

Differential Diagnosis of Radiolucent Lesions of the Jaws

Periapical Radiolucencies

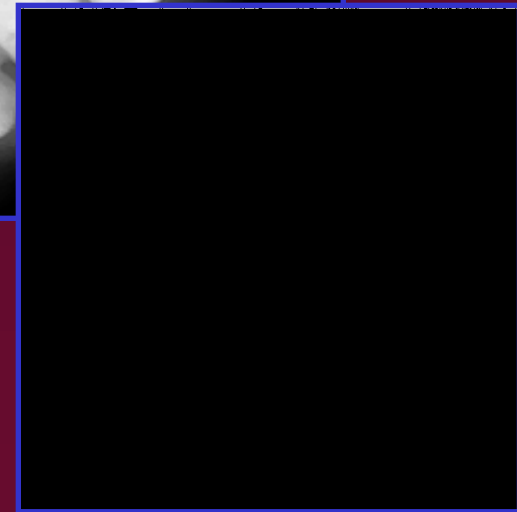
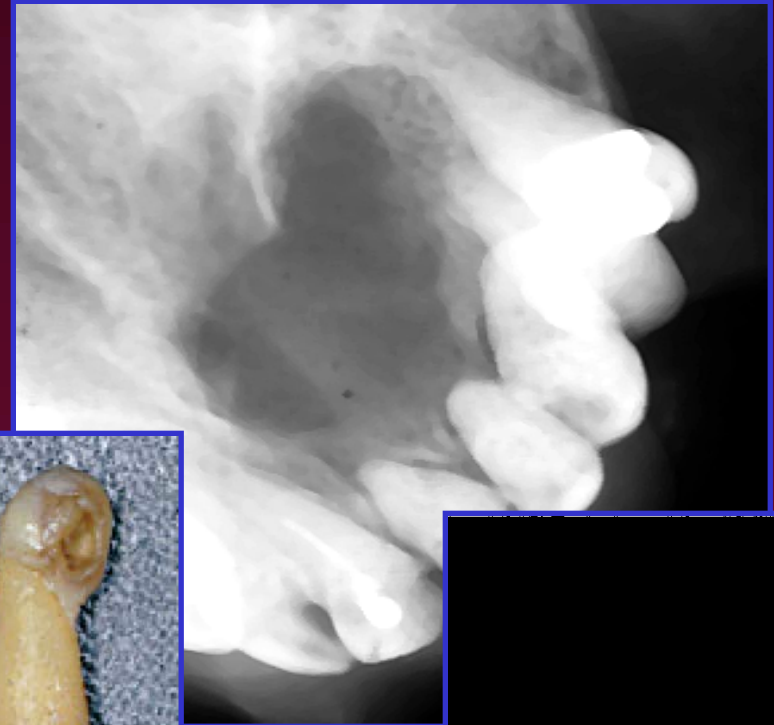
- Endodontic Apical Lesions
 - Granuloma, Abscess, Cyst
- Traumatic Bone Cyst
- Incisive Canal Cyst
- Paradental (Infected Buccal) Cyst
- Median Mandibular Cyst
- Periapical Cemental Dysplasia
- Benign Cementoblastoma
- Central Giant Cell Granuloma
- Submandibular Salivary Depression
- Rare Lesions



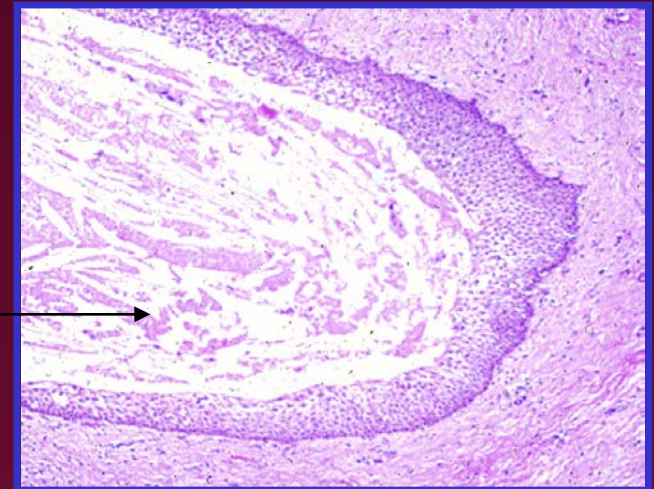
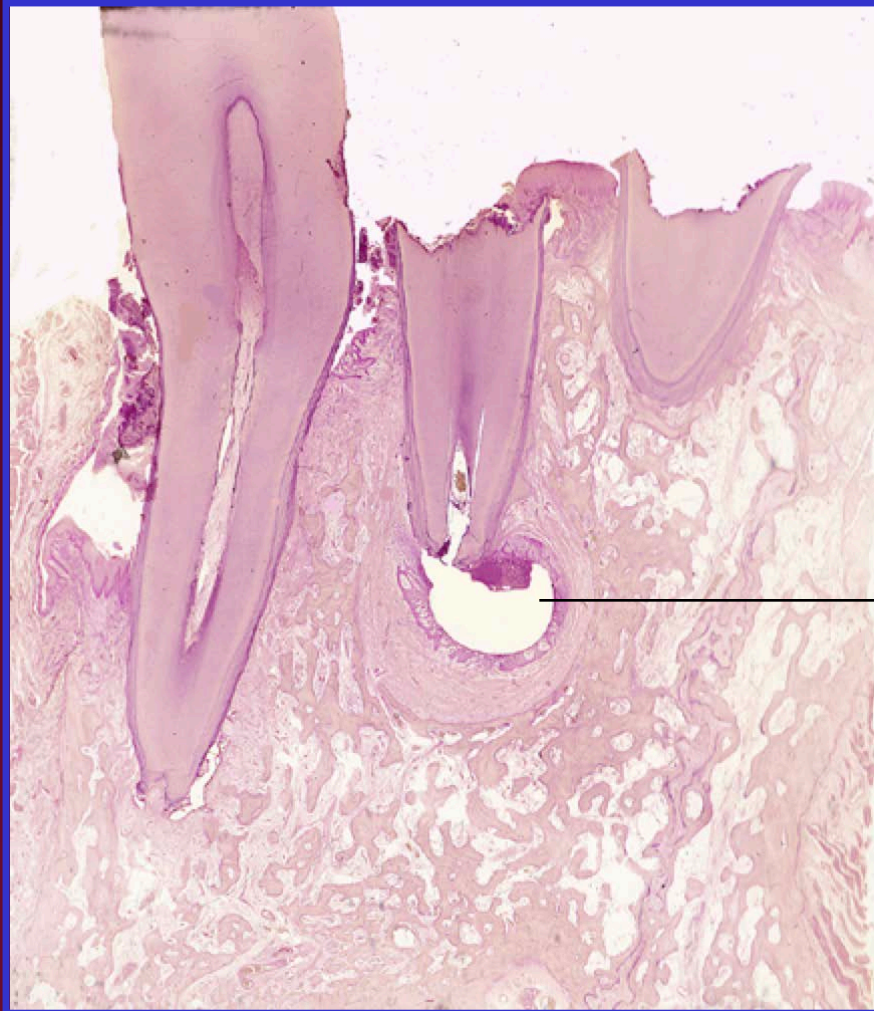
Pulp Necrosis Sequelae

- Non Vital Teeth
- Periapical Abscess
 - Widened apical PDL
 - Percussion pain
- Chronic Apical Periodontitis
 - Periapical Granuloma
- Apical Periodontal Cyst
 - Radicular Cyst

Endodontic PA Lesions



Apical Lesions



Endo-Perio Inflammatory Lesions

- Alveolar bone loss to involve apex
- Perio in Origin
- Endodontic Origin
- Combination Origins

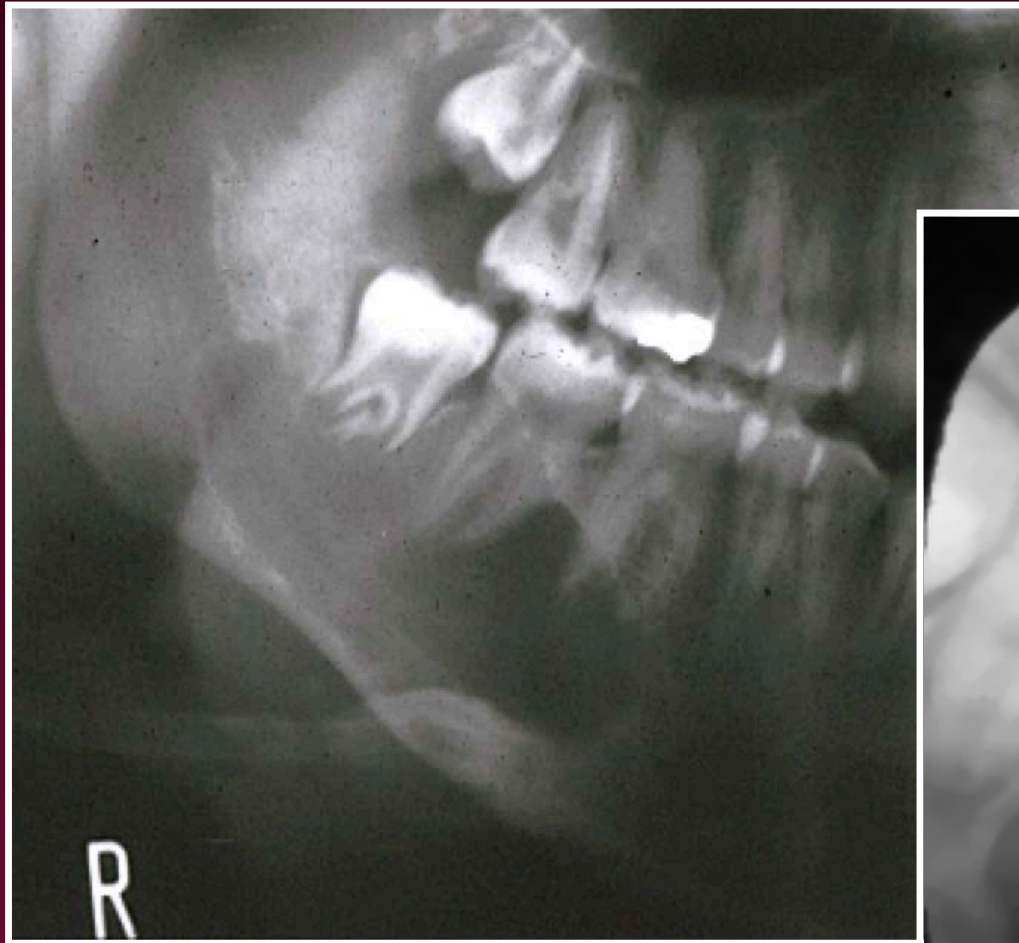
Endo-Perio Infection



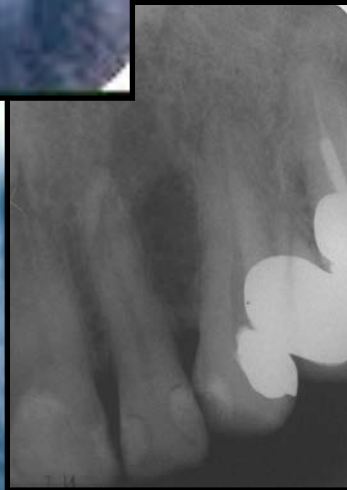
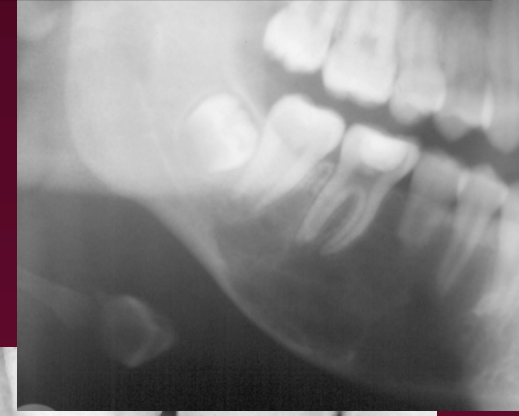
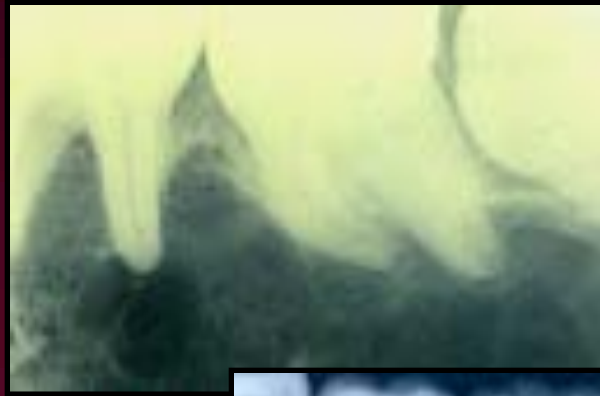
Traumatic Bone Cyst

- Most have no trauma history
- Young adults
- Scallop between roots
- Vital teeth
- Contents at surgery
 - Empty, fibrous membrane
 - Straw colored fluid
- Organize and ossify in 6-8 months

Traumatic Bone Cyst



Traumatic Bone Cysts



Incisive Canal Cyst

- Remnants of Nasopalatine Duct
- Oval/Pronate Shape
- Vital Teeth
- Root Divergence
- Respiratory Epithelium
- Neurovascular Bundle

Incisive Canal Cyst



Incisive Canal Cysts



Paradental Cyst

- Also known as infected buccal cyst
- An odontogenic cyst that arises from the buccal aspect of mandibular molar teeth, either from the rests of Malassez or from a displaced dentigerous cyst
- Cyst has no continuity with the sulcus, nor a periodontal pocket
- Radiolucency is superimposed over the roots
- Microscopic: SSE, inflamed cyst wall
- Tx: Enucleation/curettage

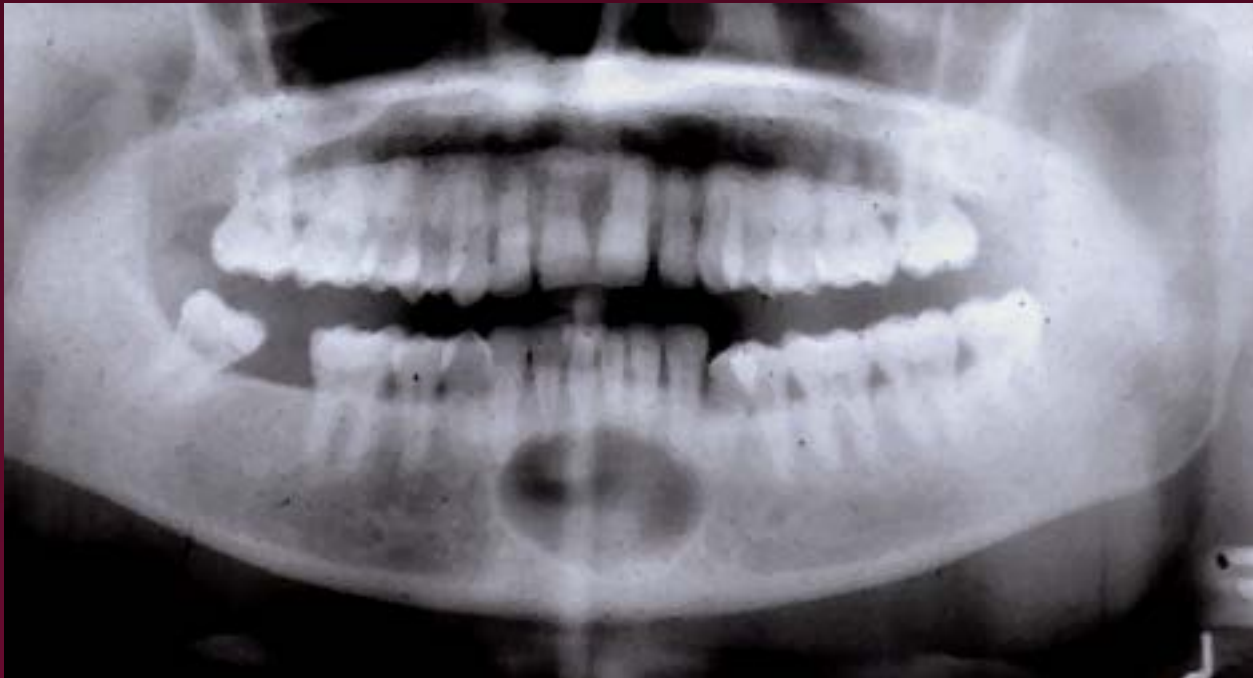
Paradental Cyst



Median Mandibular Cyst

- A developmental cyst of unknown origin
- May be odontogenic, arising from rests of Malassez OR a fissural developmental cyst arising from entrapped epithelium left from embryonic fusion of the merging mandibular processes
- Midline mandible underlying the incisors
- Well circumscribed unilocular radiolucency
- Teeth are vital
- SSE lining, occasional areas with ciliated respiratory type of epithelium
- Tx: Enucleation/curettage

Median Mandibular Cyst

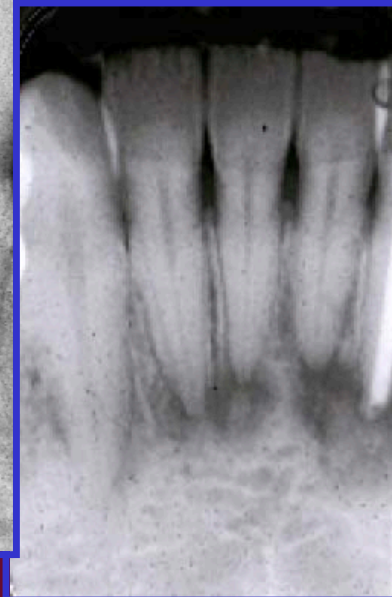


Periapical Cemental Dysplasia

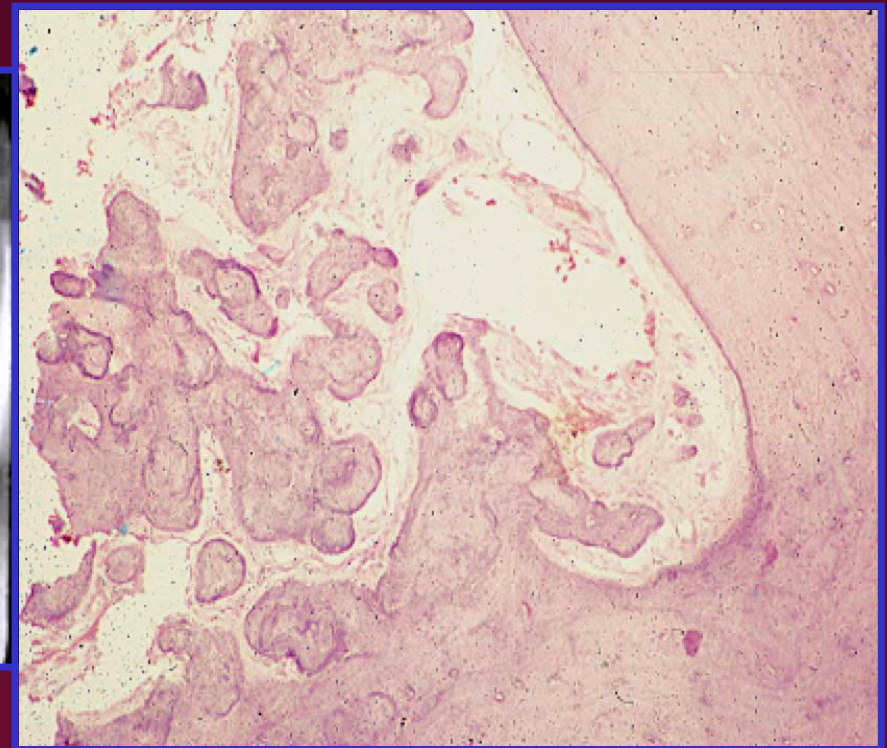
- Midlife, Black Females
- Multiple Lesions
- Anterior Teeth, sometimes premolars
- Teeth are vital
- Nonexpansile
- Progressive opacification
- No Treatment

Periapical Cemental Dysplasia

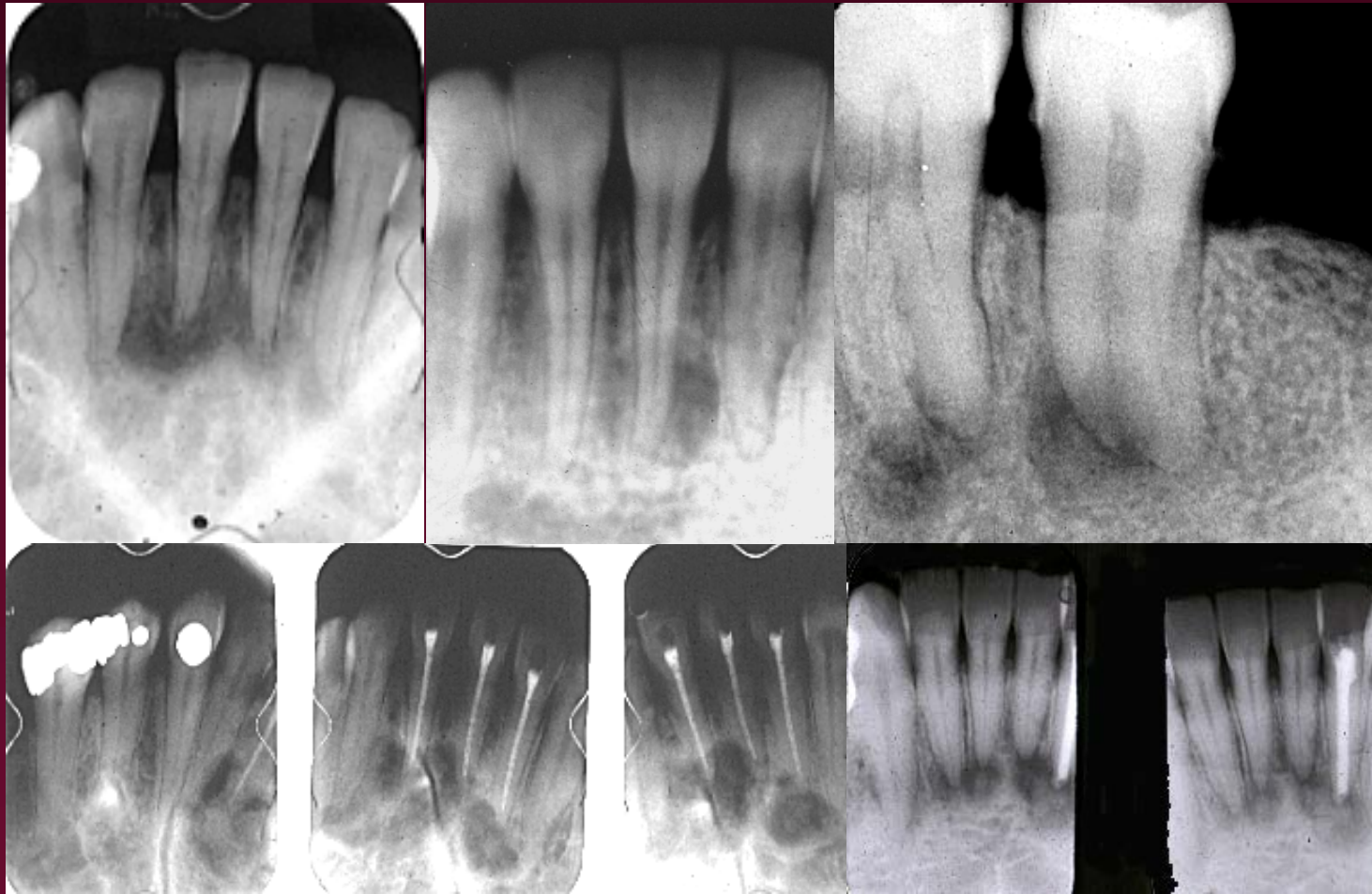
- Radiographic



- Histopathology



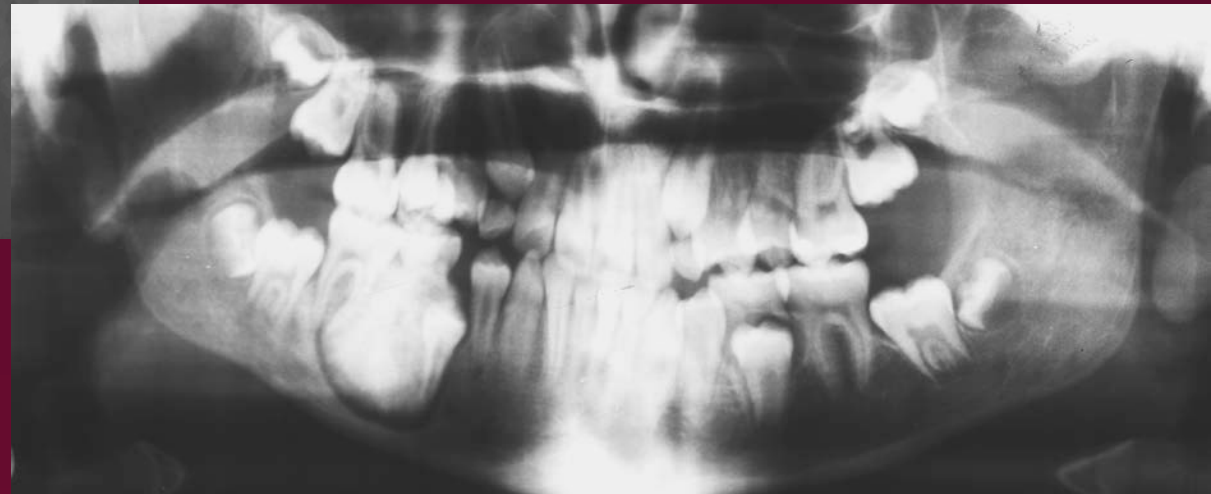
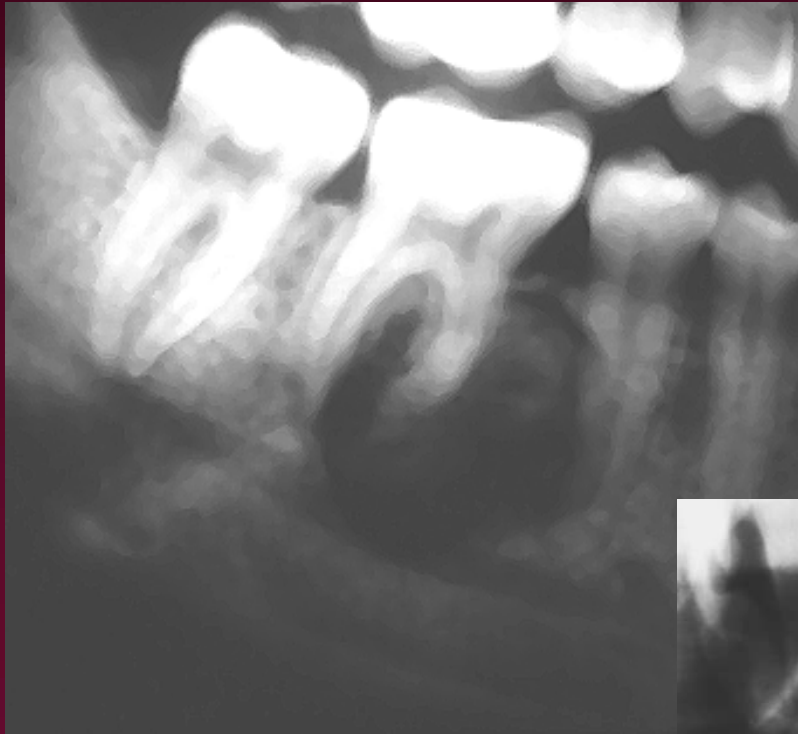
PACD



Benign Cementoblastoma

- Lucent in early, precalcified phase
- Expansile
- First Molars
- Lucency extends up furcation to envelop roots
- Vital Tooth
- Ankylosed sound to percussion, tumor is fused to root cementum

Benign Cementoblastoma

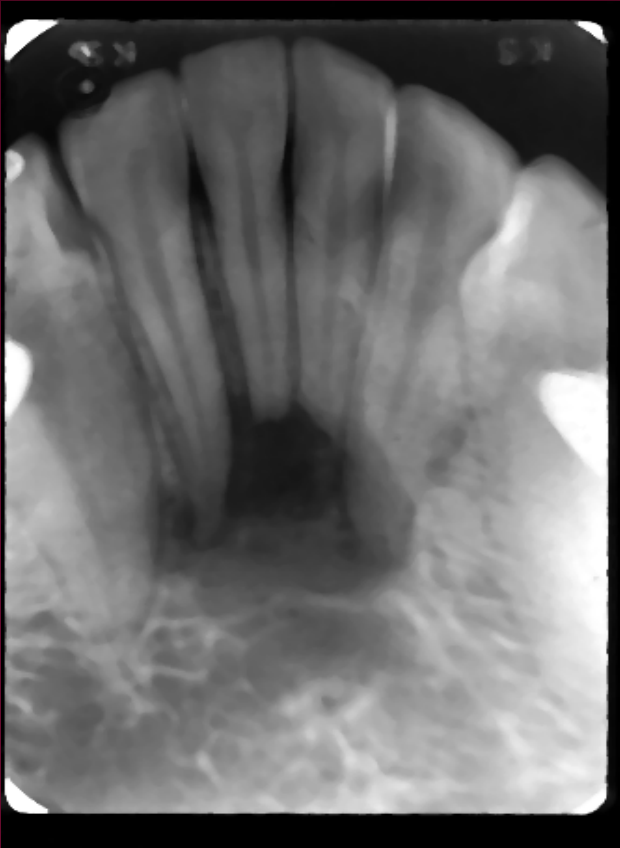


Central Giant Cell Granuloma

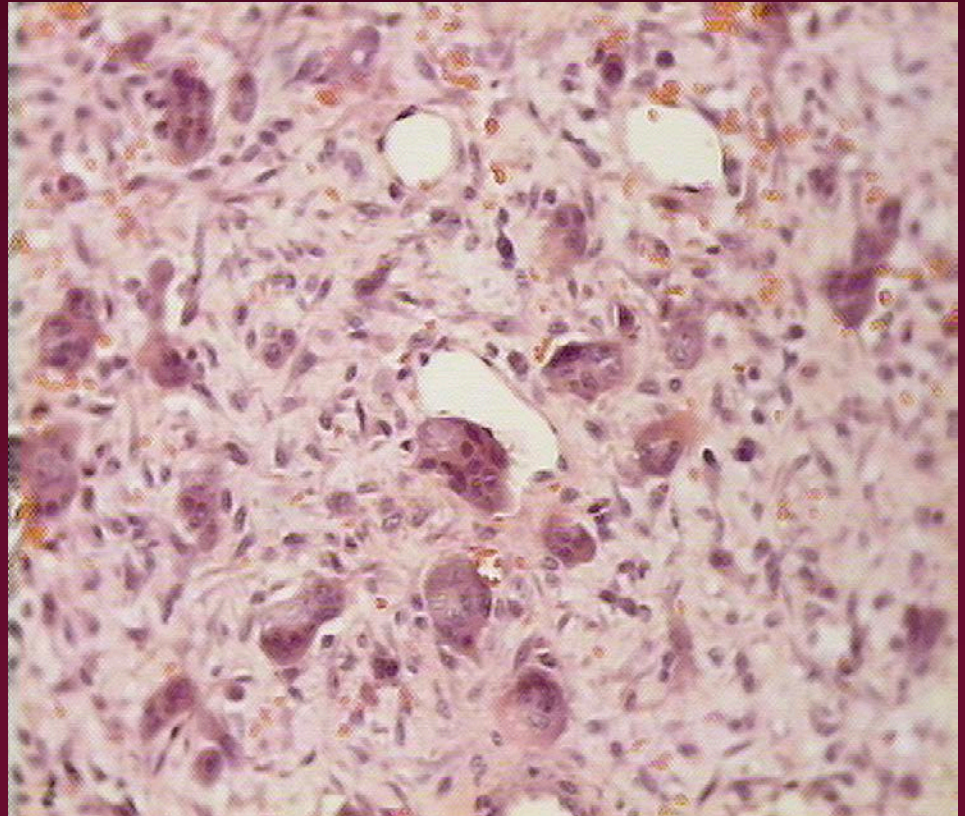
- Begins as apical lucency
- Enlarges to multilocular lesion
- Anterior to first molar
- Teens, Adults
- Expansile
- R/O Hyperparathyroidism
- Curettage vrs Intralesional Steroids

Central Giant Cell Granuloma

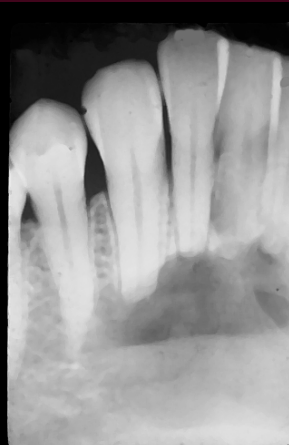
- Radiographic



- Histopathology



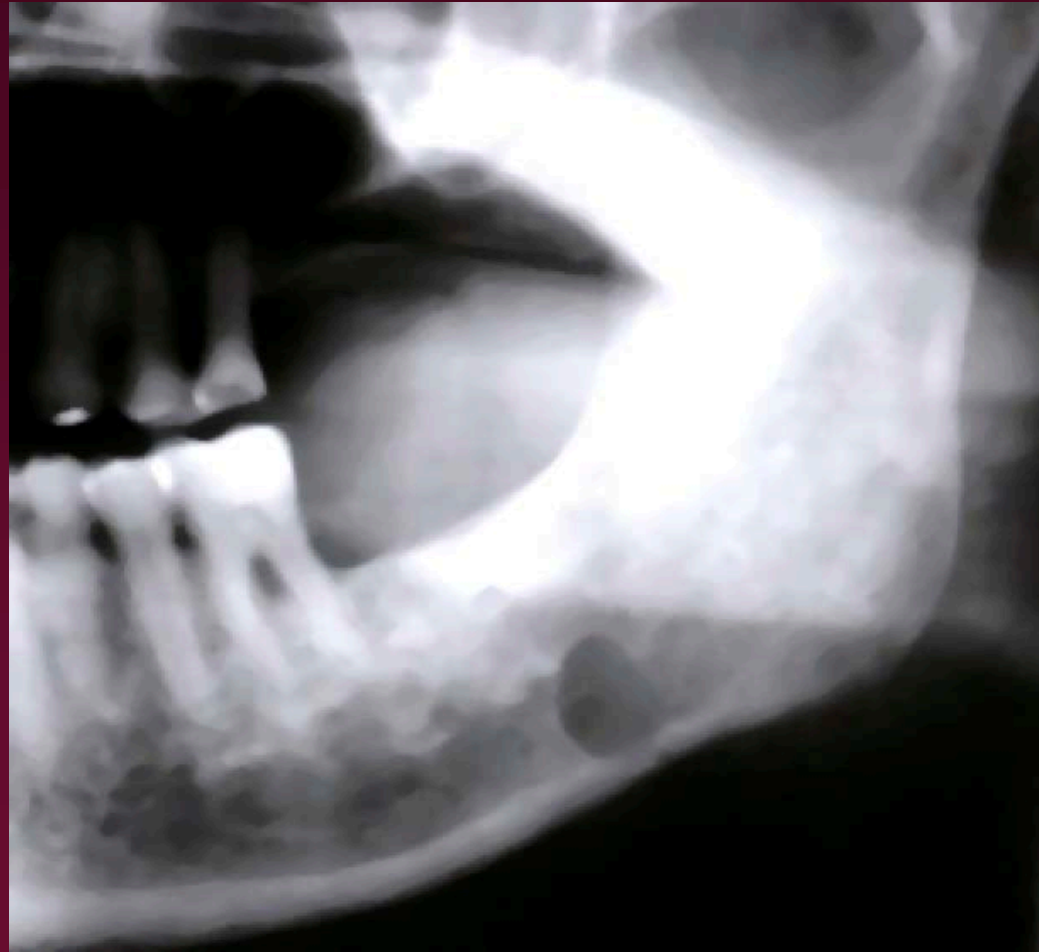
CGCG



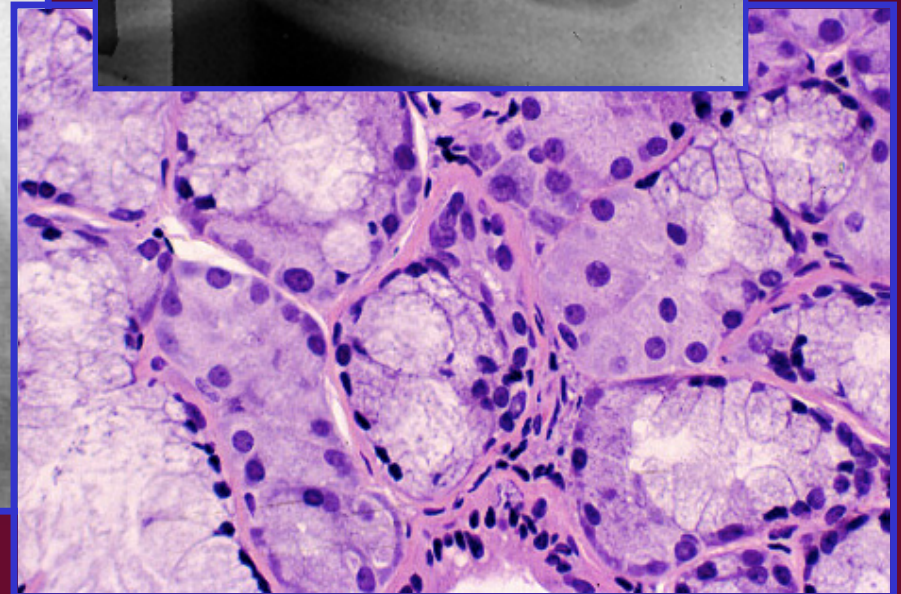
Submandibular Salivary Depression (Staphne's Cyst)

- Below inferior alveolar canal
- Second molar region
- Some are bilateral
- Nonexpansile,
- Well demarcated
- No Treatment
- Sublingual depression, cuspid region

Submandibular Salivary Depression



Sublingual Salivary Depression

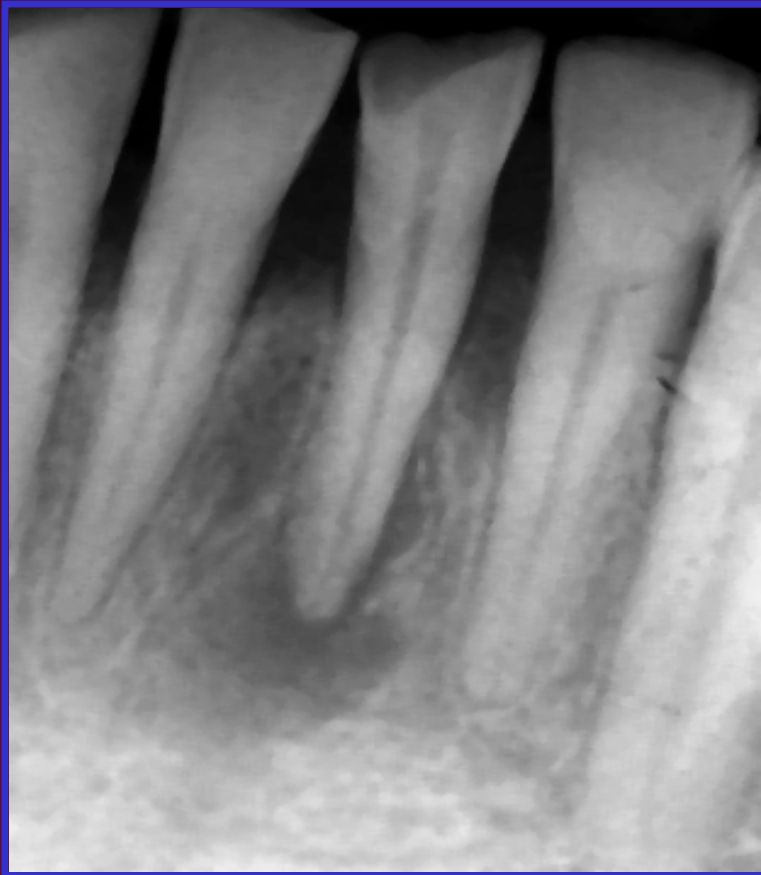


Rare Lesions, Malignancies

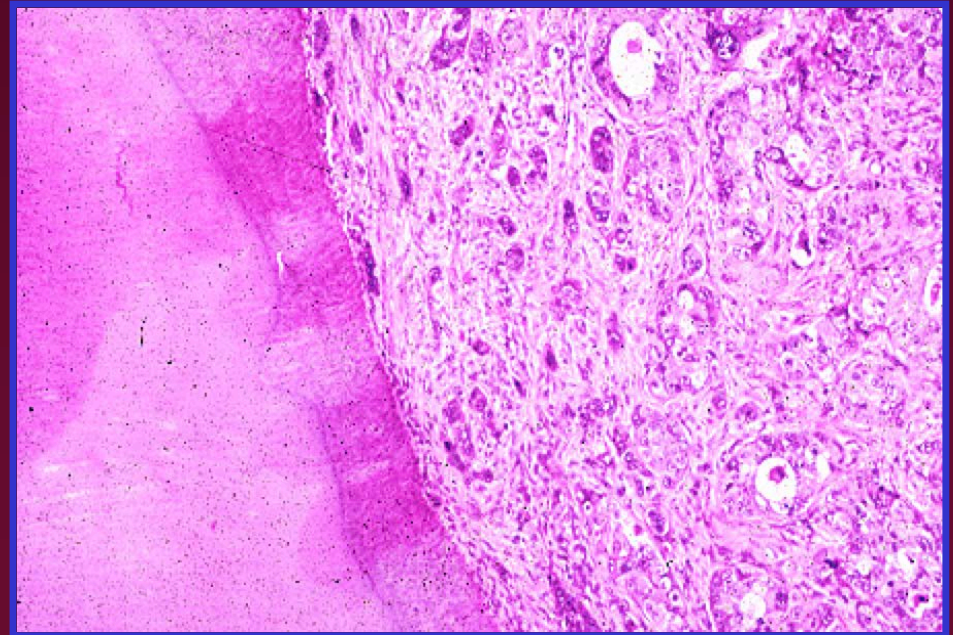
- Metastatic Carcinoma
- Primary Intra-alveolar Carcinoma
- Sarcomas

Metastatic Carcinoma

- Radiographic

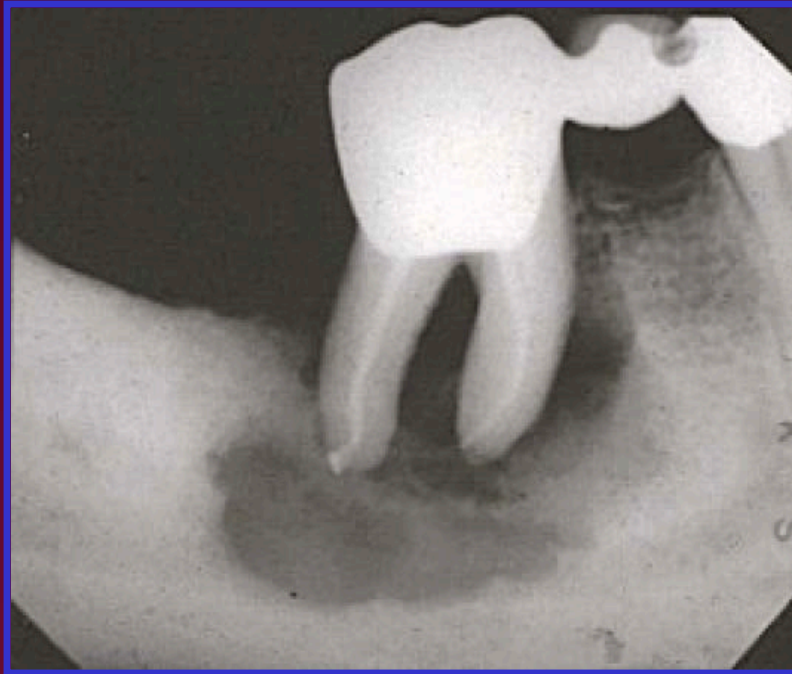


- Histopath, Breast CA



Intra-Alveolar Squamous Cell CA

- Radiographic



- Histopathology

