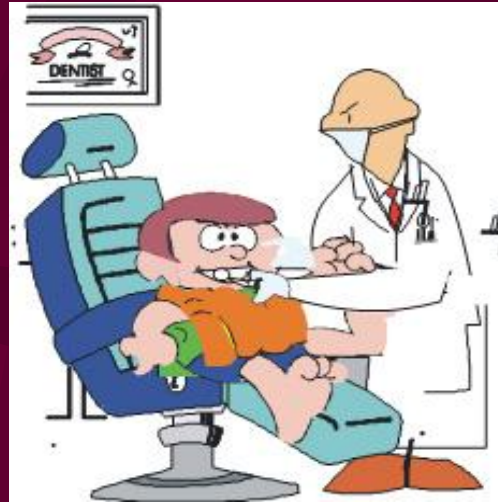


ORAL MANIFESTATIONS OF SYSTEMIC DISEASES



"Oral cavity acts as a mirror to reflect any major changes that disturb the homeostatic equilibrium of our body"

NUTRITIONAL DEFICIENCIES

VITAMIN DEFICIENCY :



Vitamin A def. :

C/F- Calcification of enamel is disturbed & enamel hypoplasia results.

Dentin is atypical so there is increased susceptibility to caries.



Vitamin -D def.

C/F- Developmental anomalies of enamel & dentin



Delayed eruption of primary and secondary dentition

Malaligned teeth



Vitamin - K def.

C/F- Gingival bleeding (on probing if Prothrombin level < 35% & spontaneous bleeding if level < 20%)



Vitamin B complex

Riboflavin def.

C/F -Glossitis

Initial loss of filiform papillae & later atrophy of all papillae of the tongue

Pale lips

Cheilosis



Niacin def.

C/F -Pellagra (rough skin)

Burning sensation of tongue which gets swollen

Oral mucosa is red & painful

Profuse salivation



Vitamin C def. :

C/F – Bright red inflamed gingiva which bleeds easily

Loose teeth

Delayed healing of oral wounds & ulcers

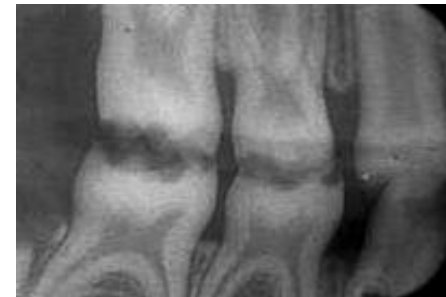


Mineral deficiency

Calcium def. :

C/F – Hypocalcified teeth

Bleeding problems



ENDOCRINAL DISTURBANCES

HYPOPITUITARISM

C/F: Eruption time & shedding time decreased

Dental arch smaller, crowding develops

Clinical crown & roots are smaller



HYPERPITUITARISM

C/F: Tooth crown & roots are longer

Jaw size is increased, prognathic

Tongue size increased

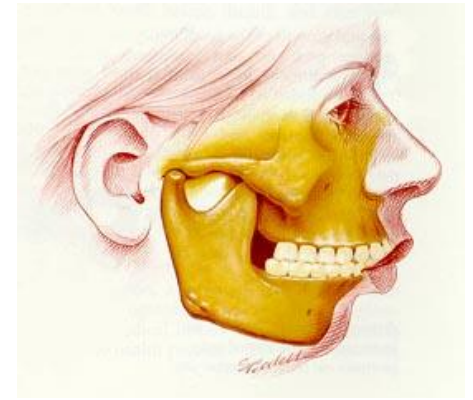


HYPOTHYROIDISM

Mandible is underdeveloped

Tongue is enlarged

Deciduous teeth are retained
beyond normal shedding time



HYPERTHYROIDISM

Early shedding of deciduous teeth

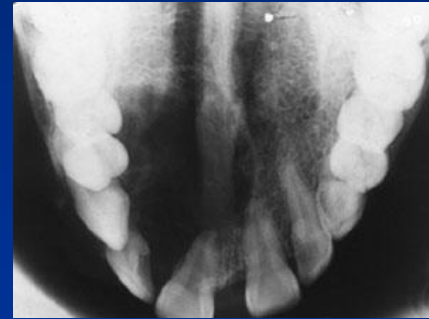
Accelerated eruption of
permanent teeth

Alveolar atrophy in advanced cases



HYPOPARATYROIDISM

- *Hypoplasia or aplasia of teeth*
- *Chronic candidosis refractory to*
- *antifungal therapy*



HYPERPARATYROIDISM

- *Pathologic fractures may be the 1st symptom*
- *Cysts of jaw*
- *Malocclusion & spacing d/t sudden drifting of teeth*
- *GROUNDGLASS appearance of bone with partial loss of lamina dura*

■ *Addison's disease:*

- *Pale brown/deep chocolate discolouration of oral mucosa*



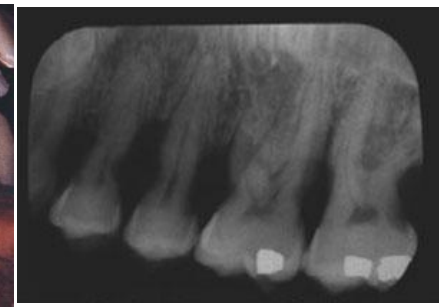
■ *Hyperadrenal hormone:*

- *Osteoporosis*
- *Cleft palate in offspring*



■ *Insulin deficiency:*

- *Gingivitis*
- *Drymouth, high caries index*
- *Poor healing of ulcers & wounds*



HAEMATOLOGICAL CONDITIONS

PERNICIOUS ANAEMIA:

HUNTER'S/MOLLER'S glossitis, glossodynia



APLASTIC ANAEMIA:

Petechiae, purpuric spots, haematomas

ERYTHROBLASTOSIS FETALIS:

Teeth develop green, brown or blue discolouration



IRON DEFICIENCY ANAEMIA:

Fissures at angle of mouth, pale atrophic mucosa, smooth, red, painful tongue



POLYCYTHEMIA:

Gingiva & tongue are deep purplish red

Gingiva is swollen & bleeds upon slightest provocation



Leucopenia

Necrotising ulcerations of oral mucosa & gingiva
Excessive salivation



Leukemia

Rapid loosening of teeth
Gingival haemorrhage & ulceration



*ALL SURGICAL PROCEDURES
ARE CONTRAINDICATED*

PLATELET & CLOTTING FACTORS DISORDER

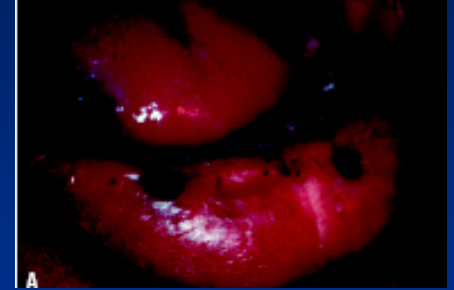
INCLUDES purpura, haemophilia, von willebrandt's disease etc.

MANIFESTATIONS :

Spontaneous gingival bleeding

Mandibular pseudo tumors

Subperiosteal bleeding with reactive bone formation



**ALL SURGICAL PROCEDURES
ARE CONTRAINDICATED**

INFECTIOUS DISEASES

BACTERIAL DISEASES

DIPHTHERIA : A grayish, thick, fibrinous, gelatinous false membrane begins from tonsils & spreads. Removal of membrane yeilds a bleeding surface. Soft palate is paralyzed in advanced cases.



TUBERCULOSIS : O/M are rare seen as ulcerative lesions of gingiva & buccal Mucosa. Tuberculosis of Mx & Md results d/t(anachoretic effect) source is periapical inflammation by way of bloodstream.



LEPROSY :

- *Small tumor like masses k/a LEPROMAS are seen on tongue, lip & hard palate*
- *Gingival hyperplasia with loosening of teeth*



ACTINOMYCOSIS :

- *Swelling & induration of facial tissue which develops into abscess discharging onto skin releasing typical sulphur granules.*



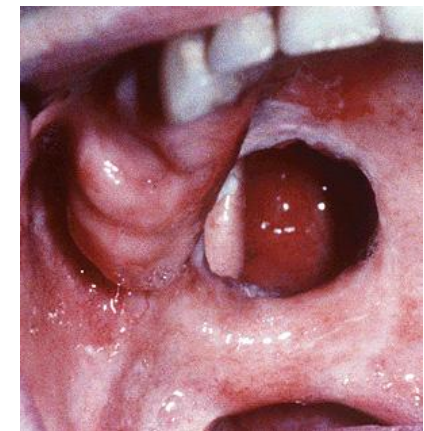
SYPHILIS

ACQUIRED :

Primary syphilis : "CHANCERE"

Secondary syphilis : "MUCOUS
PATCHES"

Tertiary syphilis : "GUMMA"



CONGENITAL

Short Mx, high palatal arch

Mulberry molars,

hypoplastic incisors

VIRAL DISEASES

AIDS

- *Oral Candidiasis is the 1st presenting sign of HIV infection*
- *Hairy Leukoplakia precedes AIDS*
- *Apthous ulcers*
- *Kaposi Sarcoma is the most common malignancy in pt. who are HIV positive*



Herpes Simplex infection

- ❑ *Leads to ACUTE HERPETIC GINGIVOSTOMATITIS*
- ❑ *Involves keratinised mucosa as single or multiple ulcers*
- ❑ *Fissures may form at the dorsal aspect of tongue*



METAL INTOXICATION

BISMUTH:

- *Ulcerative gingivostomatitis*
- *Metallic taste, burning sensation*
- *Bluish-black discolouration of gingival margin*



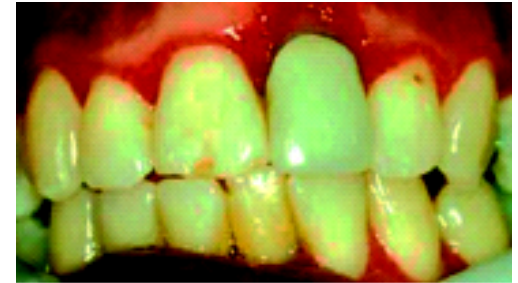
LEAD:

- *Pallor of face, tongue & lips*
- *Steel-gray BURNIAN LINE at gingival margin*



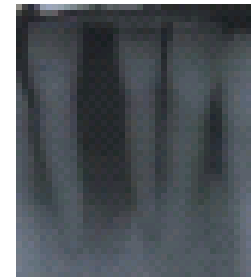
MERCURY :

- *Pronounced salivation, metallic taste*
- *Gingival pigmentation & ulceration*
- *Destruction of underlying bone*



PHOSPHORUS, ARSENIC, CHROMIUM

- *Necrosis of alveolar bone*
- *Loosening & exfoliation of teeth*
- *Gingival pigmentation & ulceration*



CONGENITAL HEART DISEASE

- Purplish discoloration of lips & gingiva which corresponds to general degree of body cyanosis & returns to normal after corrective heart surgery
- Severe marginal gingivitis & periodontal destruction
- Tongue appears coated, fissured & edematous with reddening of papillae

