Oral Ulceration

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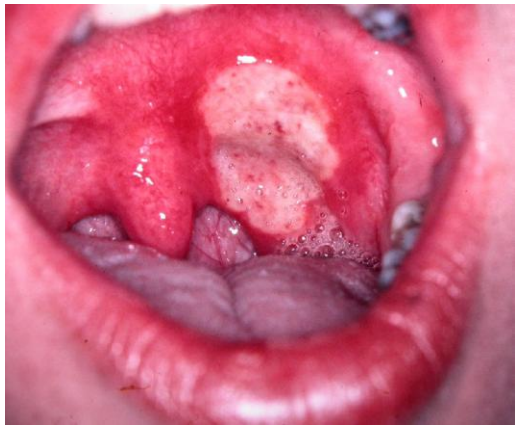
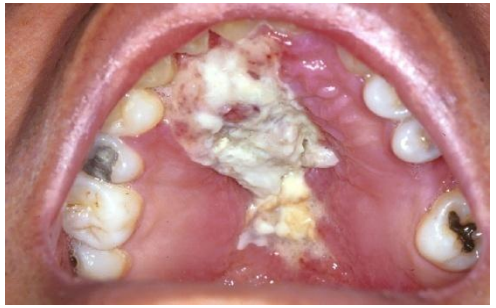
Oral Ulceration

Definition: "**A discontinuity of an epithelial surface induced by traumatic/ inflammatory/ neoplastic processes**"

Causes of mouth ulcers (Scully et al)

1. Local causes- trauma; burns
2. Drugs
3. Recurrent aphthous stomatitis
4. Malignant disease
5. Systemic disease –blood disorders, gastrointestinal disorders, mucocutaneous disease, connective tissue disease, vasculitides, infective disease
6. Others





lymphoma

Oral Ulceration

Trauma-

Mechanical -from dentures, tooth brushes (especially old worn brushes), sharp teeth self induced after local anaesthetic injection, cheek biting (a neurotic habit)

Rarely – lingual frenal ulcer from cunnilingus, palatal petichiae from fellatio

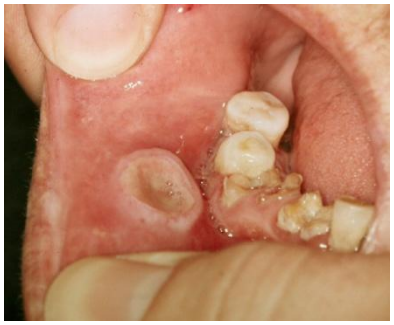
BURNS- Chemical (aspirin)

Heat (pizza, pie)

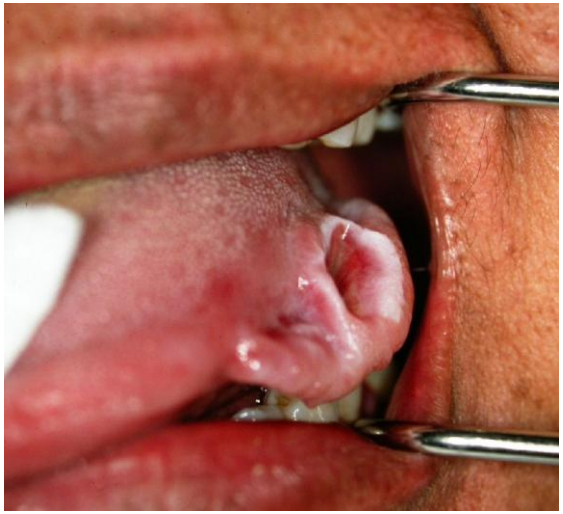
Clinically – usually single ulcer in otherwise well patient, causative problem often apparent (eg sharp tooth)

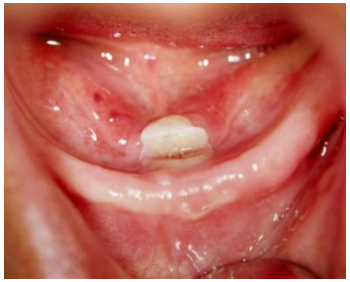
Management- remove cause and review 3 weeks, biopsy if no improvement)

0.2% chlorhexidine mouth wash, hot salt water mouth wash

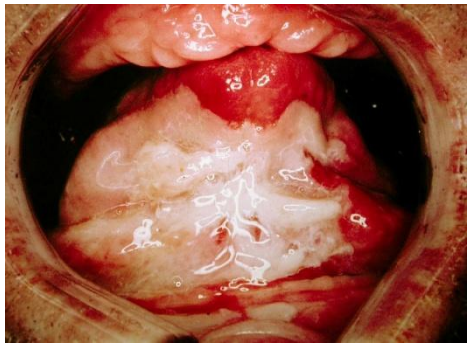


Sharp teeth

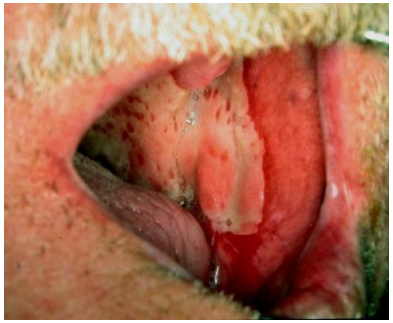




Denture



Chemical



Radiation related more generalised

Oral Ulceration

Drug -induced lesions

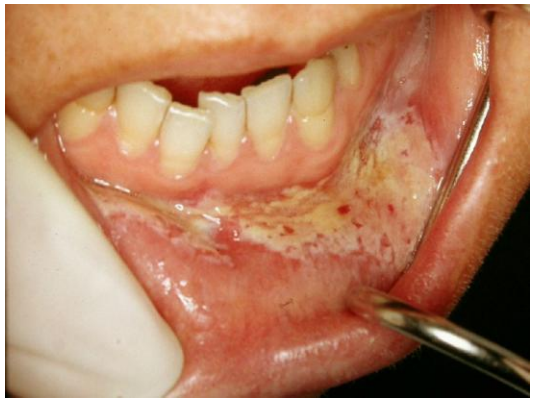
Many types of drugs can lead to lesions in the mouth

- cytotoxic agents (eg Methotreate used for immune suppression)
- Agents leading to lichenoid reactions (eg antihypertensive, anti diabetic, NSAIDS, antimalarials etc)
- Agents causing local chemical burns such as Aspirin
- Agents associated with erythema multiforme (eg sulphonamides, barbiturates)

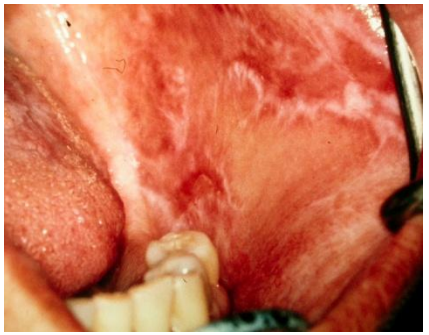
Clinical & Management- Cytotoxic cause non specific generalised and painful; management is supportive and option of stopping/ changing drug)

- Aspirin usually solitary and local, white in appearance. Stop aspirin
- Erythema multiforme – blood crusted lips and swelling

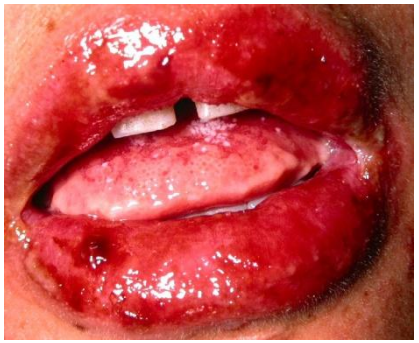
Chemical



Lichenoid



Erythema Multiforme



Oral Ulceration

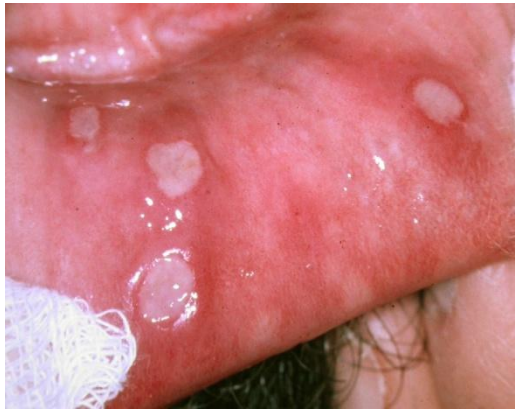
Recurrent Aphthous stomatitis (RAS)

- 20 % of population, typically start in childhood and generally improves with age
- Unknown aetiology (genetically determined immunological reactivity involving T-lymphocytes
- Clinically three types (ovoid, yellowish floor and red inflammatory halo and recur)
- Minor / Mikulikz's (small < 4mm diameter on mobile mucosa and last up to two weeks , heals without scarring) . May be associated with celiac disease
- Major / Sutton's (large > 1cm on any site and last much longer > 1 month and heal with scarring)
- Herpetiform ulcers (multiple 2mm diameter ulcers that coalesce to form larger ones with ragged edges. May appear like herpes?

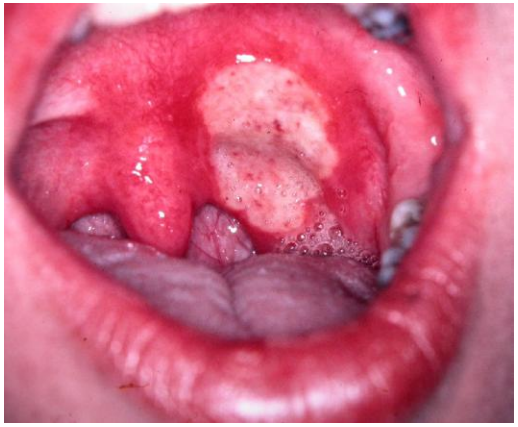
Management- Review and correct any underlying blood deficiencies (10-20%), treat any predisposing factors

0.2% Chlorhexidine MW, Topical steroids, 0.1% triamcinolone acetonide in orobase, Tetracycline MW in adults, Topical anaesthetic MW

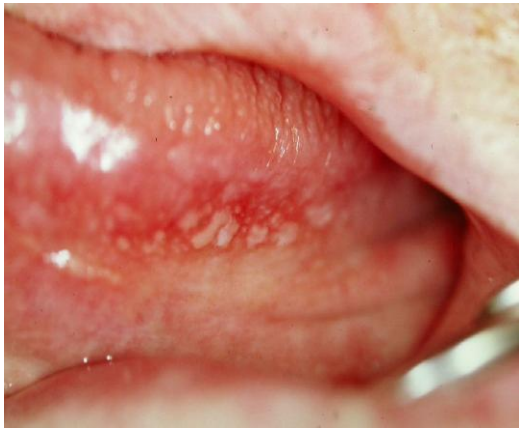
Minor RAS



Major RAS



Herpetiforme



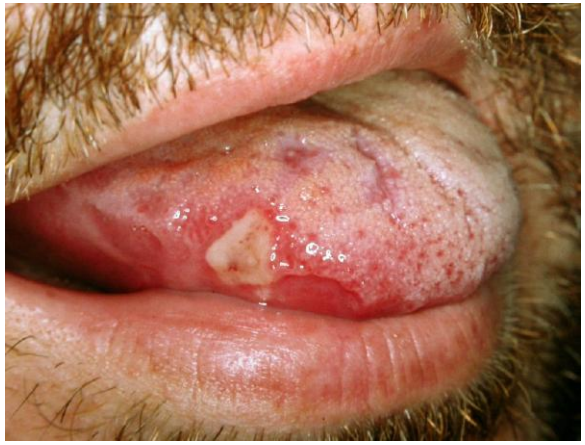
Oral Ulceration

Recurrent Aphthous stomatitis (RAS)

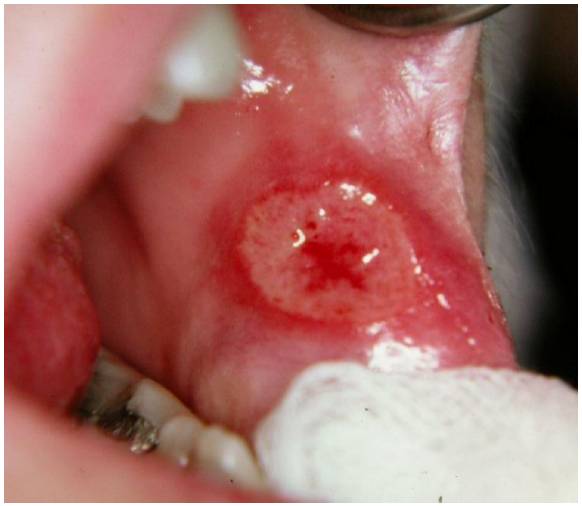
Other associations

1. Celiac disease 2-3 % young children
2. Menstruation
3. Stress?
4. Food allergy (chocolates, cinnamon?)
5. Behcet's syndrome- any type of RAS, Eye disease (reduced visual acuity, uvitis, retinal vasculitis), Genital ulcers (aphthae like), Skin disease (erythema nordosum) Arthralgia of large joints, Neurological disease. Immunological aetiology.
6. Immunodeficiencies- HIV and cyclic neutropenia

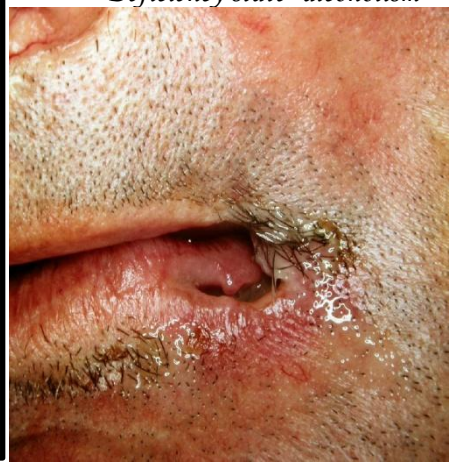
Behcet's



HIV



Deficiency state- alcoholism



Oral Ulceration

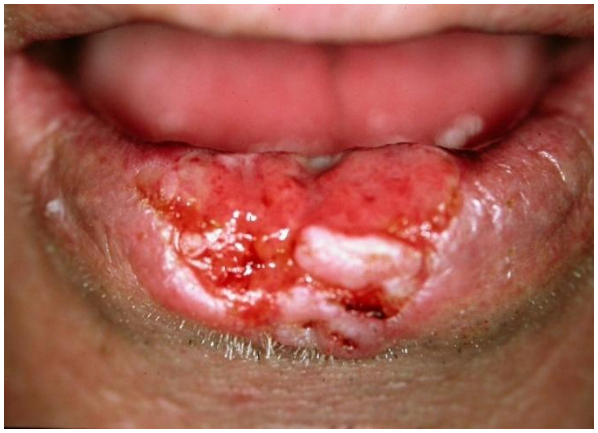
Malignant disorders

Majority (90%) are oral mucosa squamous cell carcinomas (OMSCC), other primary malignancies may be Kaposi sarcoma KS (HHV 8), Lymphoma, antral carcinoma and salivary gland tumours. Metastases (from breast, bowel) may also occur. The number of oral ca from immune suppression is rising (KS and Lymphoma)

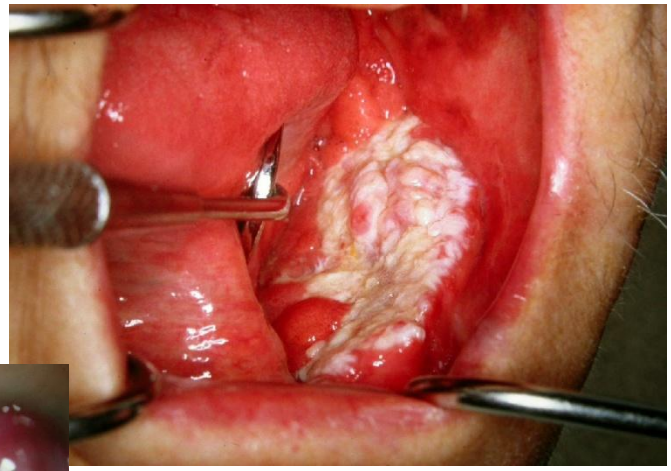
Clinically may present as a non healing ulcer which is chronic, indurated with raised rolled edges and granular floor. Cervical lyphadenopathy may be present

Management – referral to specialist

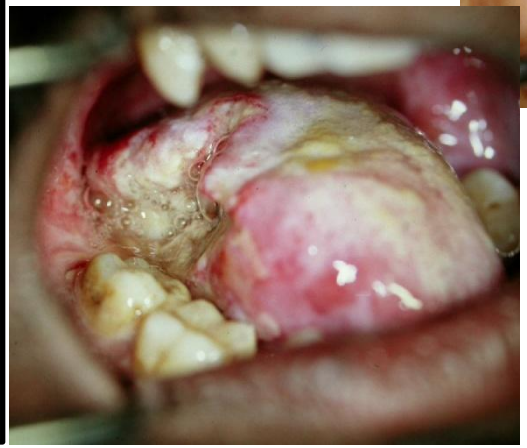
Lip OMSCC



OMSCC



Lateral tongue OMSCC



Oral Ulceration

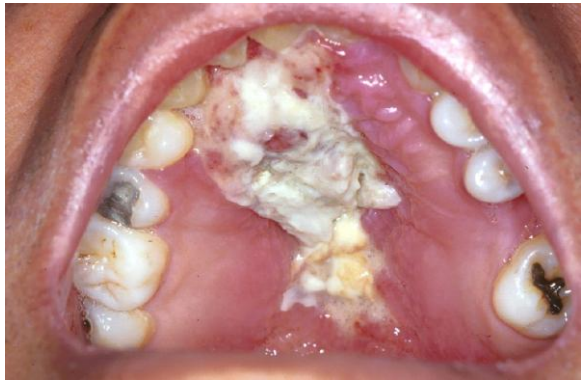
<u>Systemic Disease</u>

Leukaemia

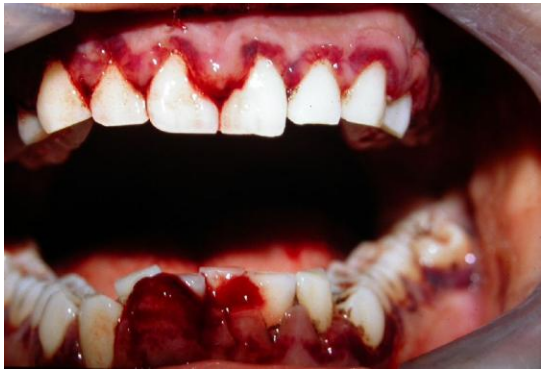
Lymphoma

Gastrointestinal causes- Celiac disease, Orofacial granulomatosis and Crohn's disease, Ulcerative colitis

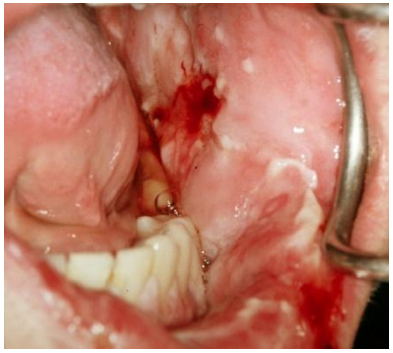
Dermatological disorders- Epidermolysis Bullosa, Lichen Planus, Lupus Erythematosus, Pemphigoid ,other vesicullobullous disorders resembling pemphigoid clinically (pemphigus, Dermatitis herpetiformis, Linear IgA, Erythema Multiforme)



lymphoma



thrombocytopenia



Erythema multiforme

Oral Ulceration

Systemic Disease

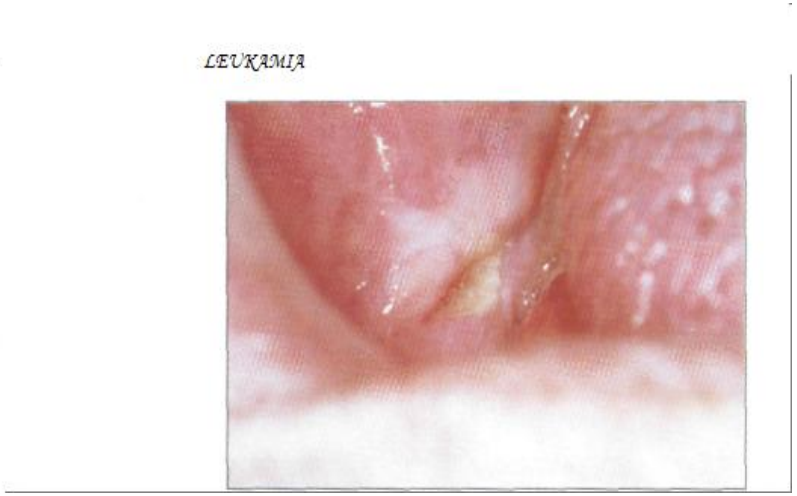
Leukaemia- malignant proliferation of leukocytes (Granulocytes {basophils, eosinophils, mast cells, neutrophils } and non-granulocytes {monocytes and lymphocytes})

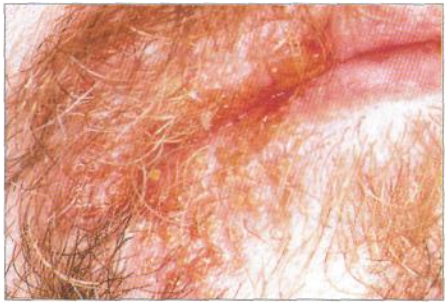
Acute leukaemia- rapid increase of immature blood cells. Which prevents bone marrow from making healthy blood cells

Chronic leukaemia- build up of mature but abnormal cells

Clinically- Anaemia, pallor weakness, lymphadenopathy; spontaneous gingival bleeding and oral purpura; intra oral herpes simplex ulcers, candidosis, leukemic gingival deposits leading to swollen "boggy" gingiva

Management- specialist care (full blood screen and bone marrow biopsy)





Leukaemia- recurrent herpes

Oral Ulceration

<u>Systemic Disease</u>

Lymphomas-

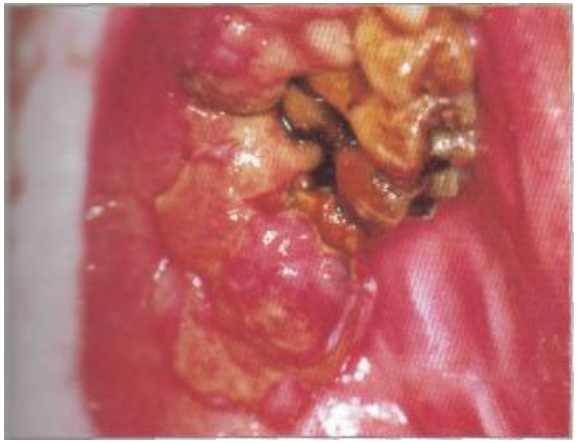
Hodgkin's lymphoma- 50% have painless enlargement of cervical lymph nodes

Non- Hodgkin's lymphomas- may produce lesions in the mouth (swelling of lips, palate, tongue, gingiva, and lips)

Herpes and candidal infections may occur

Also may occur in immunodeficiency (HIV) and immunosuppressant

Non-Hodgkin's Lymphoma in AIDS



Oral Ulceration

<u>Systemic Disease</u>

Gastrointestinal

Celiac disease- gluten enteropathy (commonly of Celtic origin). Hypersensitivity to gluten (found in wheat and other cereals)

Clinically- oral ulcers, angular stomatitis, glossitis, dental hypoplasia

Management- referral to specialist

- rectify haematinic deficiencies (iron follate, Vit B12)

Orofacial Granulomatosis – (Granulomas with no other detectable disease)

Causes of granulomas in oral region

-Crohn's disease

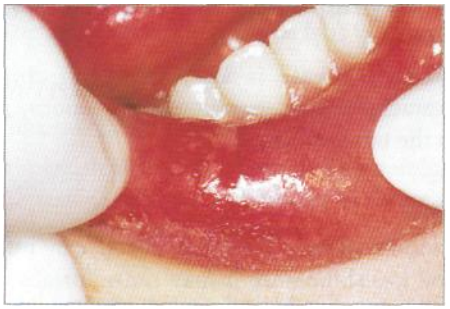
-foreign body

-Sacoidosis

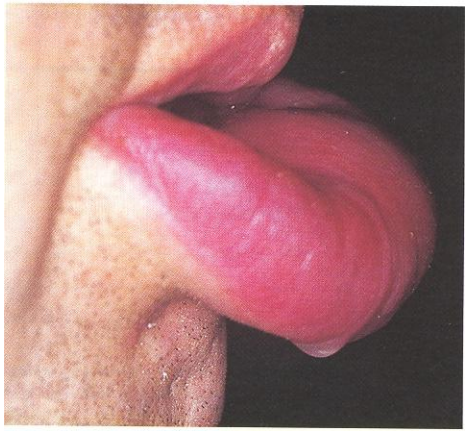
-TB

Granulomatous reactions may be due to reaction against benzoates, cinnamon, (carbonated drinks); antigens (paratuberculosis)

Celiac disease



OFG



Oral Ulceration

<u>Systemic Disease</u>

Gastrointestinal

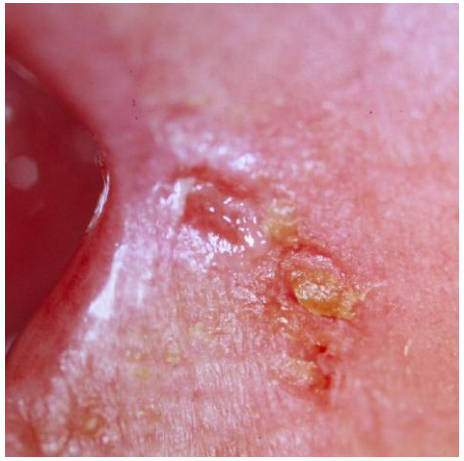
Crohn's disease- granulomatous condition may affect any part of GI-tract. Malabsorption will lead to iron and vitamin deficiencies and cause oral lesions (atrophic mucosa, ulcers)

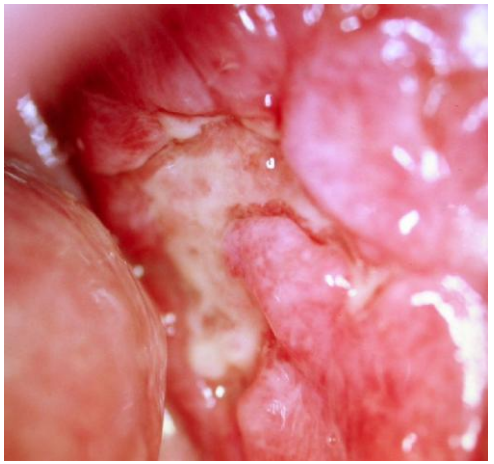
Clinically- abdominal pain, persistent diarrhoea, anaemia, weight loss

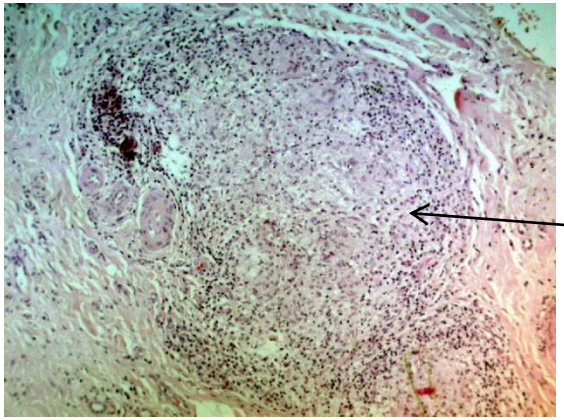
- facial / labial swelling, angular stomatitis, ulcers, mucosal tags (cobblestone), gingival hyperplasia, Miescher's cheilitis (lip swelling seen in isolation), Melkerson-Rosenthal syndrome (lip/ facial swelling g + fissured tongue + lower motor neurone facial palsy)

Management- referral to specialist

(oral biopsy for presence of lymphoedema, Blood tests : iron , vit B 12, Follate, SACE {to exclude sarcoidosis}, Chest X-ray,) ; Correct any deficiencies







Oral Ulceration

<u>Systemic Disease</u>

Gastrointestinal

Ulcerative colitis- uncommon inflammatory bowel disease (mainly adults). Ulceration and polyps (may undergo malignant change) in the colon

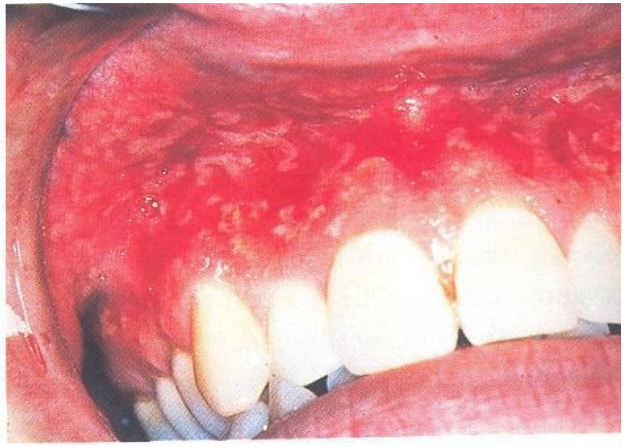
Clinically- persistent diarrhoea, iron deficiency, weight loss;

- oral ulcers (irregular), mucosal pustules (pyostomatitis vegitans)

Management- referral to specialist

(Biopsy, blood tests, sigmoidoscopy; Topical and systemic steroids)

Pyostomatitis vegitans



Oral Ulceration

Systemic Disease

Dermatological disorders- Epidermolysis Bullosa, Lichen Planus, Lupus Erythematosus, Pemphigoid ,other vesicullobullous disorders resembling pemphigoid clinically (pemphigus, Dermatitis herpetiformis, Linear IgA, Erythema Multiforme)

Epidermolysis Bullosa- Rare genetic defect in the basement membrane proteins causing the skin to blister after minor trauma, heals with scarring. Bullae may arise in the mucosa as a result of sucking

Refer to specialist

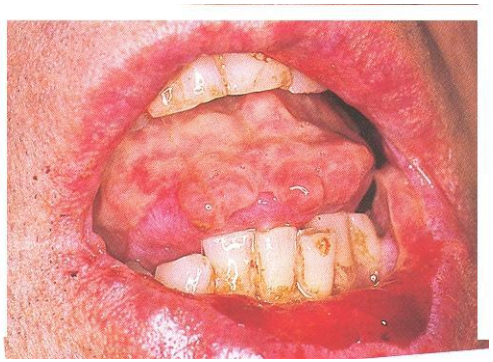
Erythema Multiforme- uncommon (recurrent) disorder of mucocutaneous tissues, often young men and characterised by blood crusted lips and target lesions of skin. Aetiology unclear (infection {herpes, mycoplasma}, drugs {sulphonamides, barbiturates, hormonal triggers

Minor form- affects one site Lips(cracked and bleeding), Ulcers (diffuse and widespread), rashes (target lesions), ocular and genital lesions

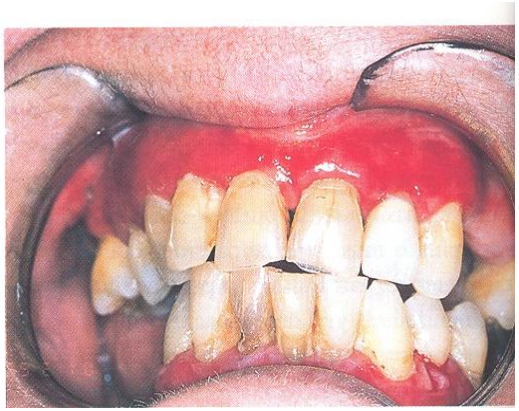
Major form (Stevens-Johnson syndrome: widespread with fever, arthritis, myocarditis and nephritis; TEN (toxic epidermal necrolysis: usually drug related may be associated with HIV)

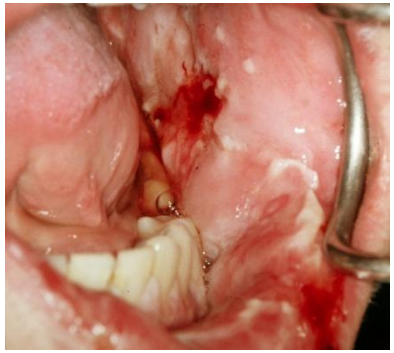
Management- referral to specialist

Pemphigus Vulgaris

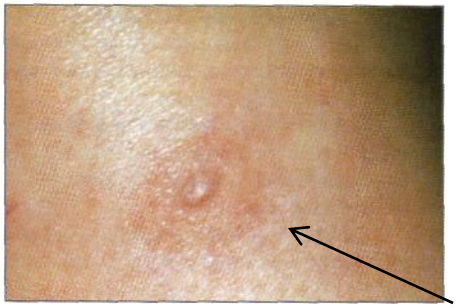


Pemphigoid





Erythema multiforme



Erythema Multiforme- target lesion

Oral Ulceration

<u>Systemic Disease</u>

Dermatological disorders-

Lichen Planus- common mucocutaneous (autoimmune disorder) involving T-lymphocytes and may present clinically as bilateral striae, papules, erosions, atrophic areas of cheek, tongue, gingiva, palate (posterior). Also can affect skin, genitals, scalp and nails

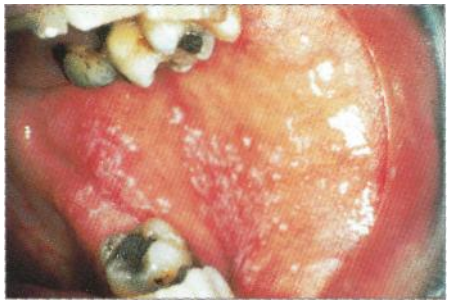
May be associated with :

drugs (antihypertensive, antidiabetic, gold, antimalarials), reactions to amalgam, Hepatitis C virus, Chronic liver disease, Graft-vs-host disease

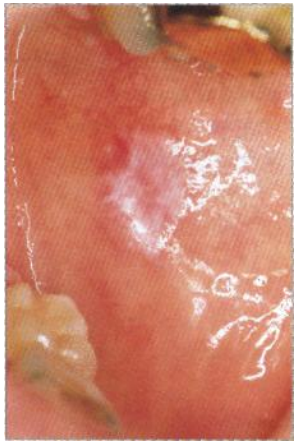
Malignant potential in 1-3%

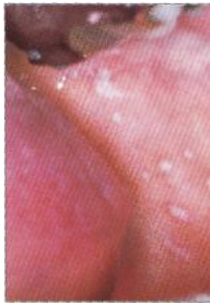
Management- confirm with biopsy, exclude predisposing factors (drugs, amalgam, systemic disease), symptomatic lesions treated with topical steroids

OLP caused by antimalarials

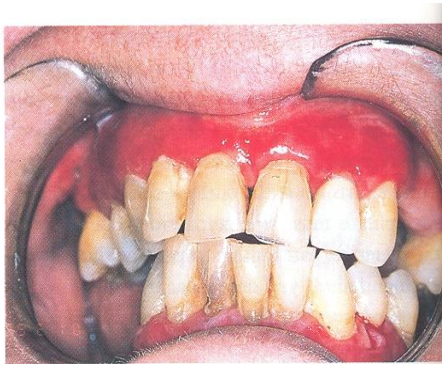


OLP plaque





Papular Lichen planus



Desquamative gingivitis