

# Differential Diagnosis of Oral Masses

## Gingival Lesions

# Gingival/Alveolar Ridge Masses

- Parulis
- Periodontal Abscess
- Tori and Exostoses
- Reactive Proliferations
- Peripheral Odontogenic Cysts
- Peripheral Odontogenic Tumors
- Squamous Cell Carcinoma
- Expansile Central Bone Tumors

# Parulis

- Buccal or Lingual
- Odontogenic Source of Infection
- Nonvital Tooth
- Periapical Radiolucency
- Purulent exudate
- Gutta purcha/radiographic tracer

# Parulis



# Periodontal Abscess

- Erythematous
- Deep Periodontal Pocket
- Alveolar Bone Loss
- Vital Teeth
- Pululence upon Probing
- Diabetes Mellitus

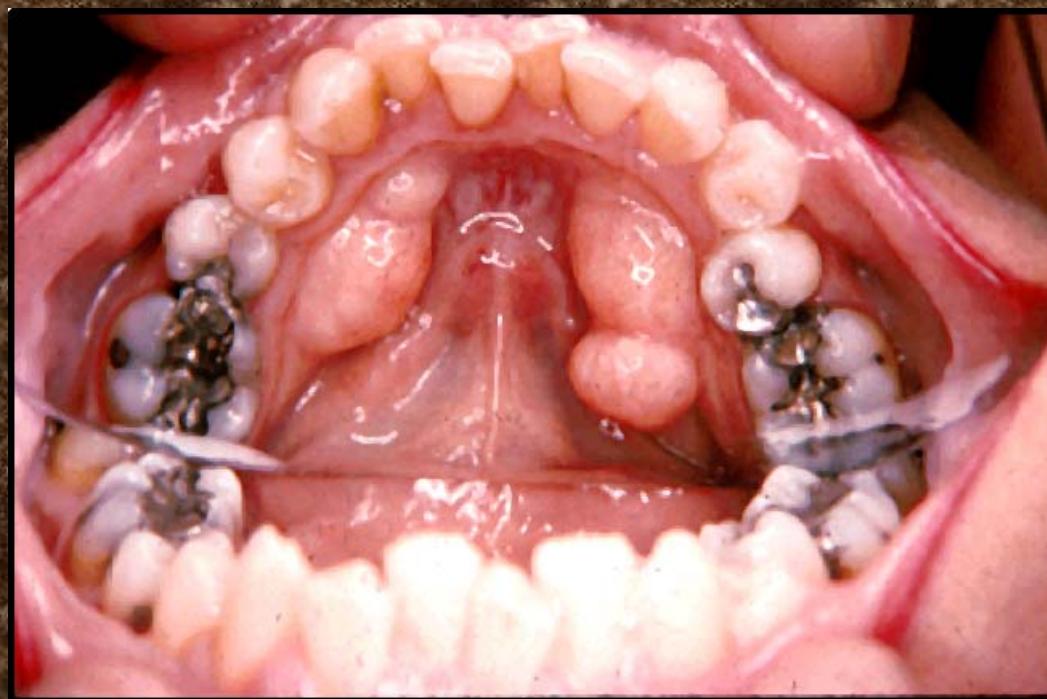
# Periodontal Abscess



# Torus Mandibularis

- Bilateral Lingual Premolar Region
- Adult Onset
- Lobulated, Bone Hard
- May become ulcerated
- May interfere with prostheses

# Mandibular Tori



# Exostoses

- Typically buccal posterior
- May occur anywhere on alveolus
- Adult onset
- Bone hard
- May interfere with prostheses

# Exostoses



# Congenital Epulis

- Bosselated tumor of the anterior alveolar ridge in newborns
- Maxilla > Mandibular ridge
- Microscopic: tumor is comprised of large granular cells with small nuclei. IHC staining is suggestive of smooth muscle origin
- Tx:Simple excision, excellent prognosis

# Congenital Epulis of the Newborn



# Reactive Lesions of the Gingiva

- Pyogenic Granuloma
  - Pregnancy Tumor
- Peripheral Fibroma
- Peripheral Ossifying Fibroma
- Peripheral Giant Cell Granuloma

# Reactive Lesions of the Gingiva

- All tend to occur during 2<sup>nd</sup>/3<sup>rd</sup> decades
- Females>Males
- Interdental Papilla most commonly
- Irritant in Sulcus
  - Foreign substance, physical irritant
  - Calculus
- Vary in aggressiveness

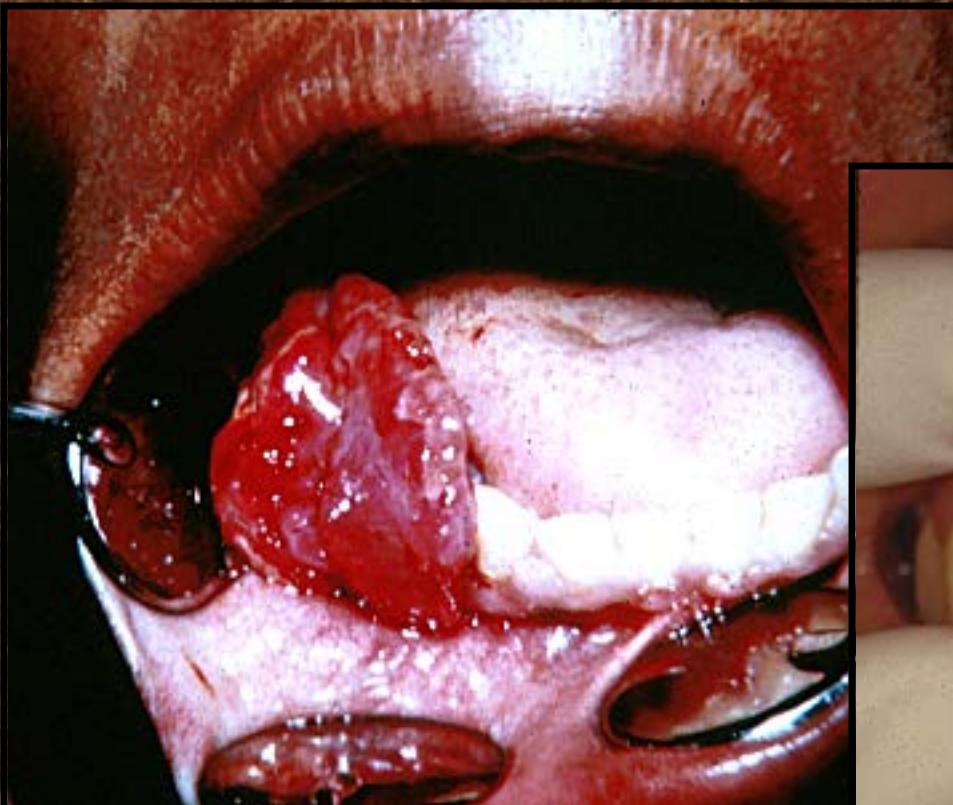
# Color Characteristics of Reactive Gingival Masses

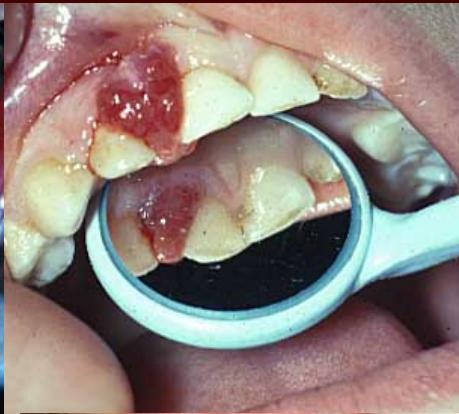
- RED – Pyogenic Granuloma
- PINK – Peripheral Ossifying Fibroma
  - Peripheral Fibroma
- BLUE/PURPLE – Peripheral Giant Cell Granuloma

# Pyogenic Granuloma

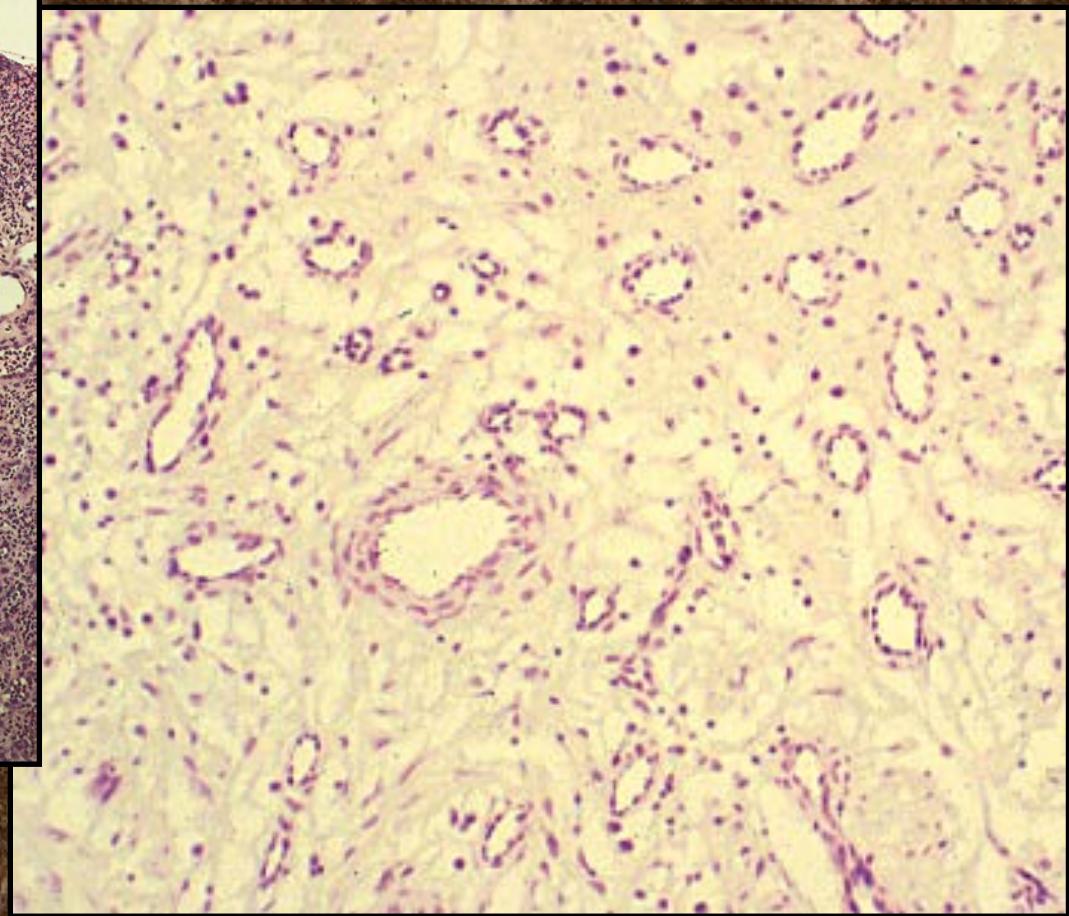
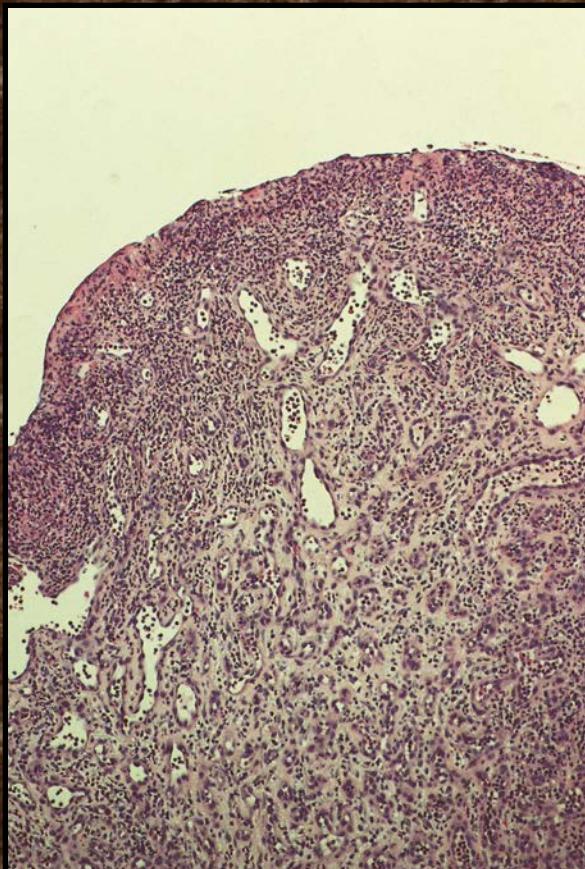
- Bright red, often ulcerated pseudomembrane
- Granulation tissue
- Pyogenic Bacteria are not etiologic
- Growth is superficial, rarely causing underlying bone loss
- Treatment: excision, thorough curettage

# Pyogenic Granuloma





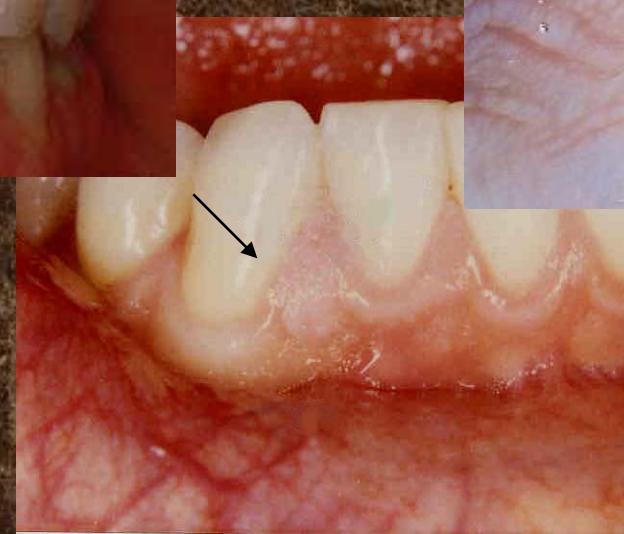
# Pyogenic Granuloma



# Peripheral Fibroma

- De Novo, or sclerosis of a Pyogenic Granuoma
- Interdental Papilla
- Coral Pink or White
- Noninvasive
- Histology
  - Reactive Fibrous Hyperplasia
  - Giant Cell Variant
  - Fasciculated Spindle Cell variant

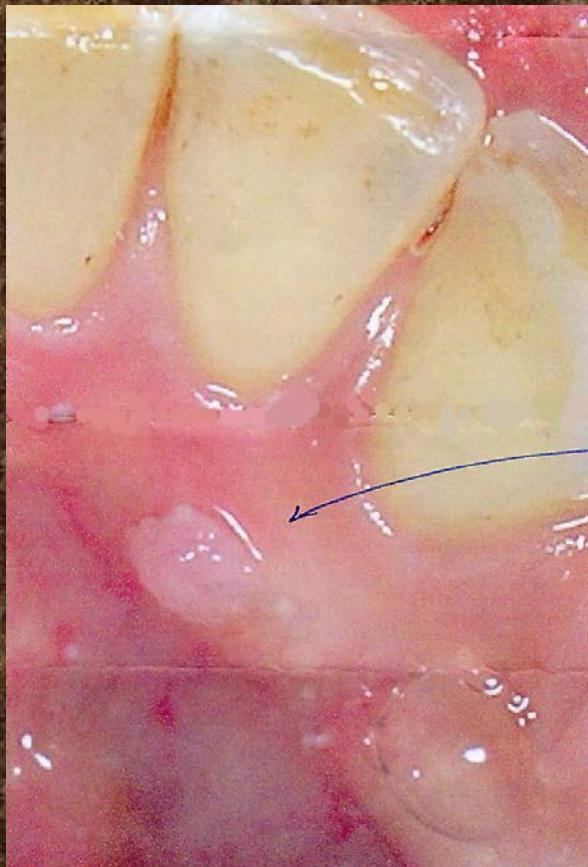
# Peripheral Fibroma



Giant Cell Fibroma

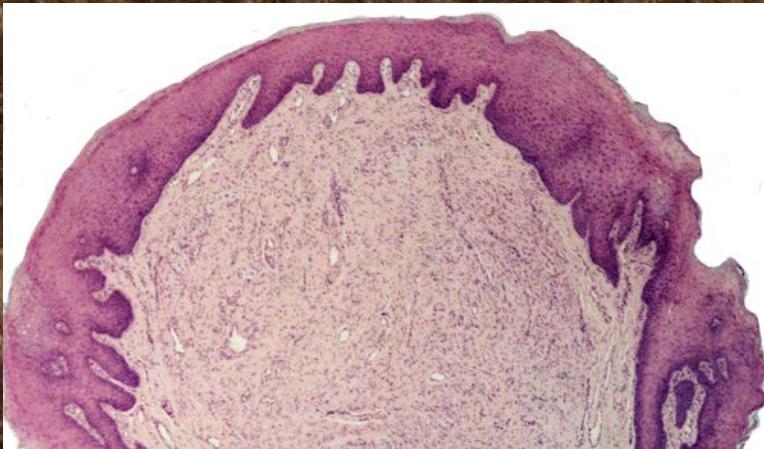
# Retrocuspid Papilla

A fibrous papule, mandibular cupid lingual gingiva

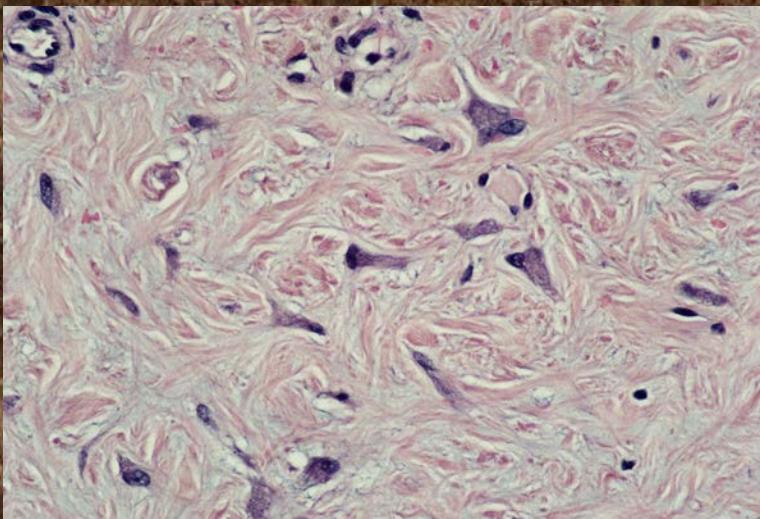


# Peripheral Fibroma

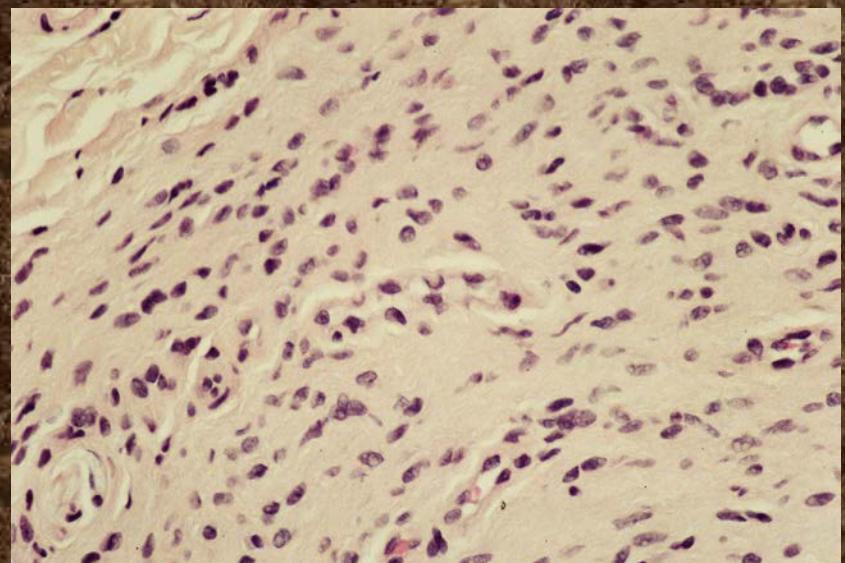
- Fibrous Hyperplasia



- Giant Cell Variant



- Fasiculated Variant



# Peripheral Ossifying Fibroma

- Arises from PDL
- Not seen in edentulous regions
- Coral Pink or White
- Opacities may be seen on Xray
- Hypercellular Fibroblastic
  - Osseous, cemental, dystrophic calcifications
- Excise down to PDL

# Peripheral Ossifying Fibroma



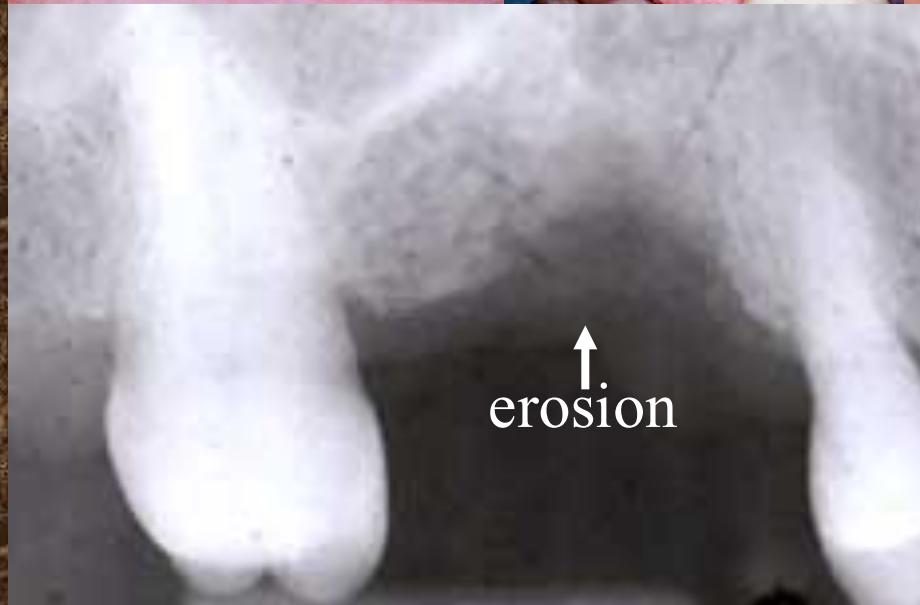
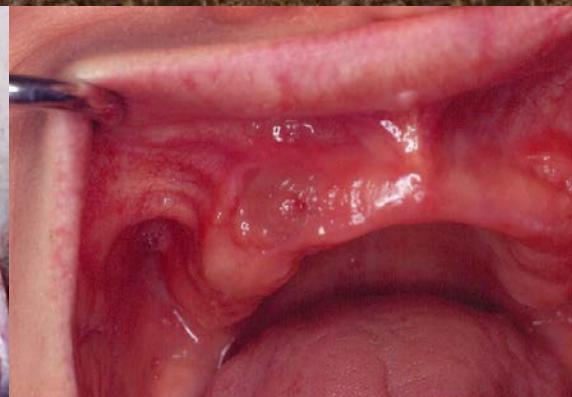
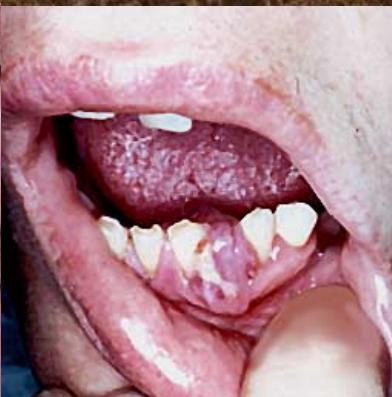
# Peripheral Ossifying Fibroma



# Peripheral Giant Cell Granuloma

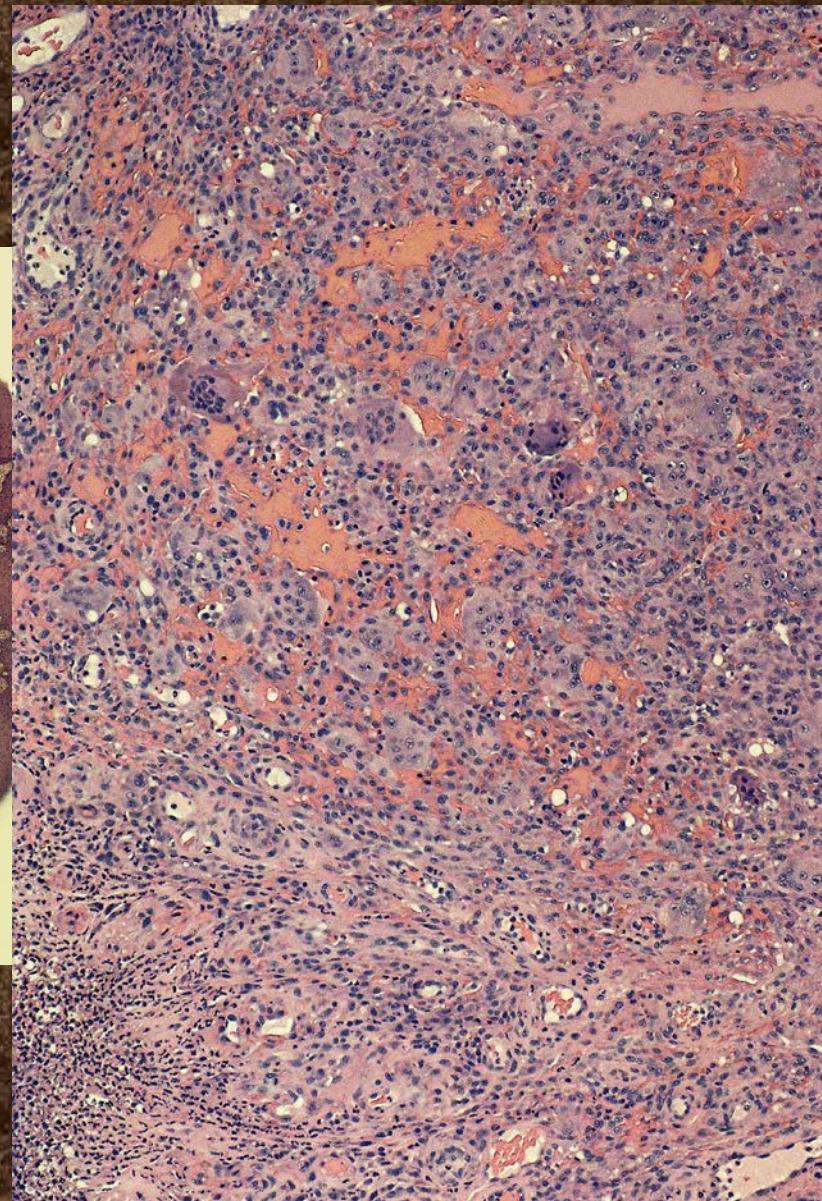
- Arises from Periostium
- Dentulous or Edentulous Regions
- Bluish Purple
- Invasive, erodes underlying bone
- Hypercellular Fibrovascular
  - Multinucleated Giant Cells
- Excise deeply, subperiosteal

# Peripheral Giant Cell Granuloma



Early  
recurrence

# Peripheral Giant Cell Granuloma



# Peripheral Odontogenic Cysts and Tumors

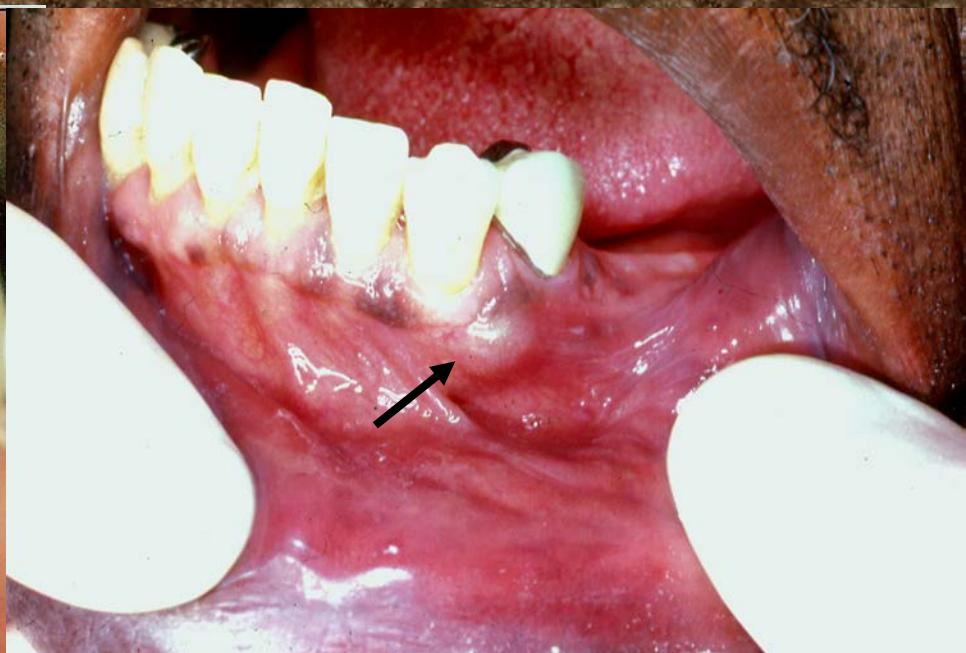
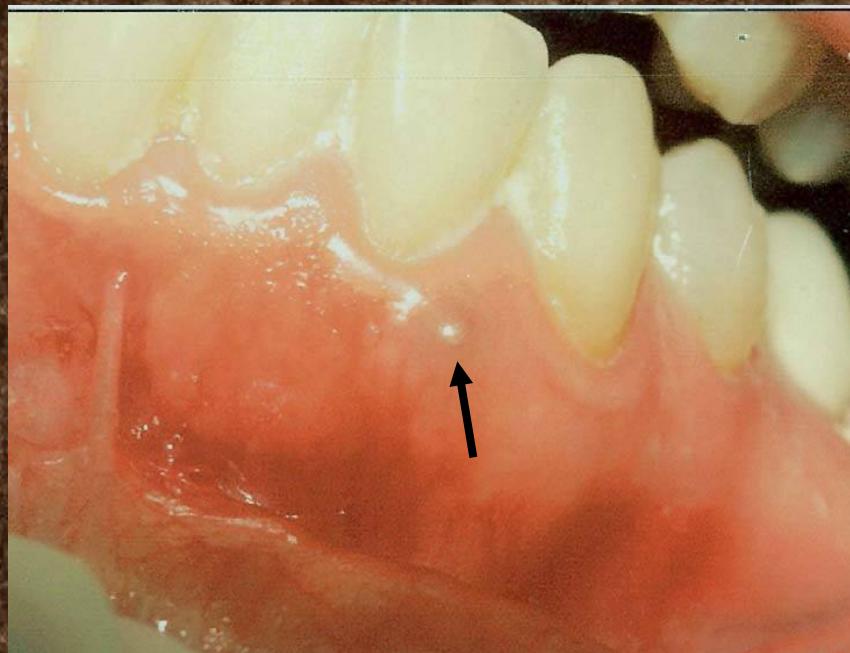
- Cysts
  - Dental Lamina Cysts of the Newborn
  - Adult Gingival Cyst
  - Peripheral CEOC (Gorlin)
- Tumors
  - Ameloblastoma
  - Calcifying Epithelial Odontogenic Tumor
  - Dentinogenic Ghost Cell Tumor
  - Odontogenic fibroma

# Gingival Cysts

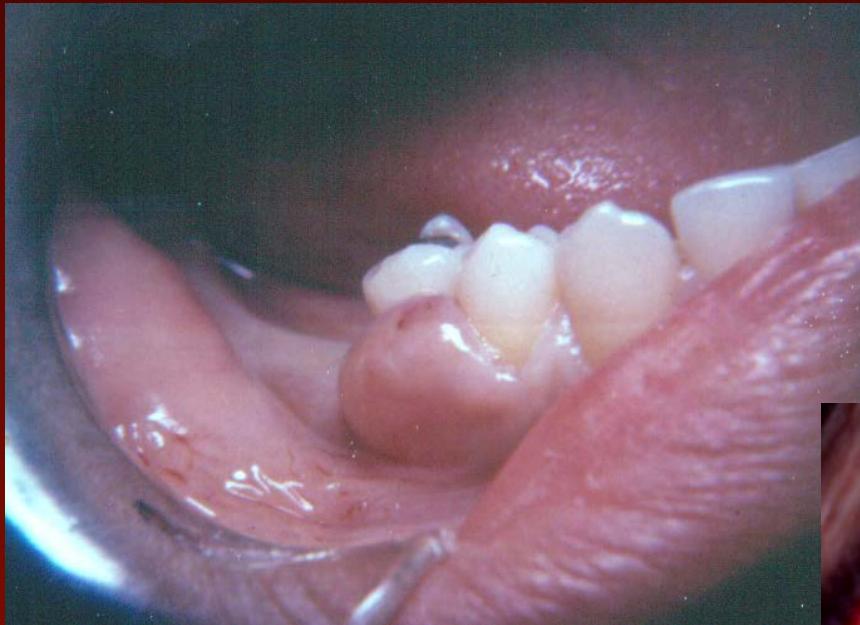
- Dental Lamina Cyst
  - Edentulous ridges of newborn
  - Keratinizing diminutive cysts
  - Spontaneous resolution
- Adult Gingival Cyst
  - Buccal Attached Gingiva
  - Peripheral Counterpart to Lateral Periodontal Cyst
  - Nonkeratinizing (squamous/cuboidal)

# Dental Lamina Cyst of the Newborn

# Adult Gingival Cyst



# Mesenchymal tumors



neurofibroma



hemangioma

# Peripheral Odontogenic Tumors are Not Aggressive

- Gingiva and Tooth Bearing Alveolar Ridge
- May erode underlying bone
- Simple excision
- Histologic Types:
  - Ameloblastoma
  - Calcifying Epithelial Odontogenic Tumor
  - Dentinogenic Ghost Cell Tumor
  - Odontogenic fibroma

# Peripheral Odontogenic Tumors

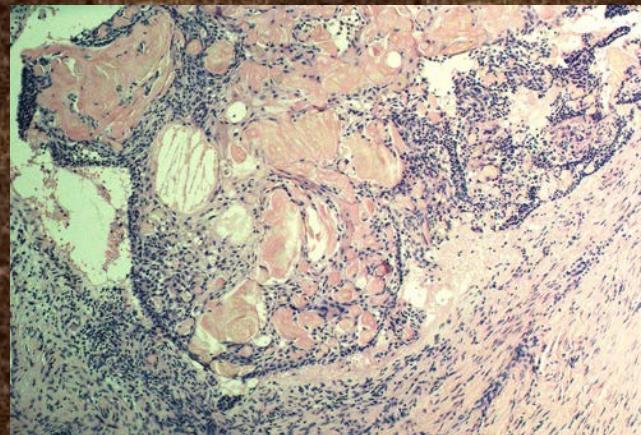
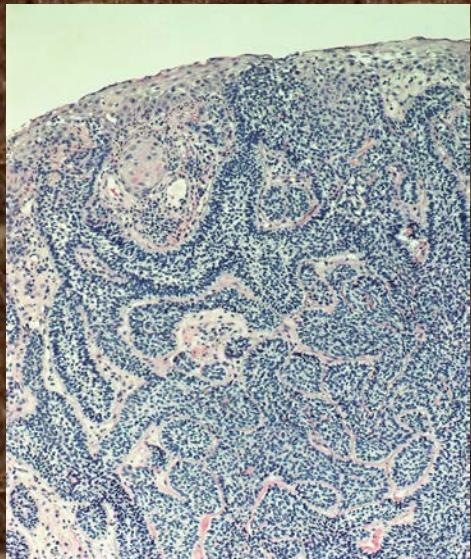
- Odontogenic Ghost Cell tumor
- Odontogenic Fibroma



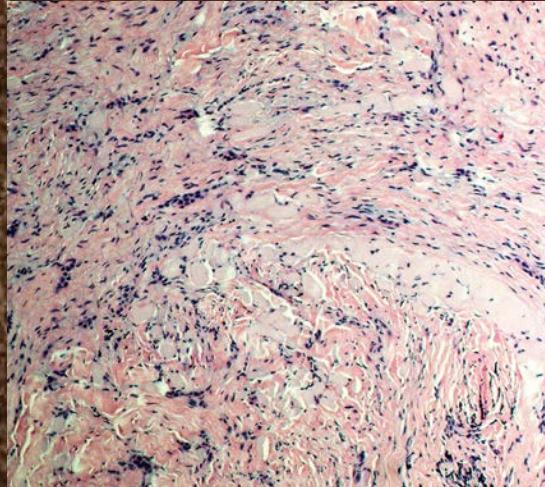
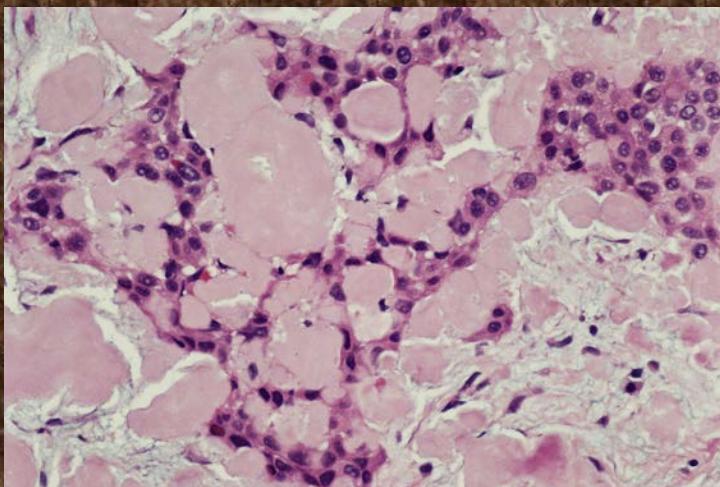
Peripheral Ameloblastoma

# Peripheral Odontogenic Tumors

- Ameloblastoma
- Gorlin Cyst (OGCT)



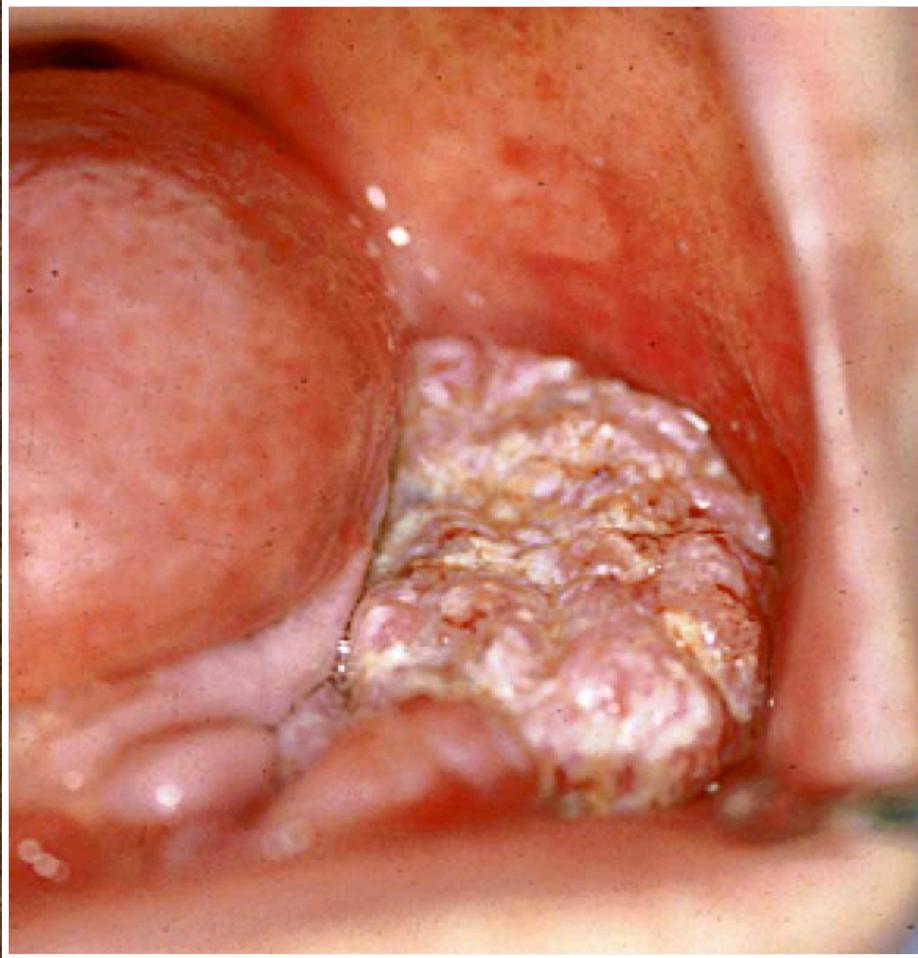
- Pindborg (CEOT)
- Odontogenic Fibroma



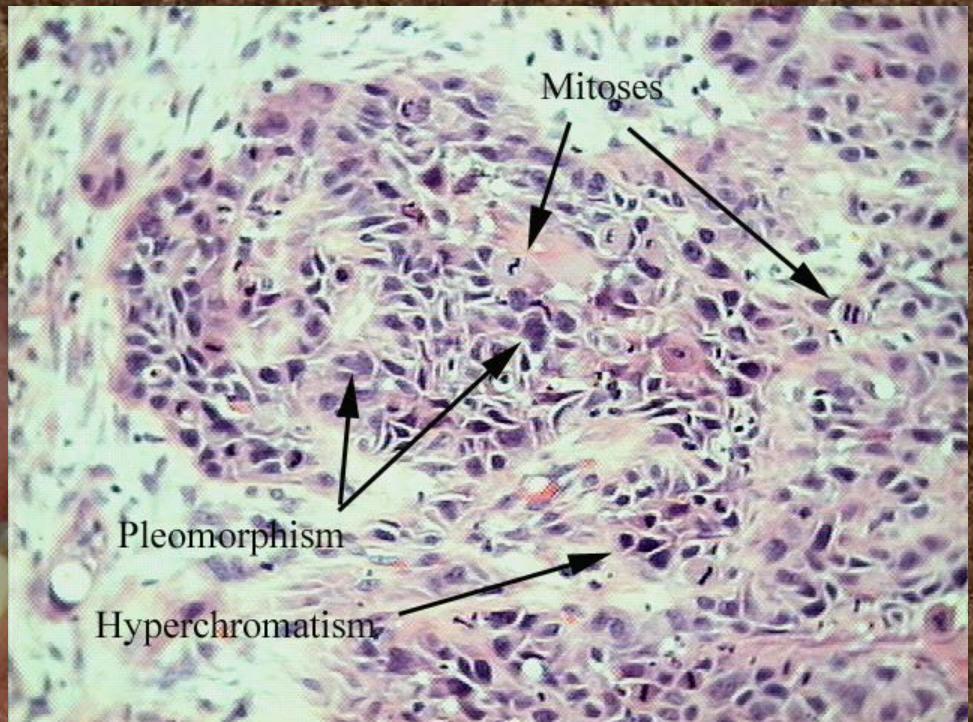
# Squamous Cell Carcinoma

- Indurated and Ulcerated Mass
- Mandibular gingiva>Maxillary
- Associated Risk Factors
- Periosteal and Osseous Invasion
- Regional and Distant Mets
- Resection and XRT

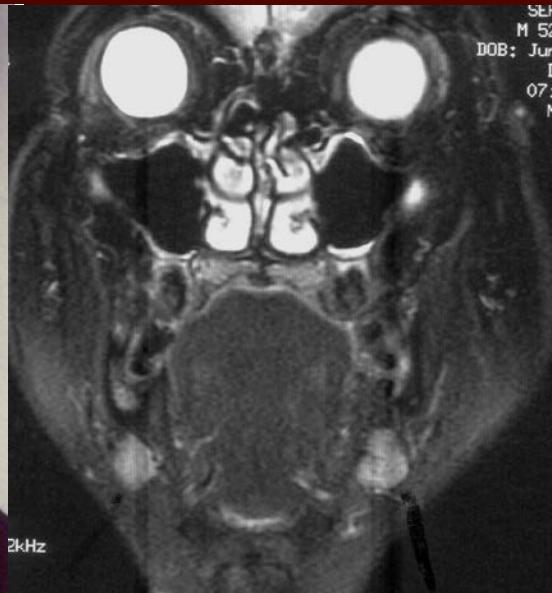
# Squamous Cell Carcinoma



# Squamous Cell Carcinoma



# Metastatic Carcinoma



Primary in  
kidney

# Intraosseous Lesions

- Infections
- Cysts
- Odontogenic Tumors
- Nonodontogenic Tumors

Most are diffuse, fusiform  
enlargements of the alveolus

Radiographs will disclose a  
central lesion

# Diffuse Gingival Enlargements



# Diffuse Gingival Enlargement

- Hormonal Gingivitis
  - Pregnancy, Puberty
- Drug Induced Hyperplasia
  - Dilantin, Cyclosporin, Calcium Channel Blockers
- Fibromatosis Gingivae
- Plasma Cell Gingivitis
- Wegener's Granulomatosis
- Leukemia

# Plasma Cell Gingivitis



# Cyclosporin



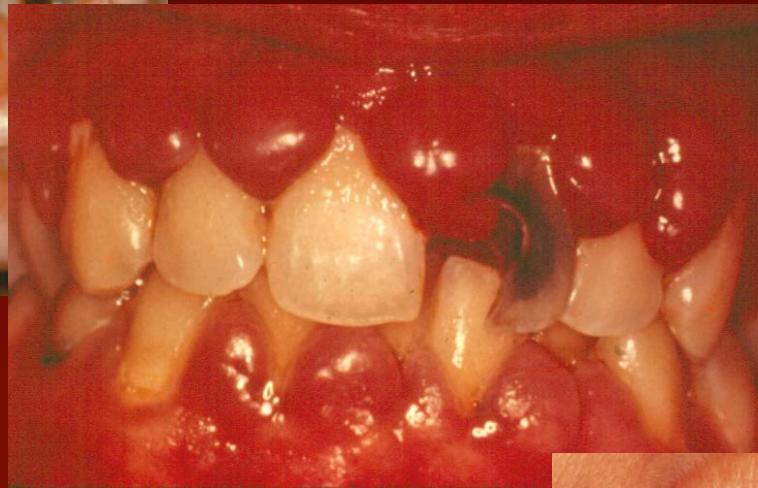
# Dilantin



# Pregnancy Gingivitis



# Leukemia



# Wegener's Granulomatosis



“strawberry gums”