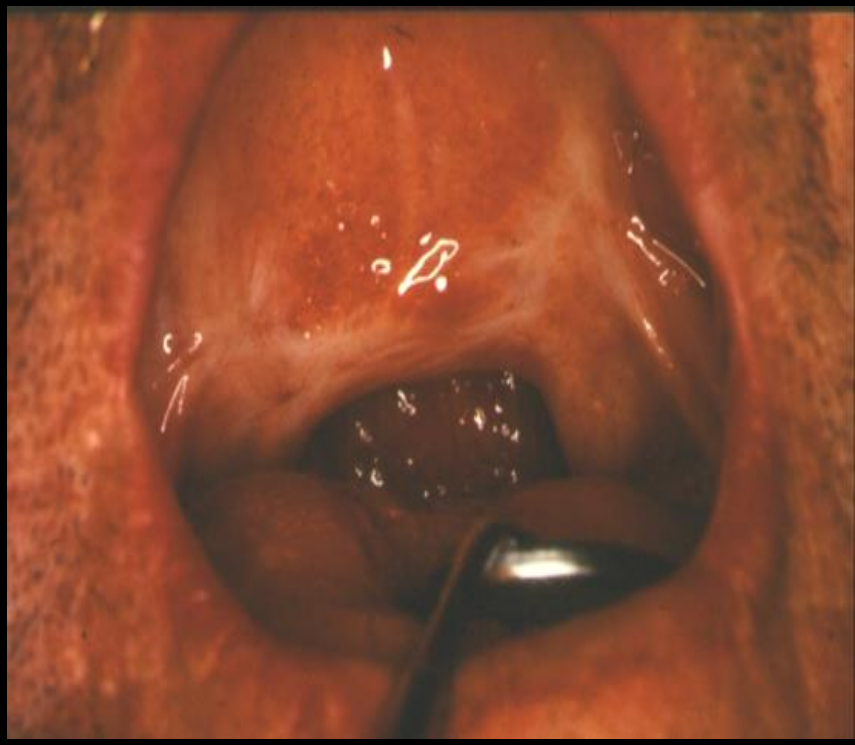


The lesions may last for months

Can be misdiagnosed carcinoma, pemphigoid.

Major aphthous ulcer (Sutton)
Periadentitis necrotica recurrens mucosae oris





- Chronically recurred and healed scars in Sutton aphthae

SUTTON APHTHA – periadenitis mucosae necrotica recurrens

SUTTON APHTHA on the lip

– periadenitis mucosae necrotica recurrens

SUTTON APHTHA A LÁGY SZÁJPADON –
periadenitis mucosae necrotica recurrens

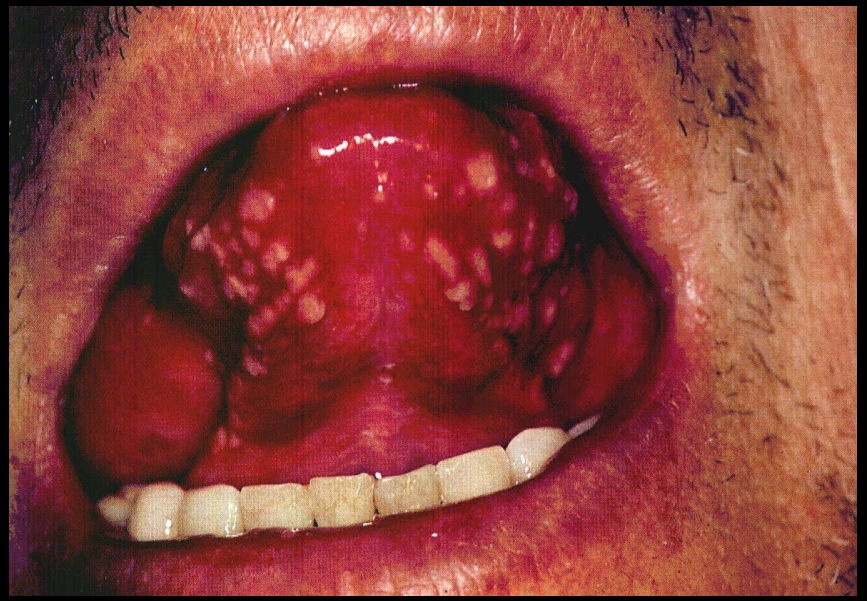

02 12 9

SUTTON APHTHA periadenitis mucosae necrotica recurrens

- Chronically recurred and healed scars in Sutton aphthae

Herpetiform Ulcers (Cooke)

- It was described by Cooke 1960
- Develops in younghood
- There is no autoantibody against the oral epithelium
- Could be 100 erosions in one time
- 15-20% of the total cases of RAS
- Spontaneous heal in 8-10 days without scar



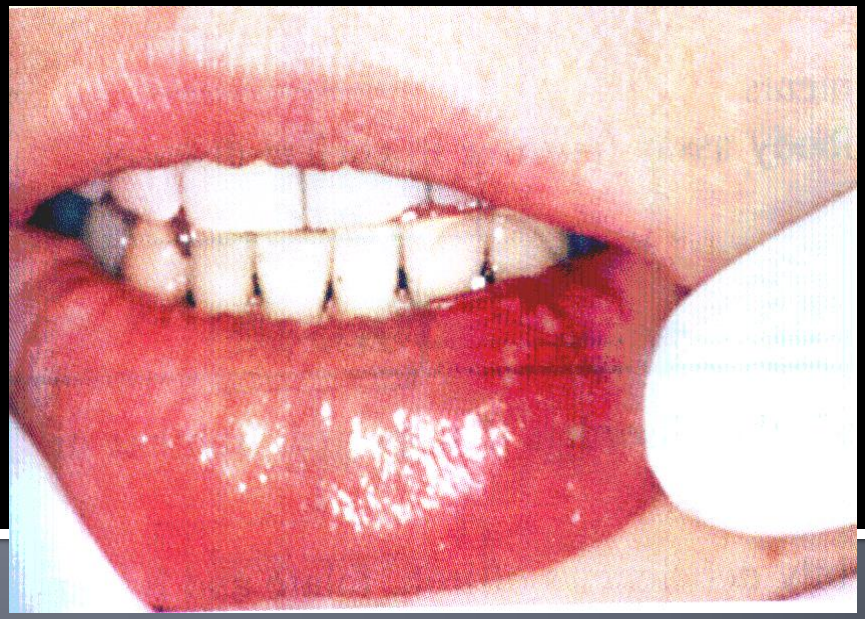
HERPETIFORM ULCERATIO

COOKE APHTHA

HERPETIFORM ULCERATIO

Herpetiform ulcers (Cooke)

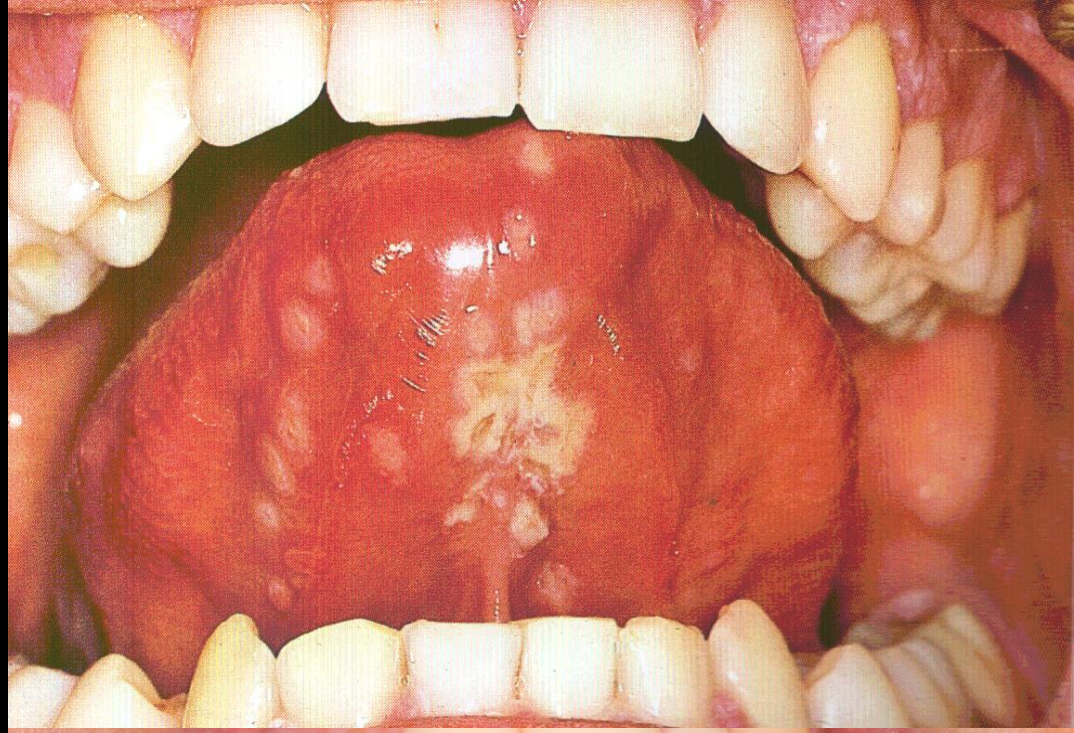
- Are found mainly in young age rather in females
- minute pinhead-size ulcers
-
- large, round ragged ulcers
- Involve any oral sites
- Heal 10 days or longer



Herpetiform ulcer

- Often extremely painful
- Heal without scar
- Recur frequently that ulceration may be virtually continuous

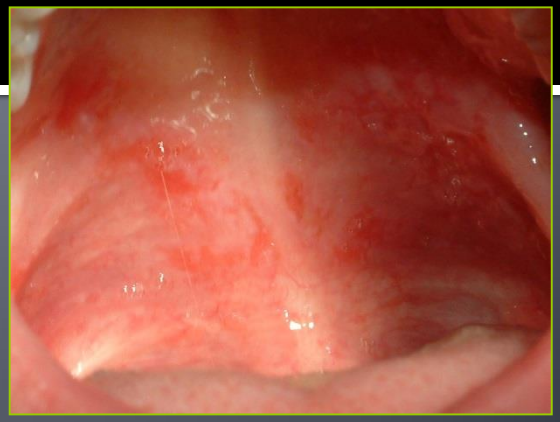
- Herpetiform ulcer



Herpetiform ulceratio

Differential Diagnosis

viral stomatitis
chronic multiple lesions
pemphigus
pemphigoid,
connective tissue disease,
drug reactions,
dermatologic disorders.
HIV+ connective tissue diseases
lupus,
inflammatory bowel disease,



Recurrent Aphthous Stomatitis (RAS)

Laboratory Findings

Laboratory investigation should be ordered when patients do not follow the usual pattern of RAS,

when episodes of RAS become more severe,
begin past the age of 25,

Recurrent Aphthous Stomatitis (RAS)

Patients with

- severe recurrent minor aphthae
- major aphthous connective tissue diseases
- hematologic abnormalities,

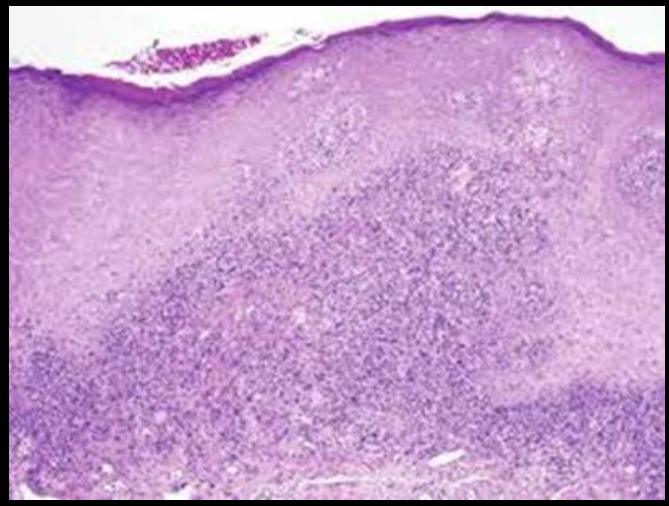
should be referred to an internist to rule out malabsorption syndromes

HIV-infected patients, particularly those with CD_4 counts below 100/mm3, may develop major aphthous ulcers,

severe oral ulcers are sign of AIDS.

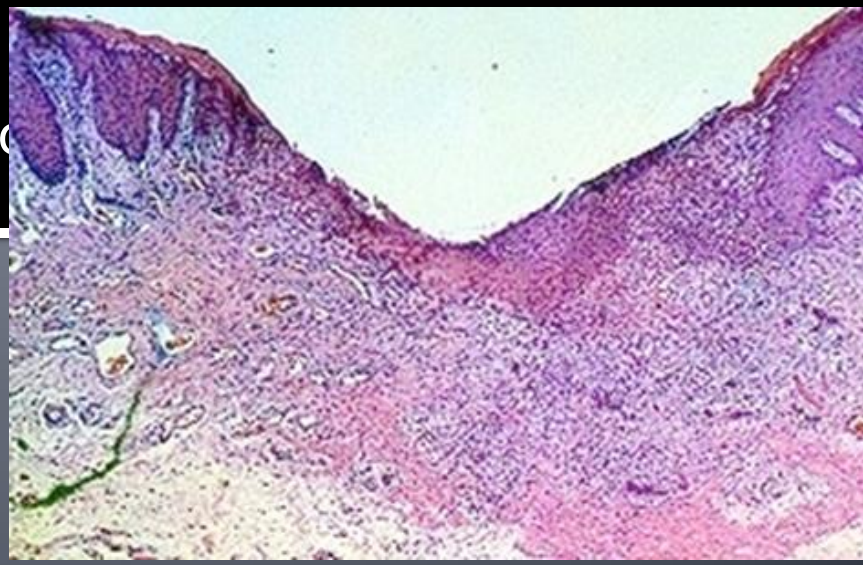
Recurrent Aphthous Stomatitis (RAS)

Biopsies



early lesions infiltration of large granular lymphocytes and CD_4 lymphocytes with focal degeneration of basal cells
small intraepithelial vesicles

Advanced lesions superficial ulcer covered by a fibrinous exudate
granulation tissue at the base
mixed acute and chronic inflammato infiltratre.



Non traumatizing tooth brushing

Avoid hard foodstuff (chips, toast)

Avoid spicy food - trauma

Avoid nuts, peanuts, walnuts mandel

Avid sodium lauryl sulphate

Recurrent Aphthous Stomatitis (RAS)

Sutton aphtha therapy

colchicine,
pentoxifylline,
dapsone,
systhemic steroids,
oxytetracyclin
thalidomide (Contergan)??? .

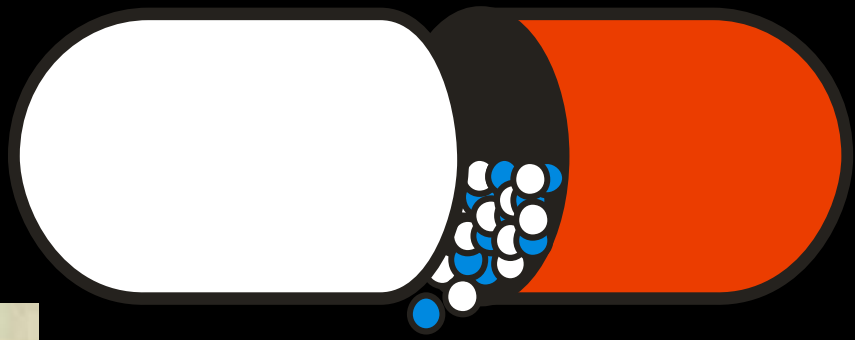
Topical corticosteroid

can often control RAS.

Systemic

The major concern of adrenal suppression with long term and/or repeated application has rarely been addressed,

.



Recurrent Aphthous Stomatitis (RAS)

- Tetracyclin 250 mg, four times daily decrease the duration of RAS, but it is forbidden to children under 12 years.
- The good oral hygiene is also very important.

Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

Inflammatory bowel diseases

Coeliacia

Ulcerative collitis

Crohn's disease

Behçet Disease [BD (Behçet Syndrome)]

- Behçets disease (BD) was initially described by the Turkish dermatologist *Hulusi Behçet* as a triad of symptoms
  - recurring oral ulcers,
  - recurring genital ulcers,
  - Eye involvement.

The highest incidence in:

- eastern Asia,
- Middle East,
- eastern Mediterranean,
- Turkey
- Japan,

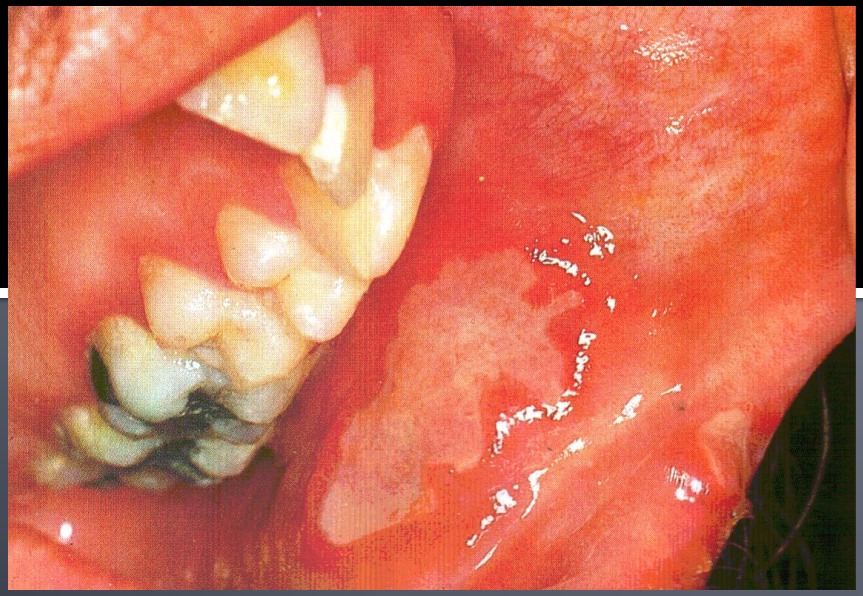
Behçet Disease [BD (Behçet Syndrome)]

- The cause of BD is unknown,
- circulating immune complexes,
  - Autoimmunity,
  - cytokines,
  - heat shock proteins,
  - HLA -B51 genotype is most frequently linked to BD, especially in patients with severe forms
- BD results when a bacteria or virus triggers an immune reaction in a genetically predisposed individual.

Symptoms of Bechcet syndrome

- Oral aphthous stomatitis
- Aphthous like genital ulcers
- Eye disease: hypopion, iridocyclitis

- Plus: Meningoencephalitis and spinal cord disease
  joint, gastrointestinal and vessel diseases



Behçet Disease BD (Behçet Syndrome)

Management

- Azathioprine and other immunosuppressive drugs
- combined with prednisone have been shown to reduce ocular oral and genital involvement.
-
- Dapsone, colchicine, and thalidomide
- have also been used effectively to treat mucosal lesions of BD

Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

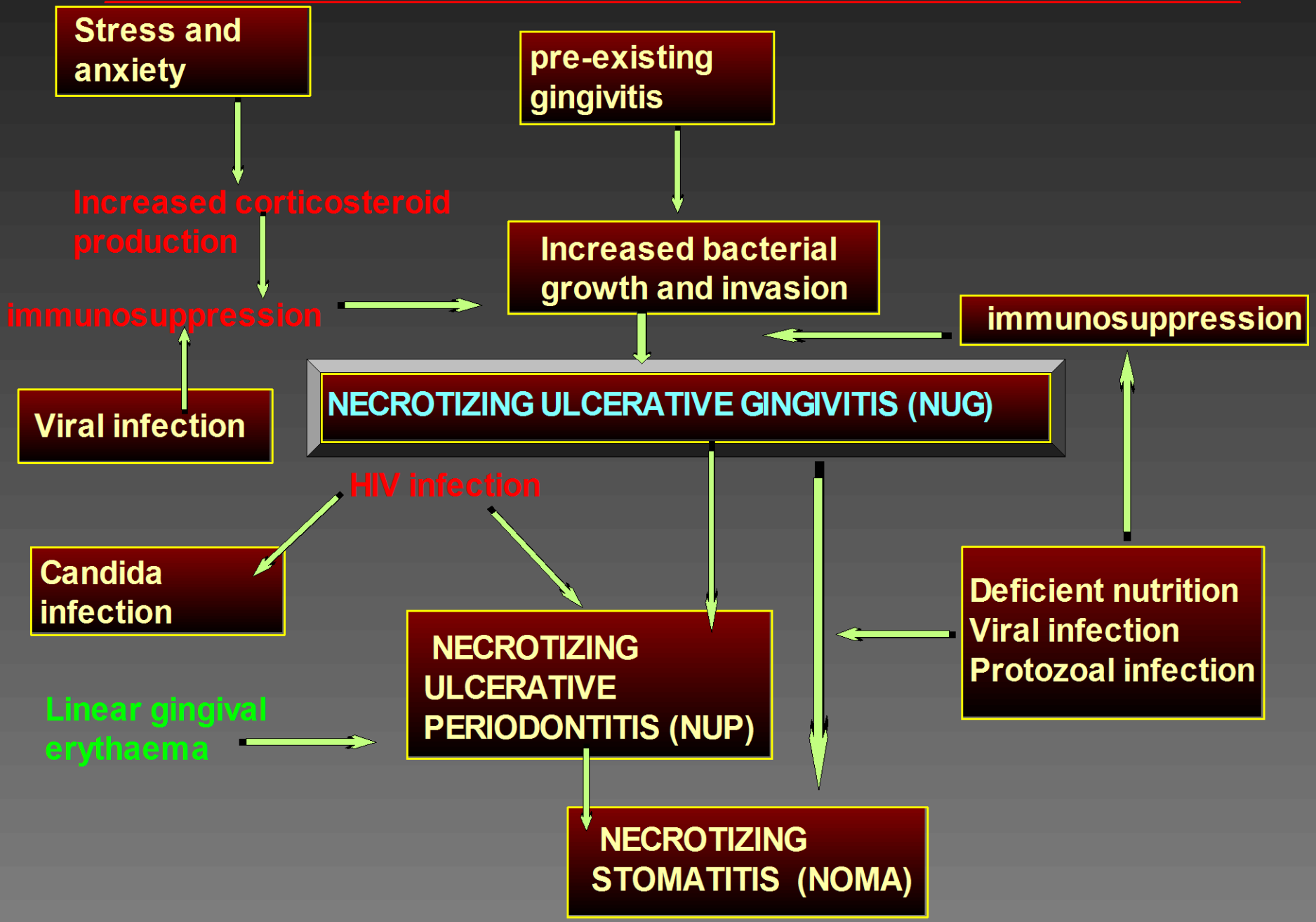
Inflammatory bowel diseases

Coeliacia

Ulcerative collitis

Crohn’s disease

NUG ETIOLOGICAL MECHANISM



GINGIVITIS ULCEROSA

GINGIVITIS ULCEROSA

GINGIVITIS ULCEROSA CHRONICA

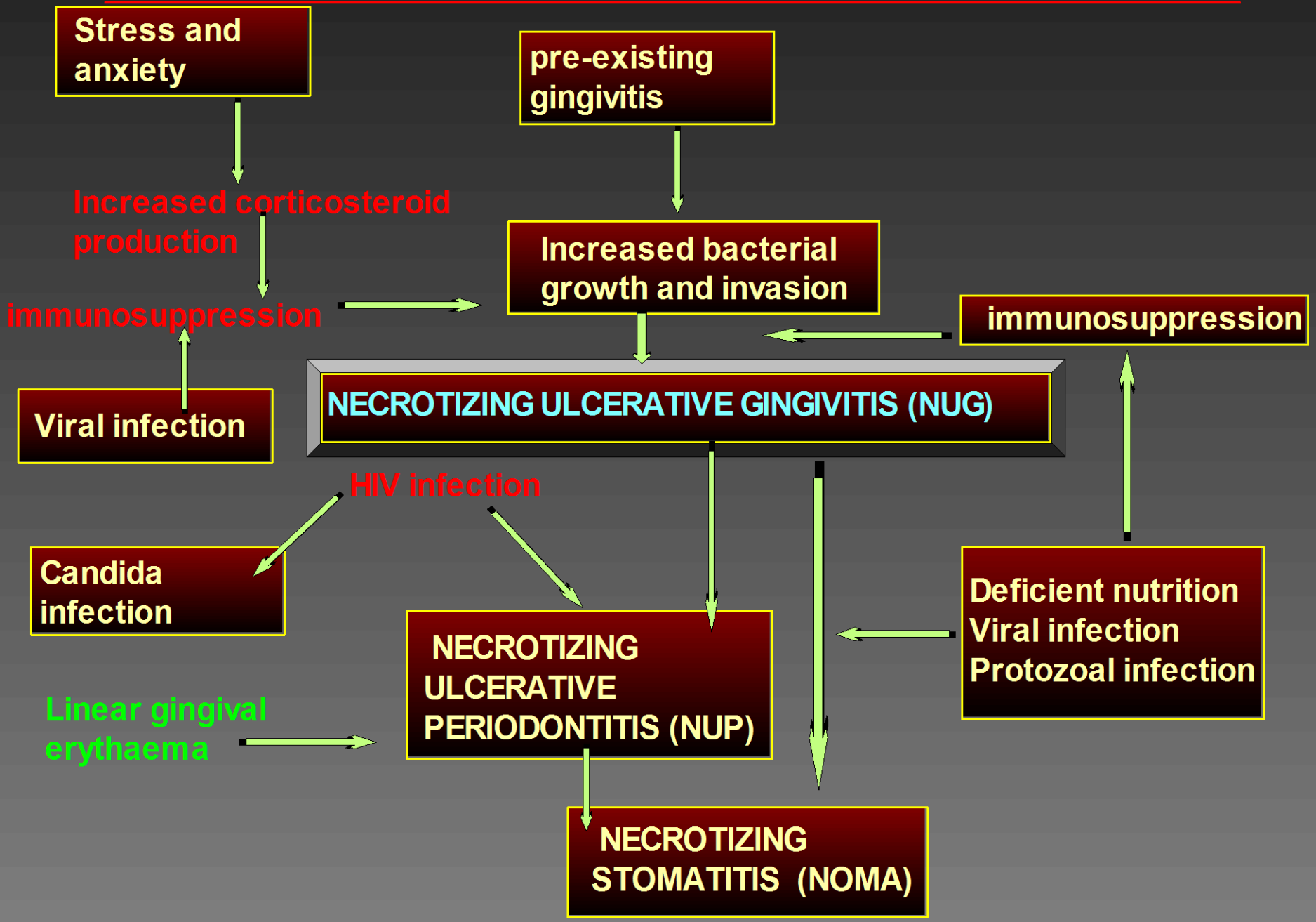
PARODONTITIS ULCEROSA HIV POZITIV!!!!


98 5 13


98 5 13



NUG ETIOLOGICAL MECHANISM



Necrosis due to acute leukokemia

Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

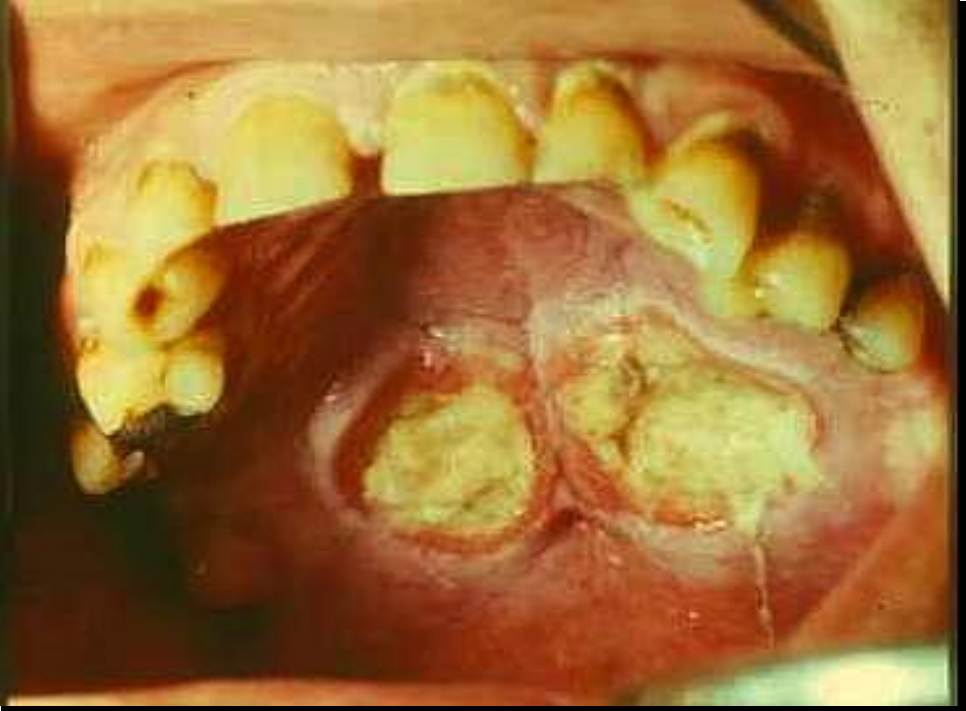
Inflammatory bowel diseases

Coeliacia

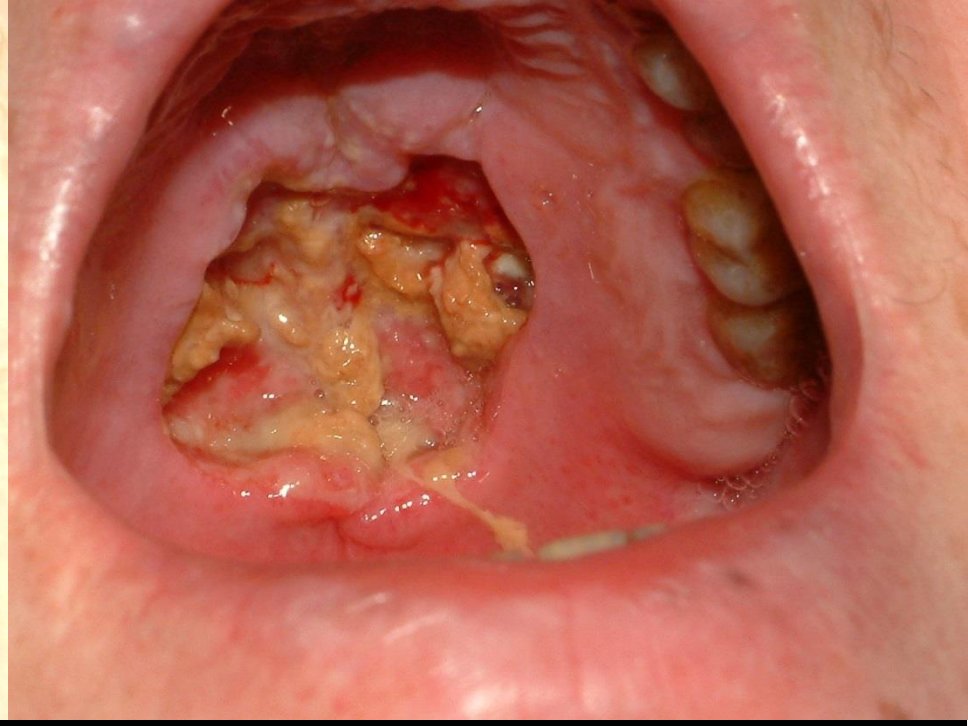
Ulcerative collitis

Crohn's disease

NECROTIZING SIALOMETAPLASIA



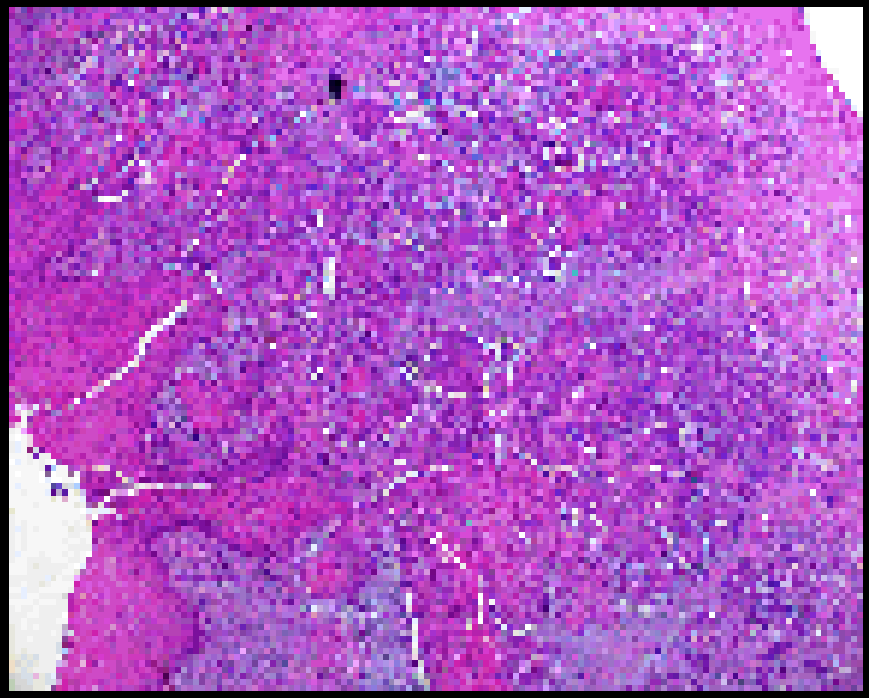
NECROTIZING SIALOMETAPLASIA

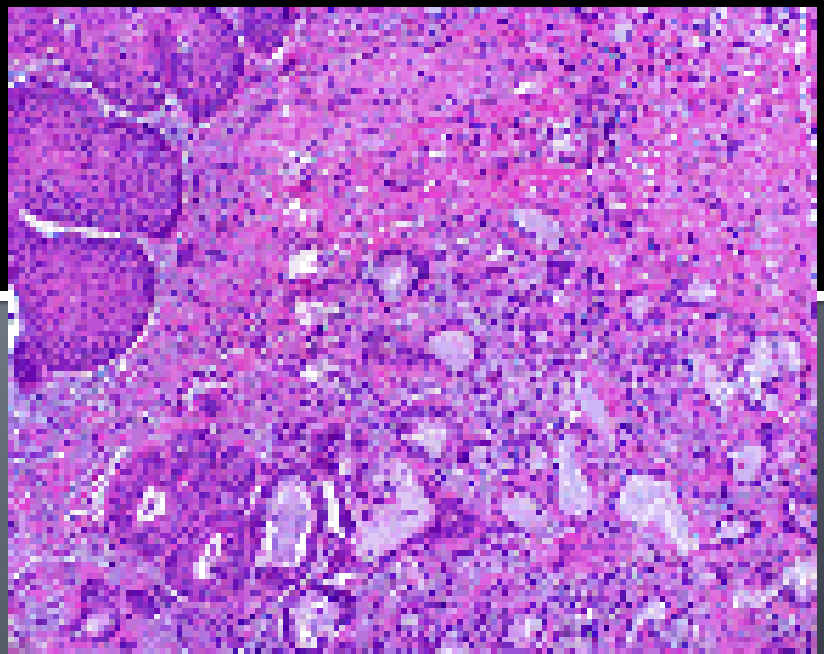



NECROTIZING SIALOMETAPLASIA


HISTOLOGY

- Ischemic lobular necrosis
- acinus cells coagulation necrosis
- ductus cell metaplasia
- PMN and moncytes cell infiltrate
- pseudoepitheliomatous hyperplasia





Immune- autoimmune diseases II.

Recurrent Aphthous ulcers

Ulcerative gingivitis

Ulcerative periodontitis

Necrotizing sialomethaplasia

Inflammatory bowel diseases

Coeliacia

Ulcerative collitis

Crohn’s disease

Diseases of the Lower Digestive Tract

Inflammatory Bowel Disease (IBD.)

idiopathic IBD.

Inflammatory processes that affect the large and small intestines.

- Ulcerative colitis
- Crohn's disease

Ulcerative colitis involves the mucosa and submucosa of the colon.
Crohn's disease involving all layers of the gut.

etiology and pathogenesis of ulcerative colitis and Crohn's disease are unknown,

Diseases of the Lower Digestive Tract

Inflammatory Bowel Disease

oral signs of IBDs,

- pyostomatitis vegetans,
- chronic stomatitis,
- aphthous ulcerations,
- oral epithelial tags and folds,
- gingivitis,
- persistent lip swelling,
- lichenoid mucosal reactions,






- granulomatous inflammation of minor salivary gland ducts,
- candidiasis, and angular cheilitis.

Aphtha

RAS is a disease seriously hurting the patients.