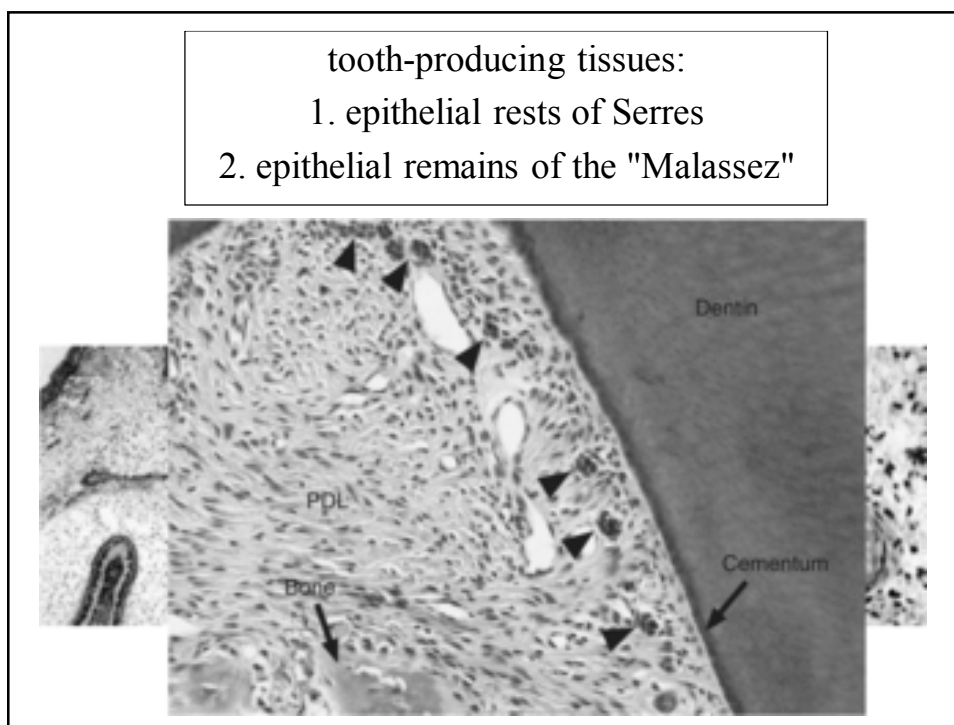
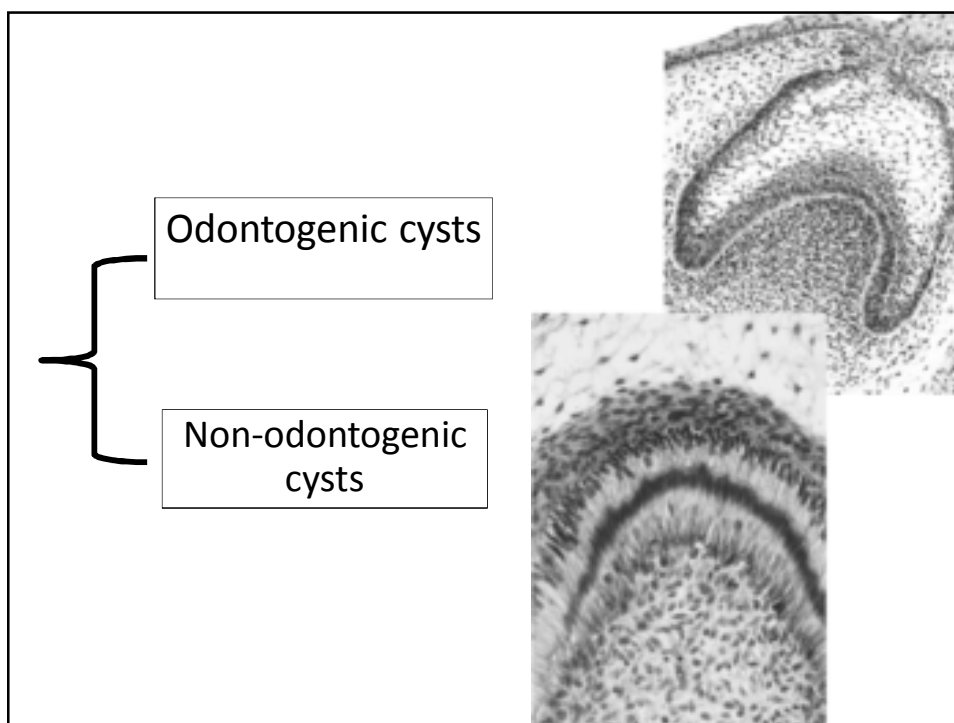
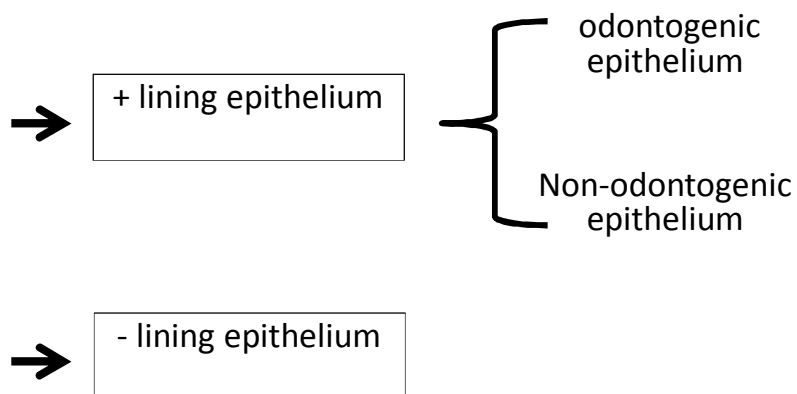
A cartoon illustration of three balloons. The top balloon is light gray and has a smiling face. The two bottom balloons are dark gray and also have smiling faces. They are tied together with wavy lines representing strings.

**Cysts in oral cavity**

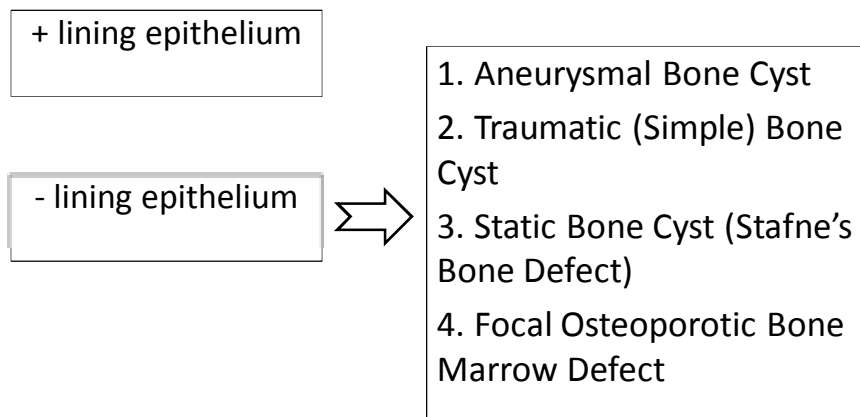
Dr. Amirah Alnour DDS, MSD (oral pathology), PhD Damascus university DUPO (Saint Josef University) MMSc- medical education
---



## Classification



## Classification



## Classification

+ lining epithelium



Non-odontogenic  
epithelium



- lining epithelium

1. Globulomaxillary Cyst/Lesion
2. Nasolabial Cyst
3. Median Mandibular Cyst
4. Nasopalatine Duct (Incisive) Canal Cyst

## Classification

+ lining epithelium



Odontogenic  
epithelium

Inflammatory      Developmental

- lining epithelium

## Classification

### Inflammatory

1. Periapical (Radicular) Cyst
2. Residual cyst
3. collateral

### Developmental

1. Lateral Periodontal Cyst
2. Gingival Cyst
3. Dentigerous Cyst
4. Glandular Odontogenic Cyst
5. Odontogenic Keratocyst
6. Calcifying Odontogenic Cyst

Type	Source	Origin of Rests	Cyst Examples
Odontogenic rests	Rests of Malassez	Epithelial root sheath	Periapical (radicular) cyst
	Reduced enamel epithelium	Enamel organ	Dentigerous cyst
	Rests of dental lamina (rests of Serres)	Epithelial connection between mucosa and enamel organ	Odontogenic keratocyst (KOCOT)
			Lateral periodontal cyst Gingival cyst of adult Gingival cyst of newborn Glandular odontogenic cyst
Nonodontogenic rests	Remnants of nasopalatine duct	Paired nasopalatine ducts (vestigial)	Nasopalatine duct cyst

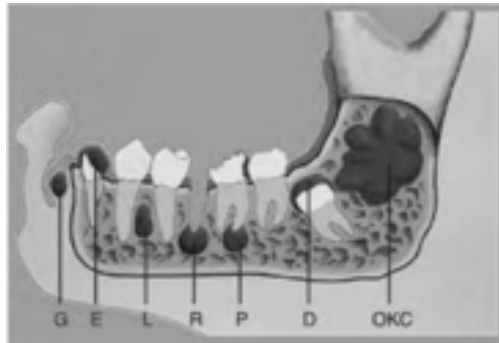
### Soft Tissue Cysts of the Neck

1. Branchial Cyst/Cervical Lymphoepithelial Cyst
2. Dermoid Cyst
3. Thyroglossal Tract Cyst



## Odontogenic cysts

- Asymptomatic
- Egg shell cracking



Bony expansion



Cortical thinning



Egg-shell cracking

#### Cytokeratins During odontogenesis:

CK7 & CK14 : stellatum reticulum at the early bell stages

CKCK7 & CK14 & 19: cells of the enamel epithelium;

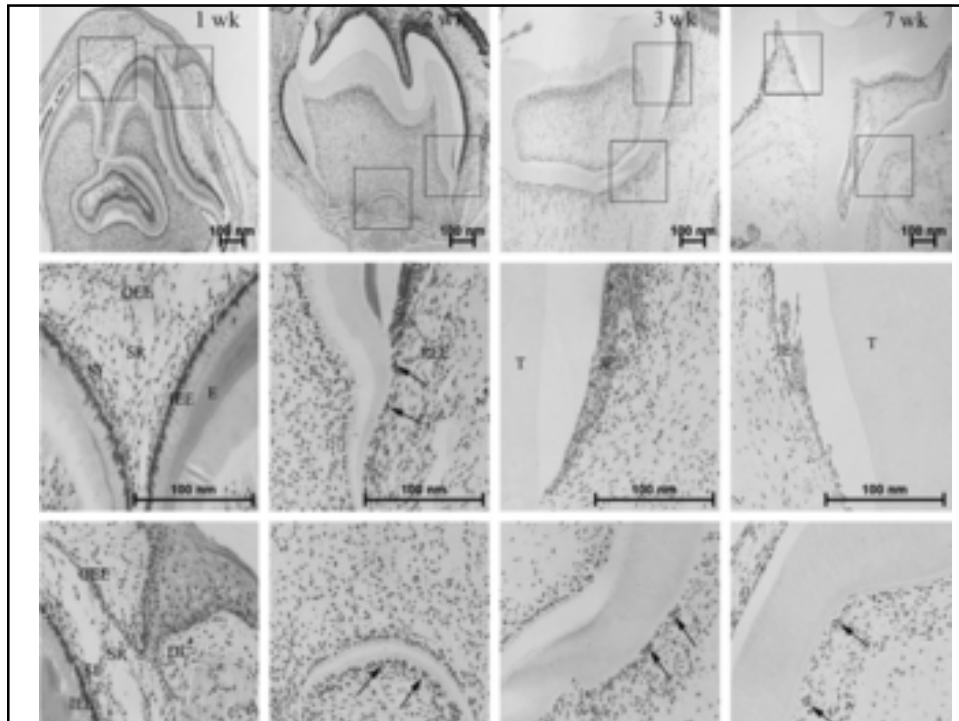
CK14: early bell stage and replaced by CK19 in differentiated ameloblasts;

CKs 7 & 13: in the "rests of Serres"

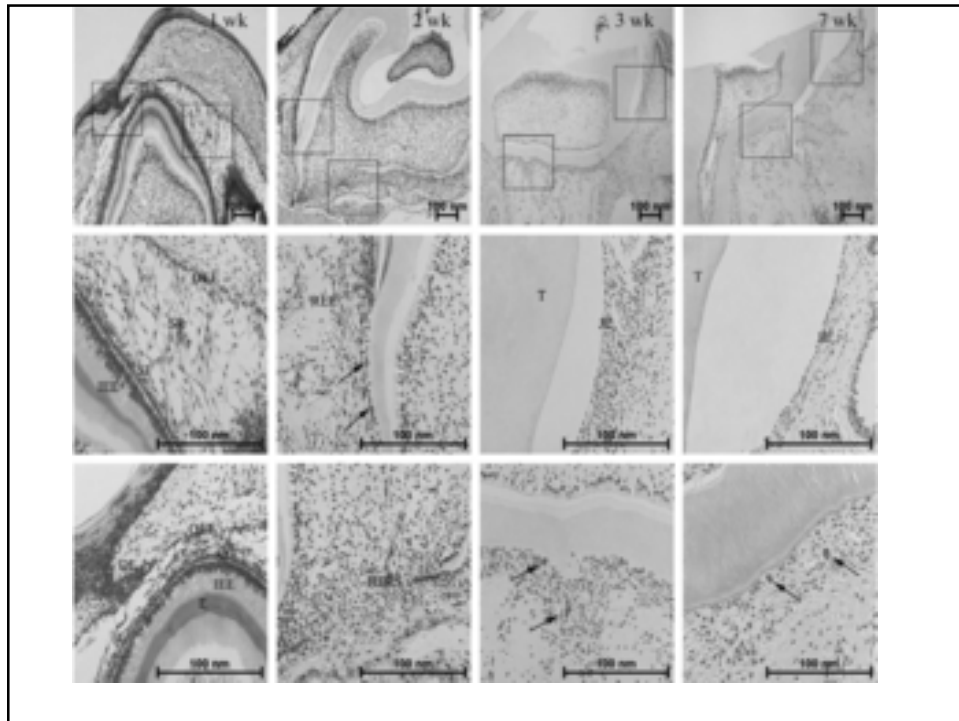
	Stellate reticulum	Enamel organ	Ameloblast	Rest of Serres
CK7	+	+		+
CK14	+	+		
CK19		+	+	
CK 13				+

CK19

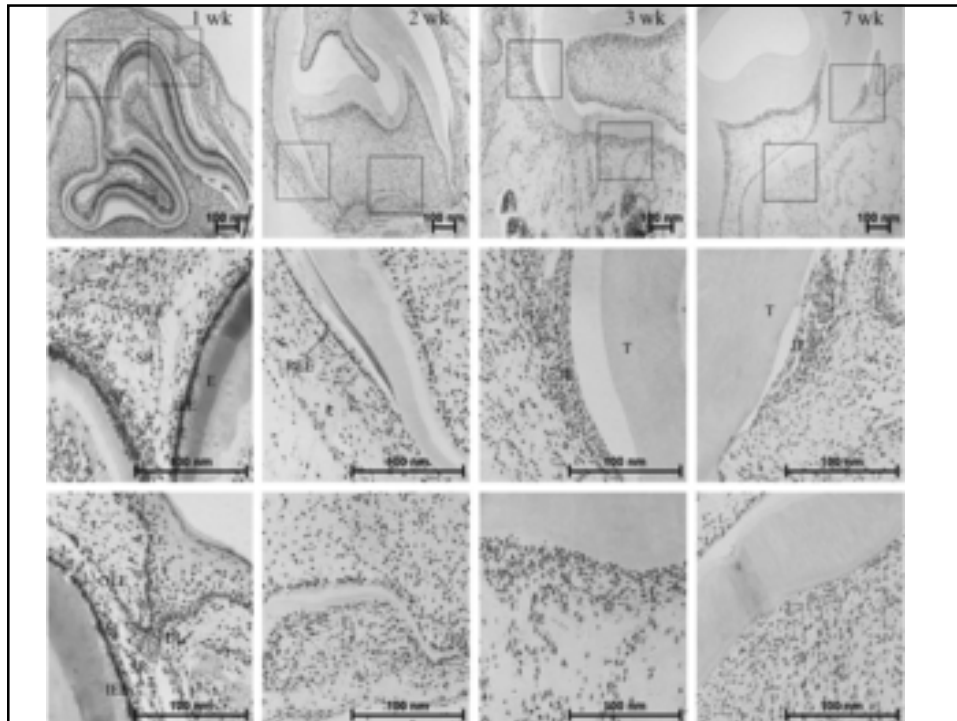




CK17



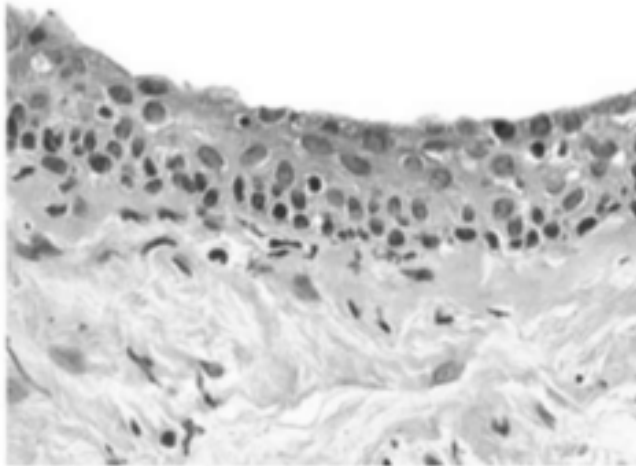
CK13



CKs 5 &6: all layers of the odontogenic cysts,  
 CK13: supra-basal cell layer of all odontogenic  
 cysts,  
 CK20: negative in all odontogenic cysts

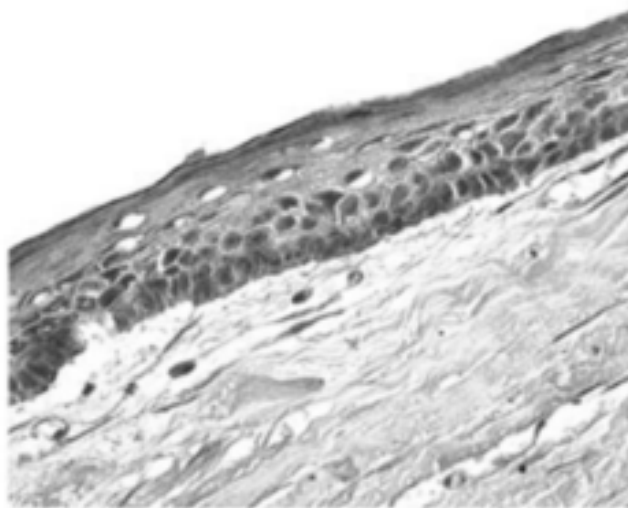
Ck15 dentigerous cyst: suprabasal layer

**A**

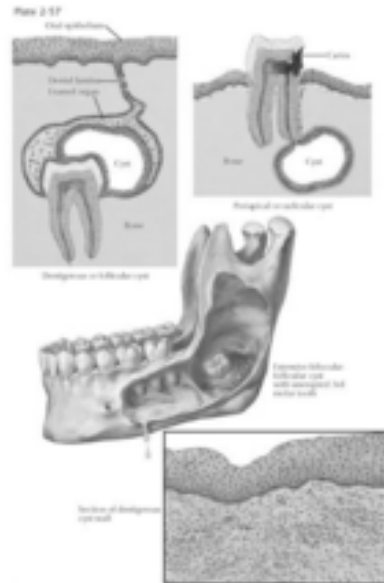


Ck15 in OKC: in almost all layers

**B**



## Odontogenic cysts

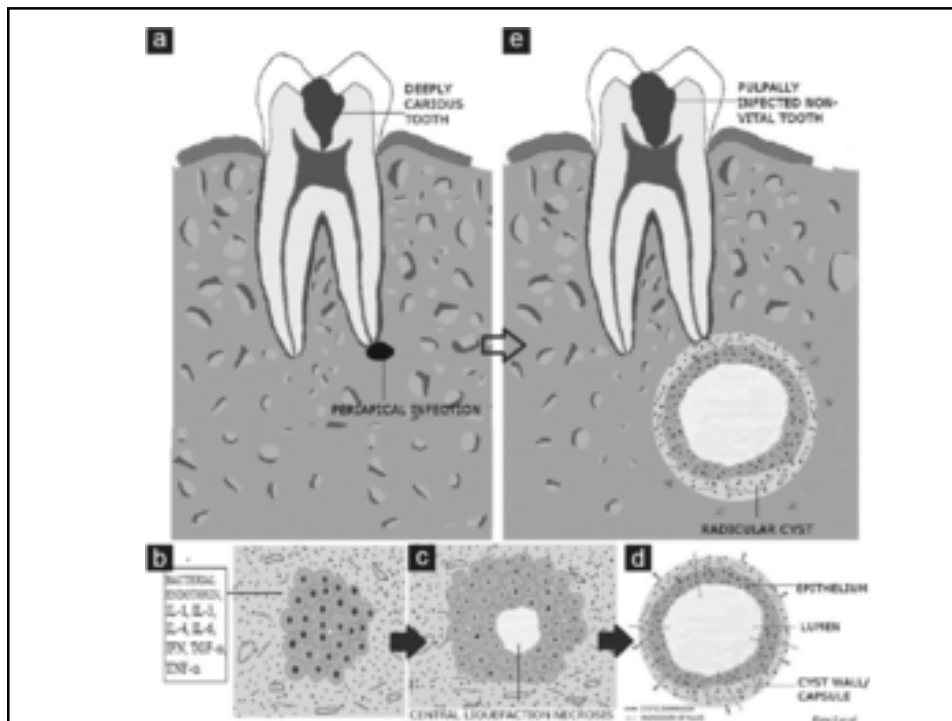
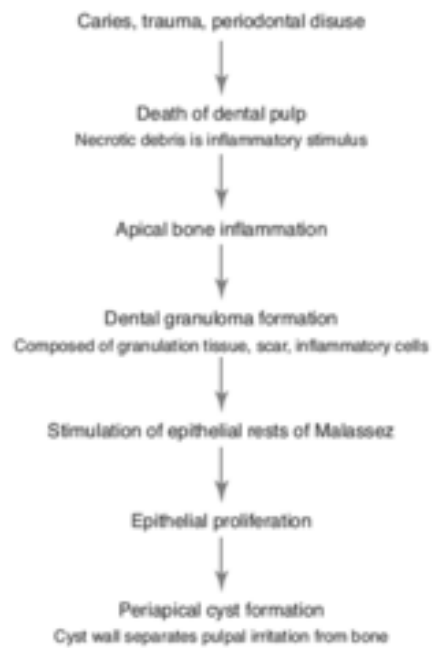


## Odontogenic cysts

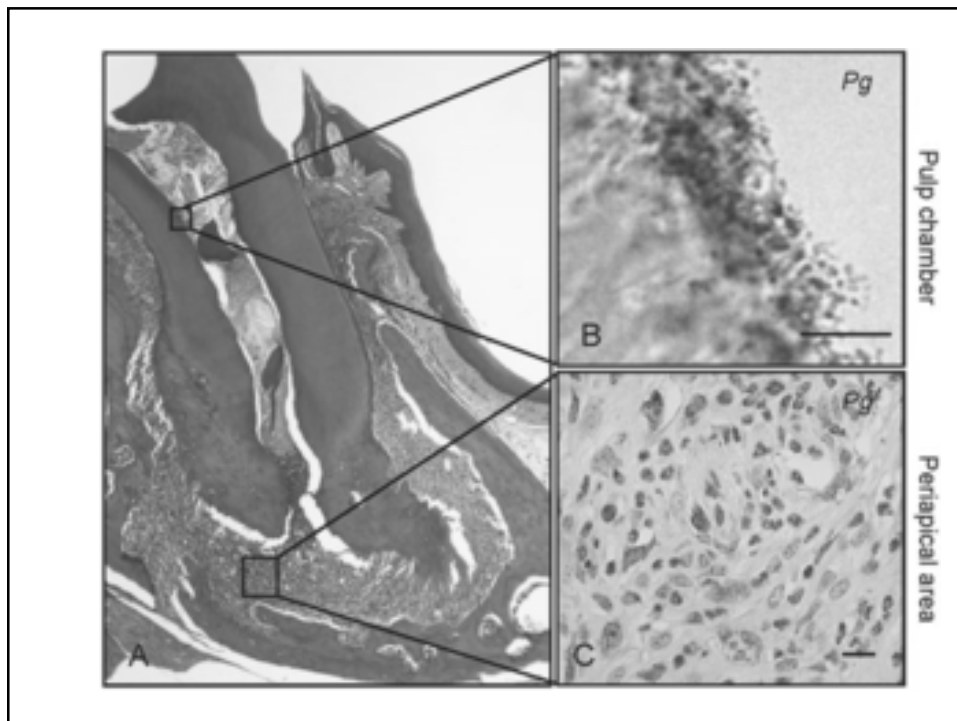
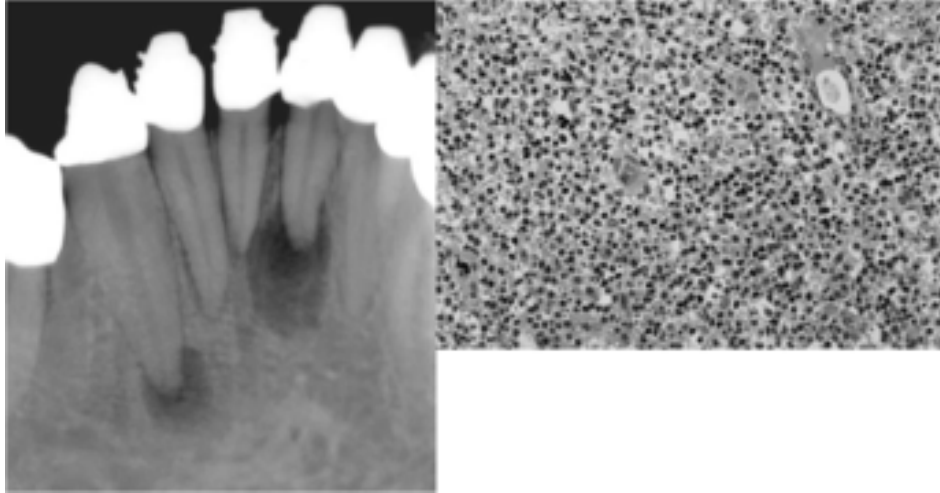
Inflammatory origin

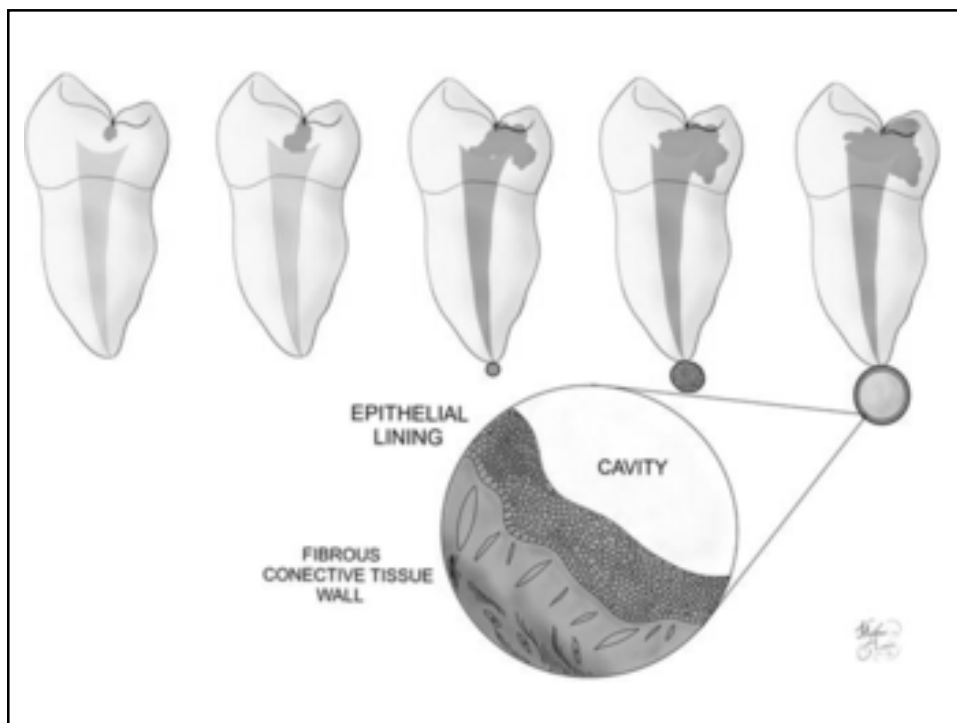
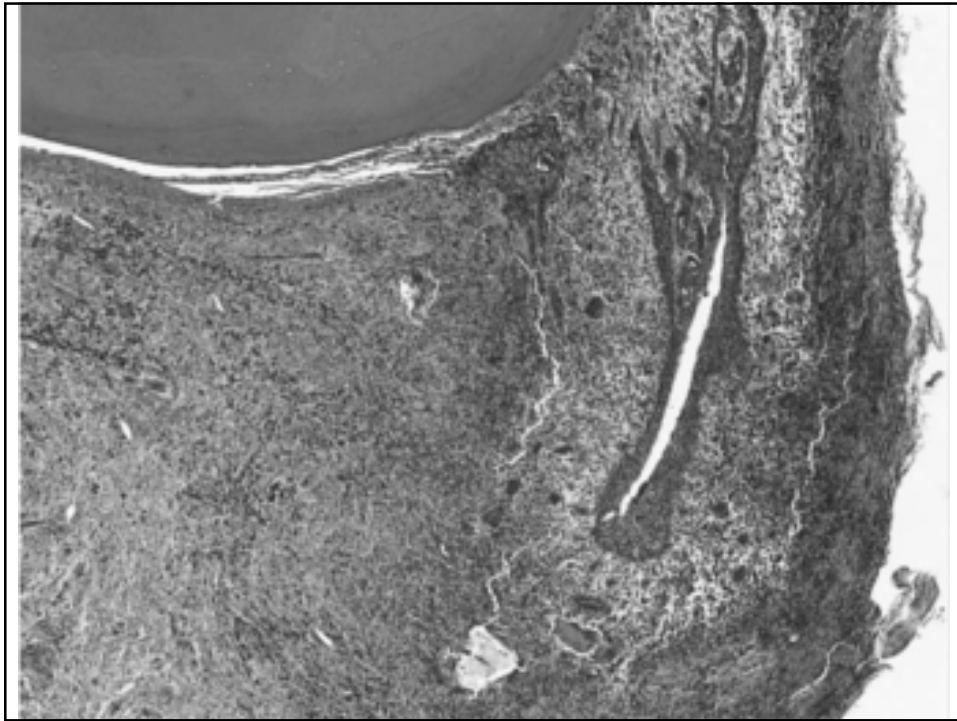
## Radicular cyst

1



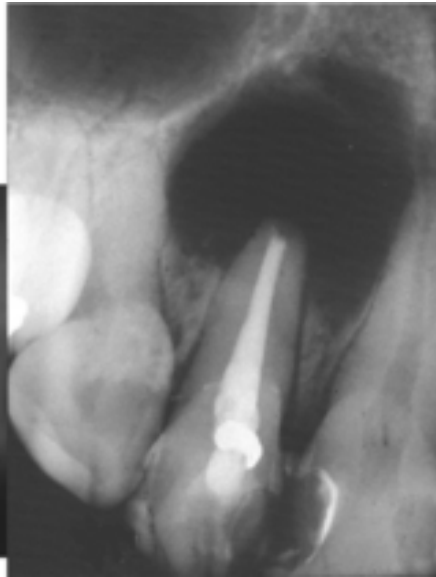
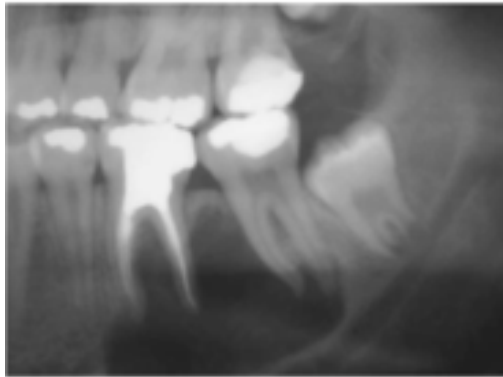
## Periapical granuloma



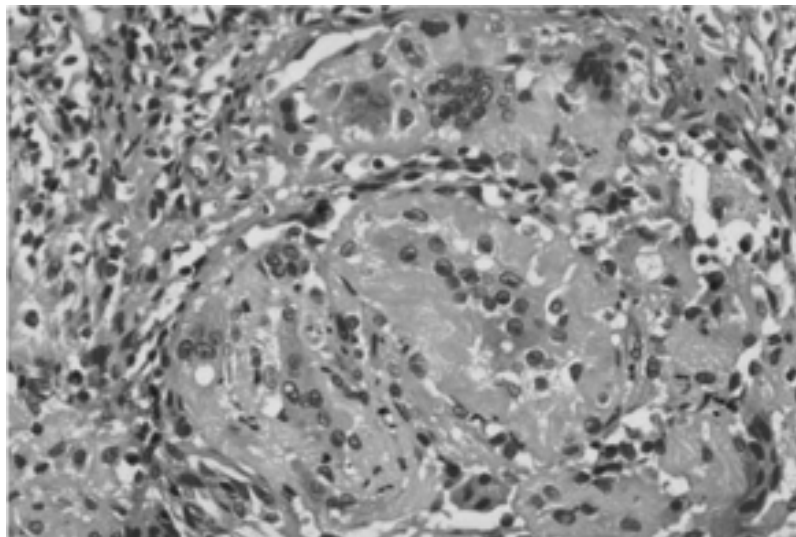


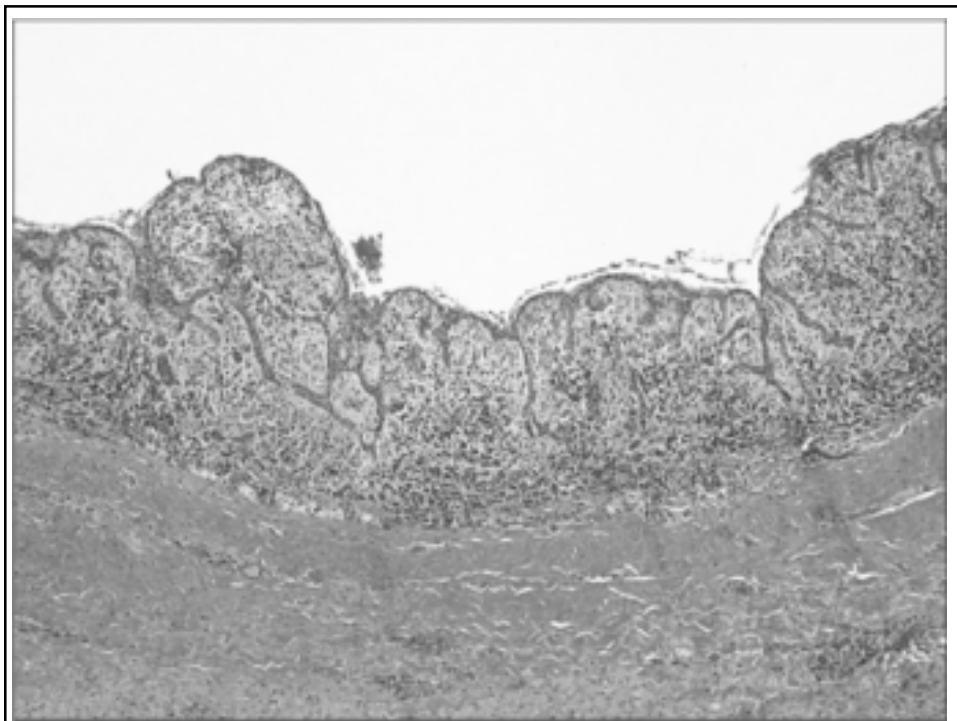
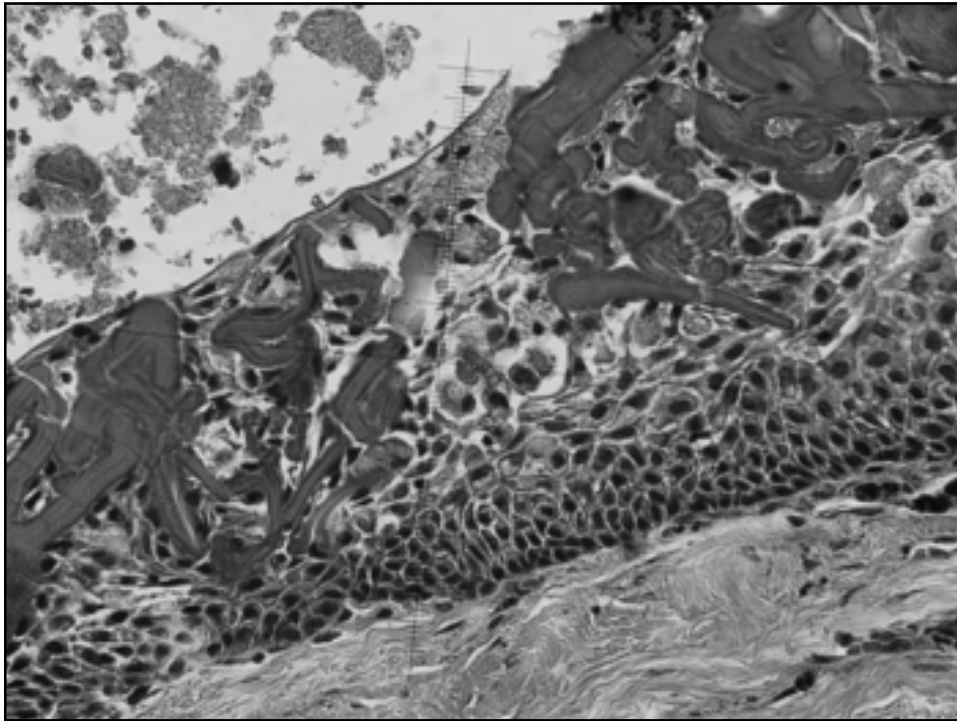


Periapical cyst

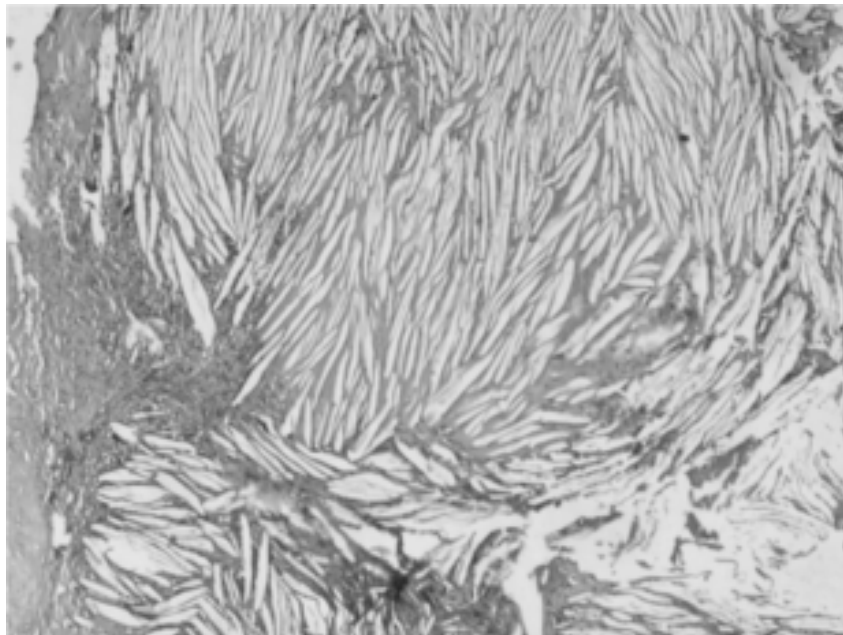
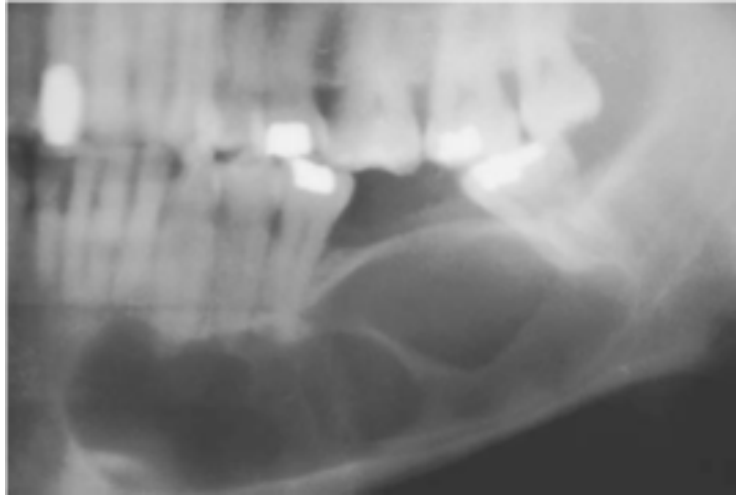


Periapical cyst



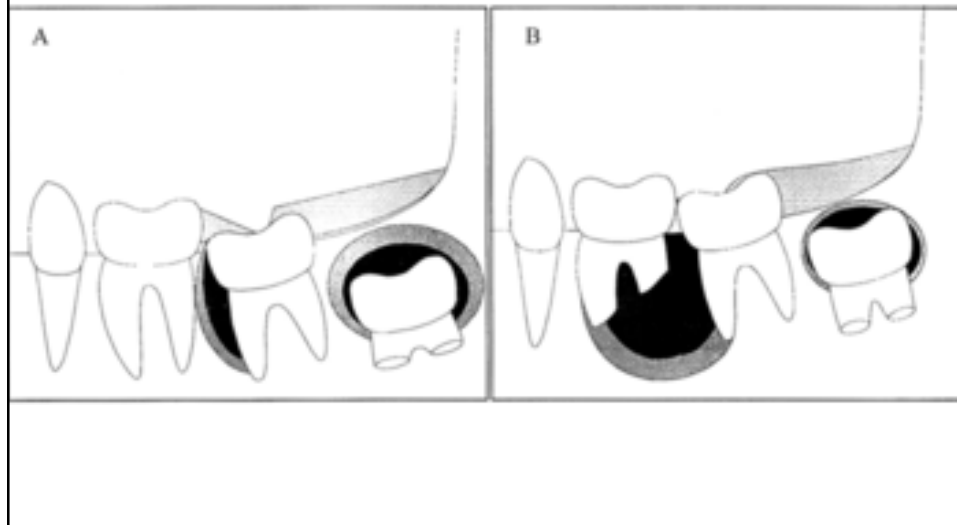


Residual cyst



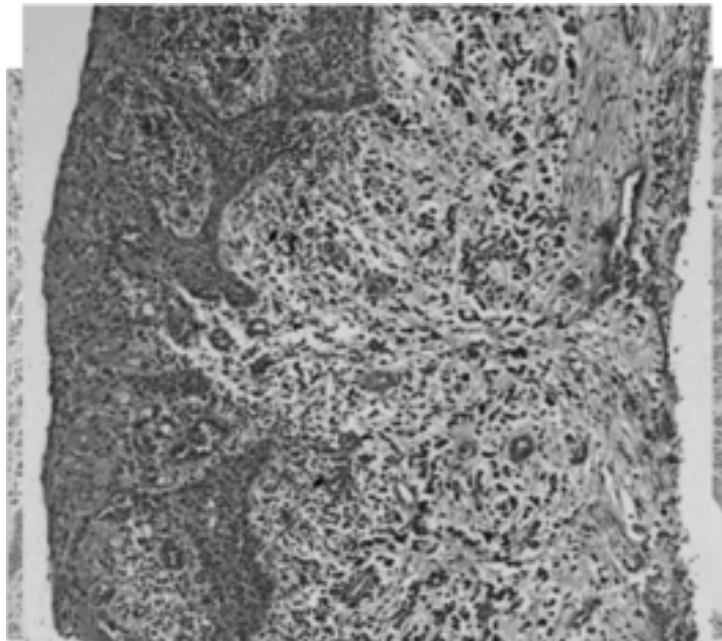
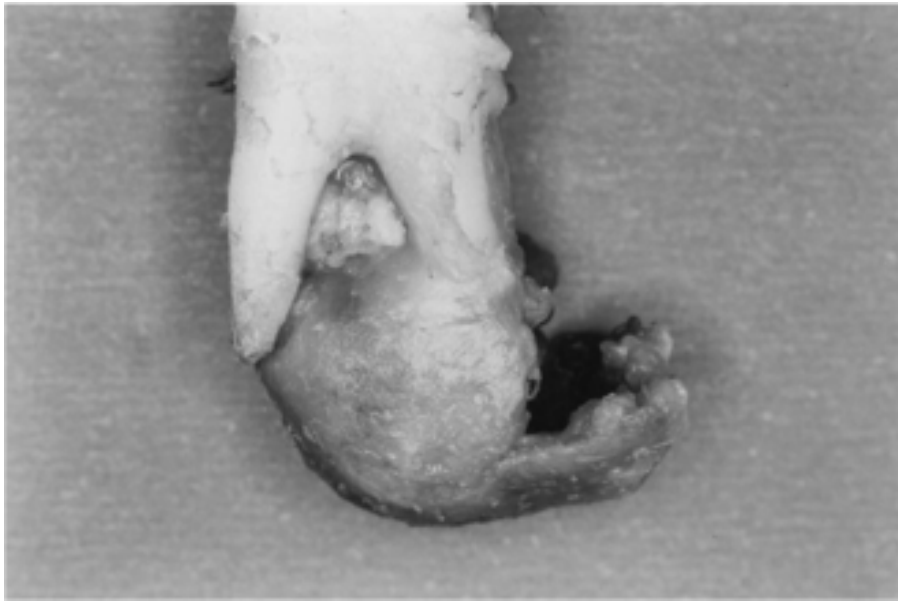
## Collateral cyst

2



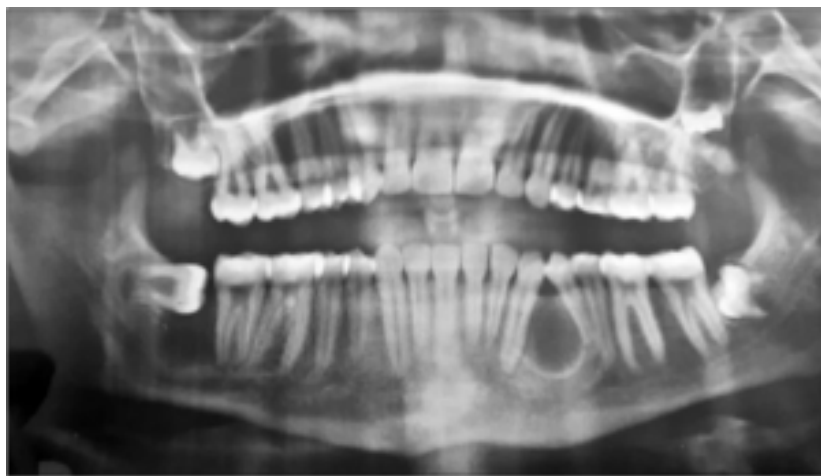
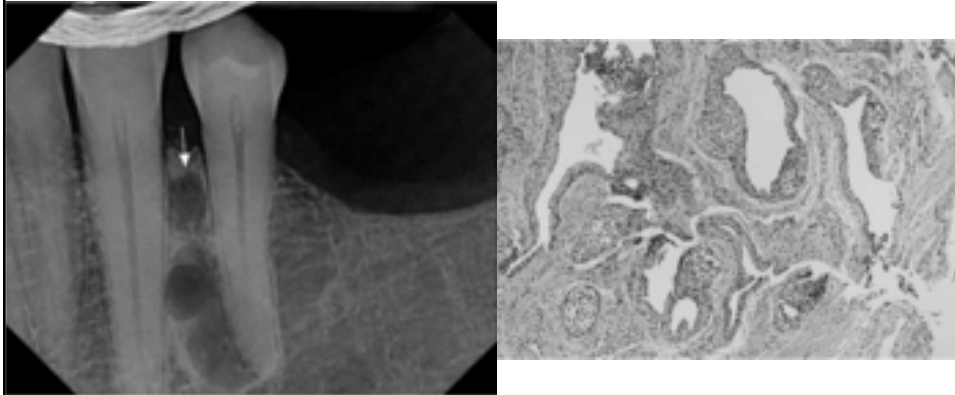
The pathogenic mechanism of this lesion is not specified

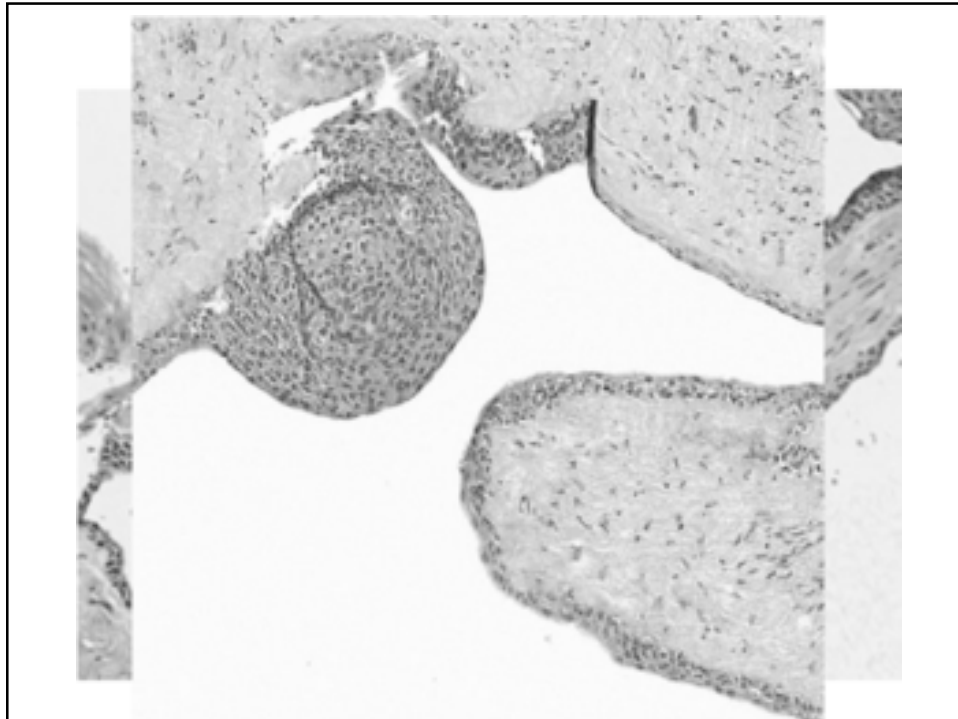
Origin : the remnants of the enamel organ or the epithelial junction .



## Lateral periodontal cyst

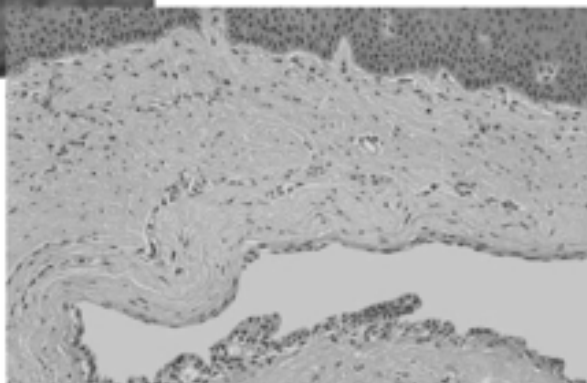
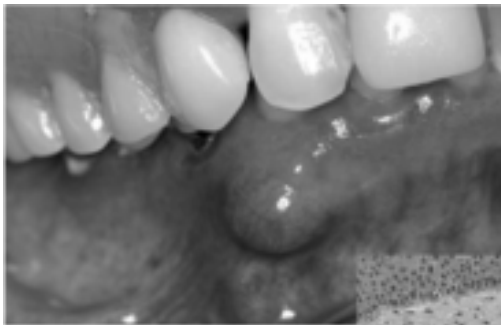
3

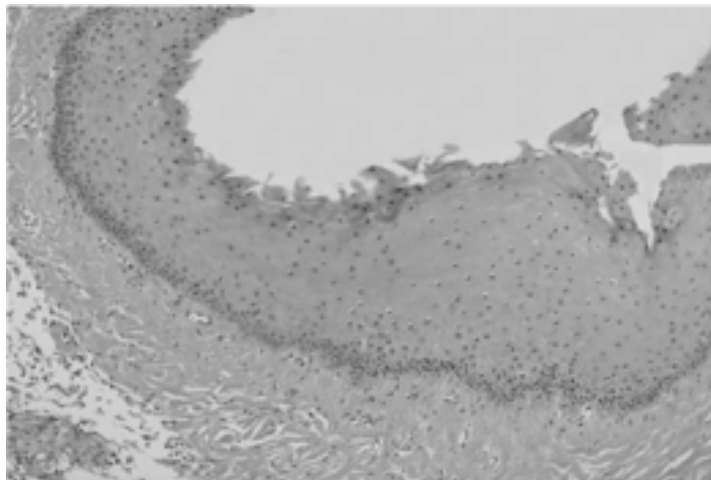
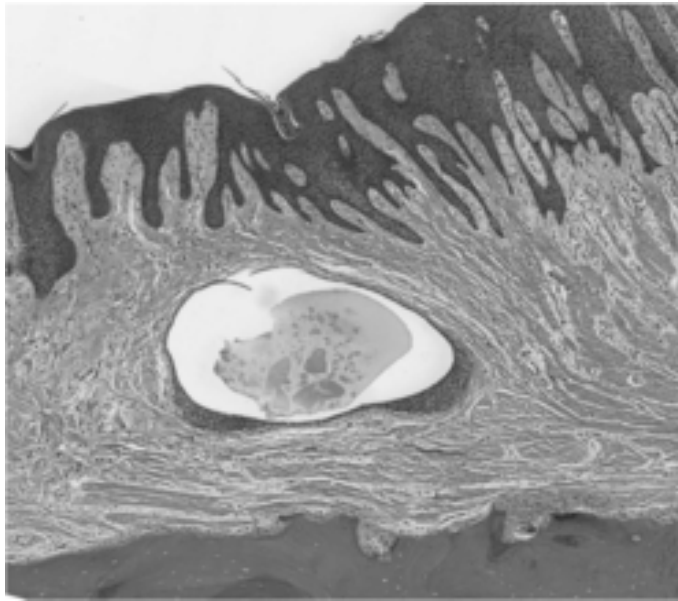




Gingival cyst

4







Gingival cyst in new born

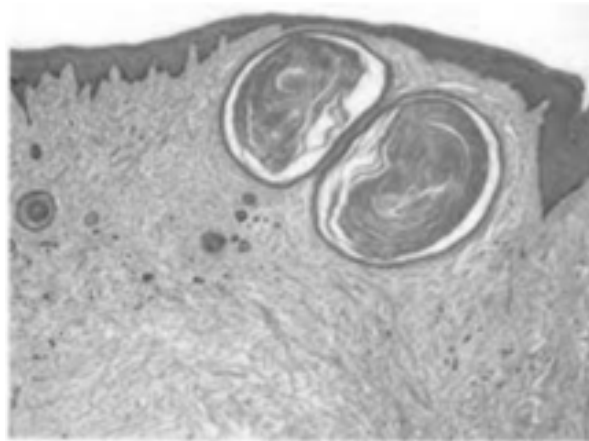
Bohn's nodules



Gingival cyst in new born

Epstein's pearls in preterm neonate.

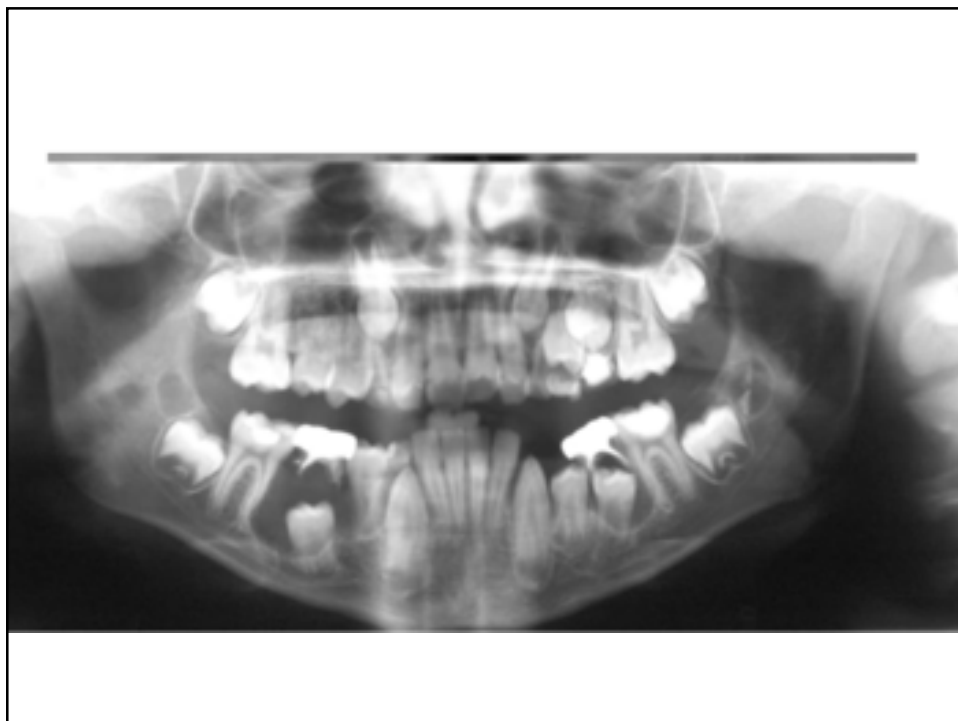


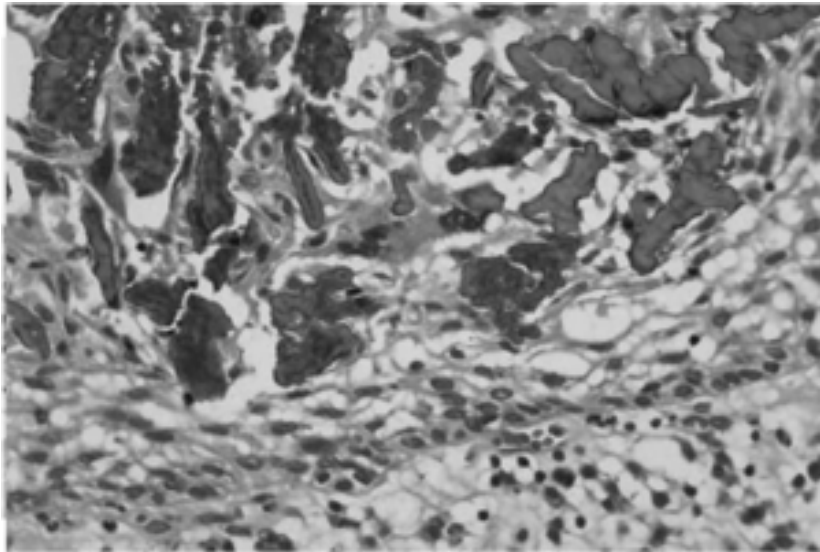


Dentigerous cyst

5





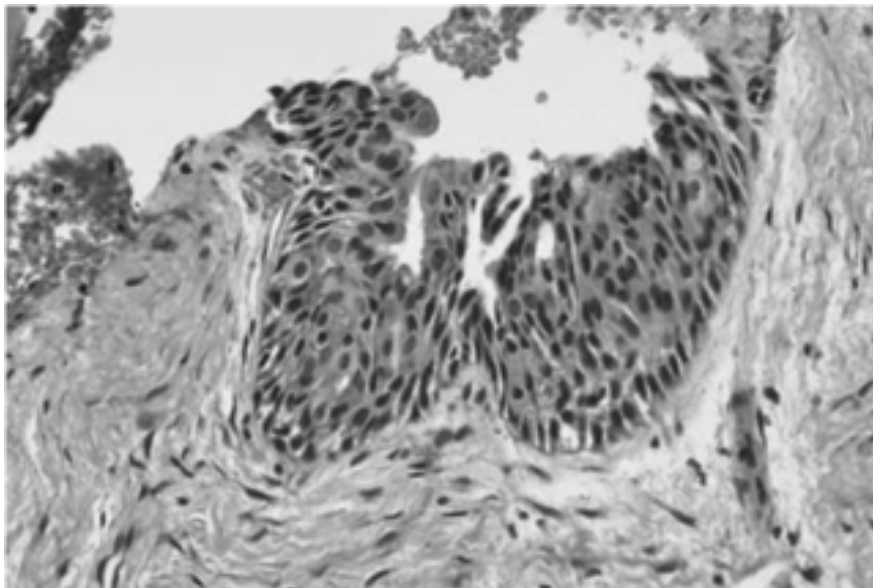
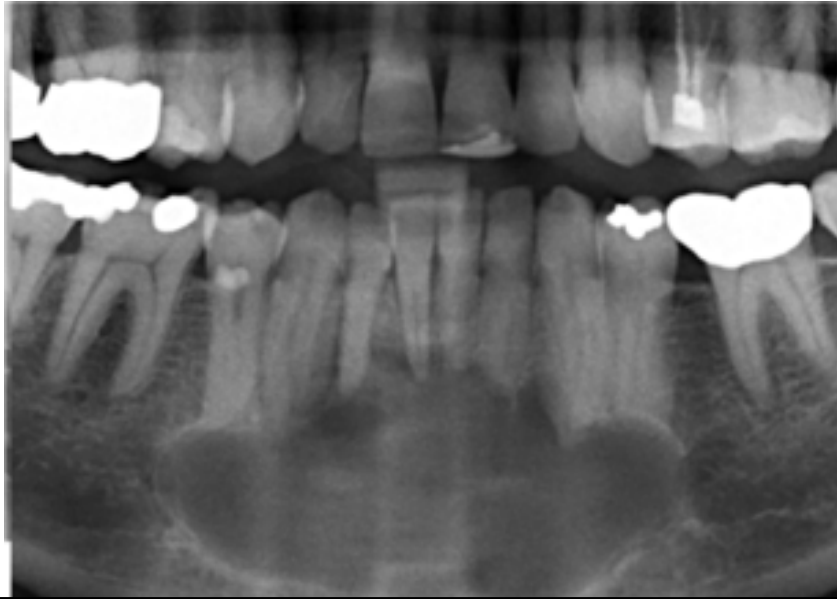


Eruption cyst



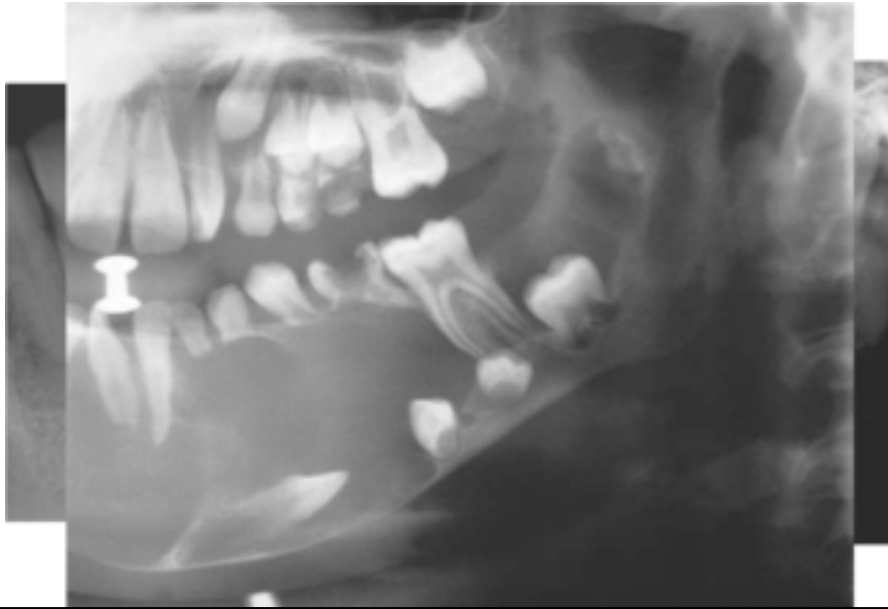
Glandular cyst

6

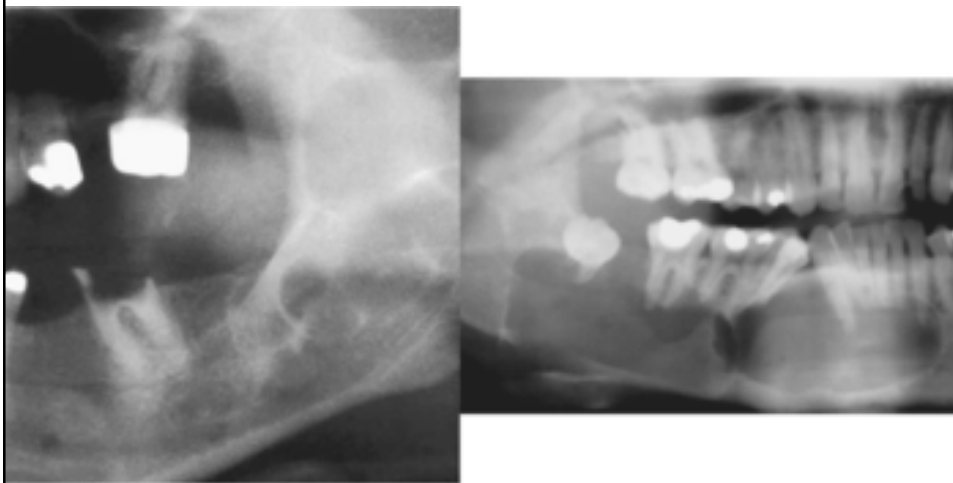


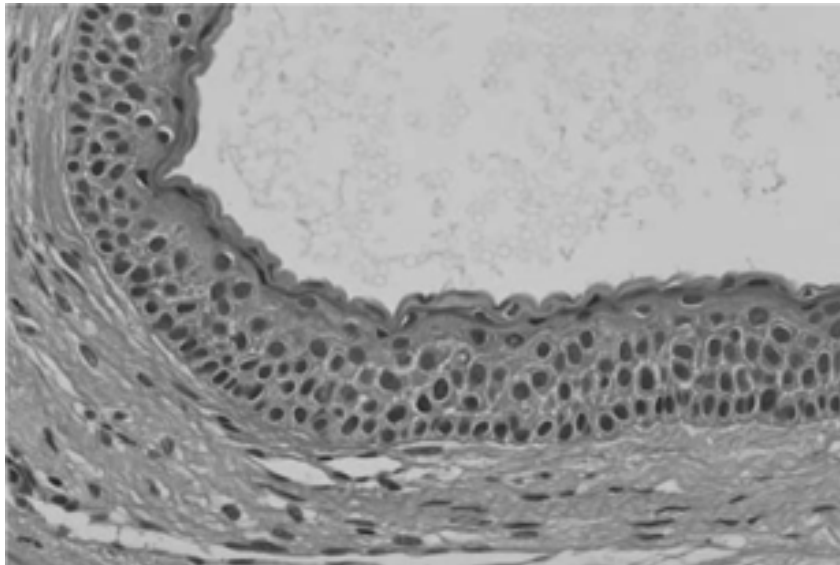
## Odontogenic keratocyst

7

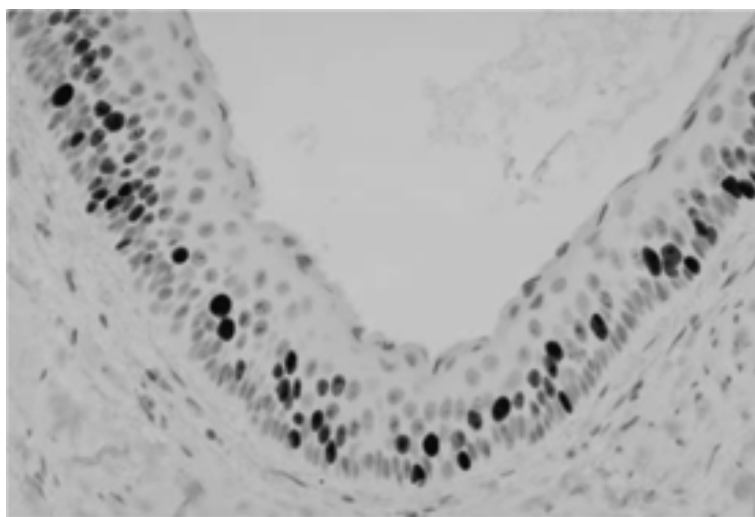


## Odontogenic keratocyst

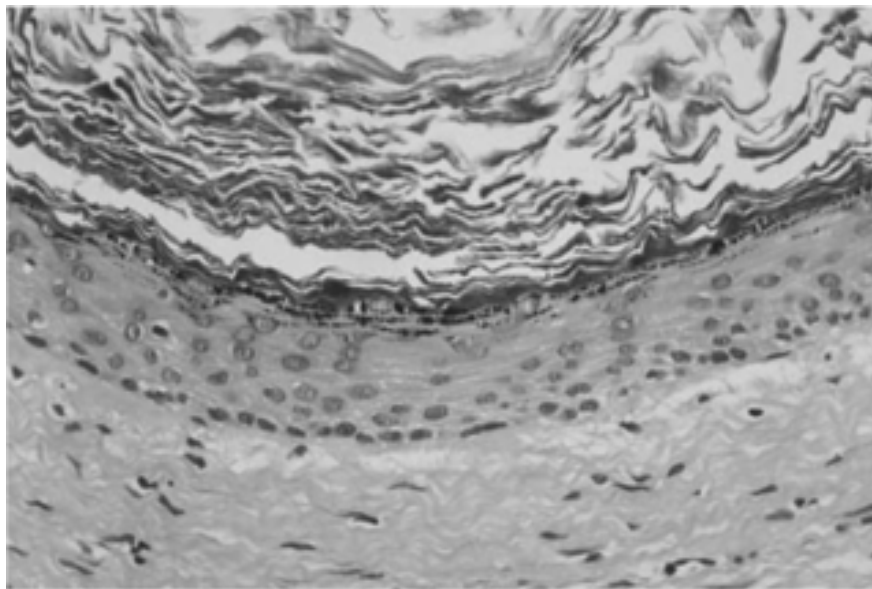
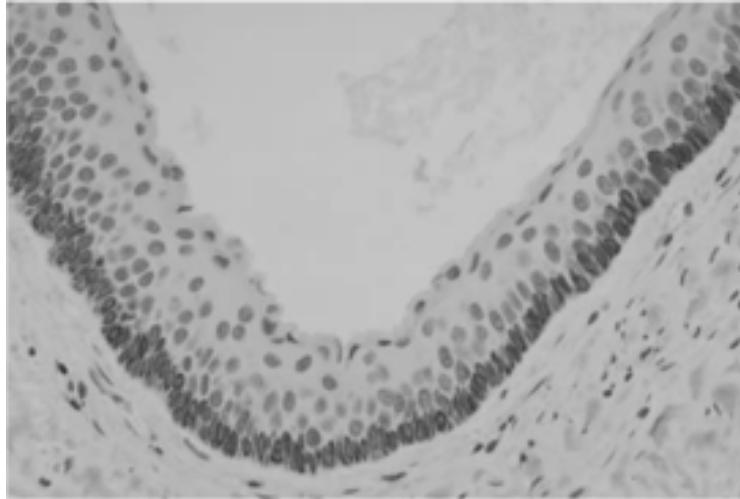




ki67



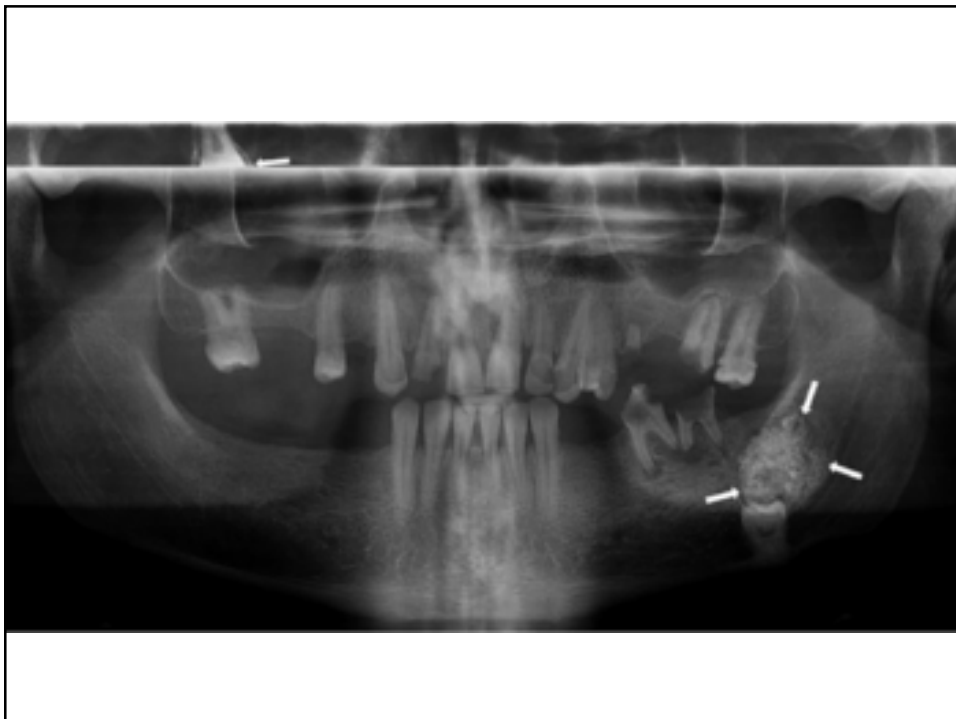
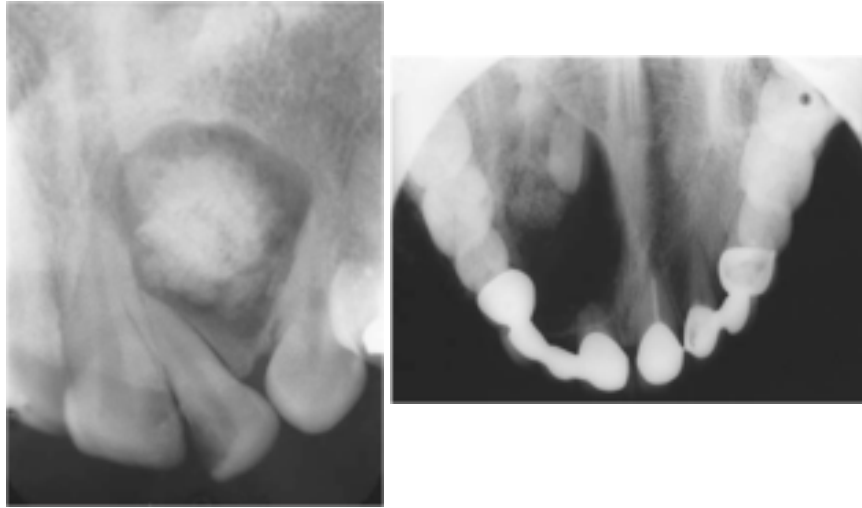
bcl2

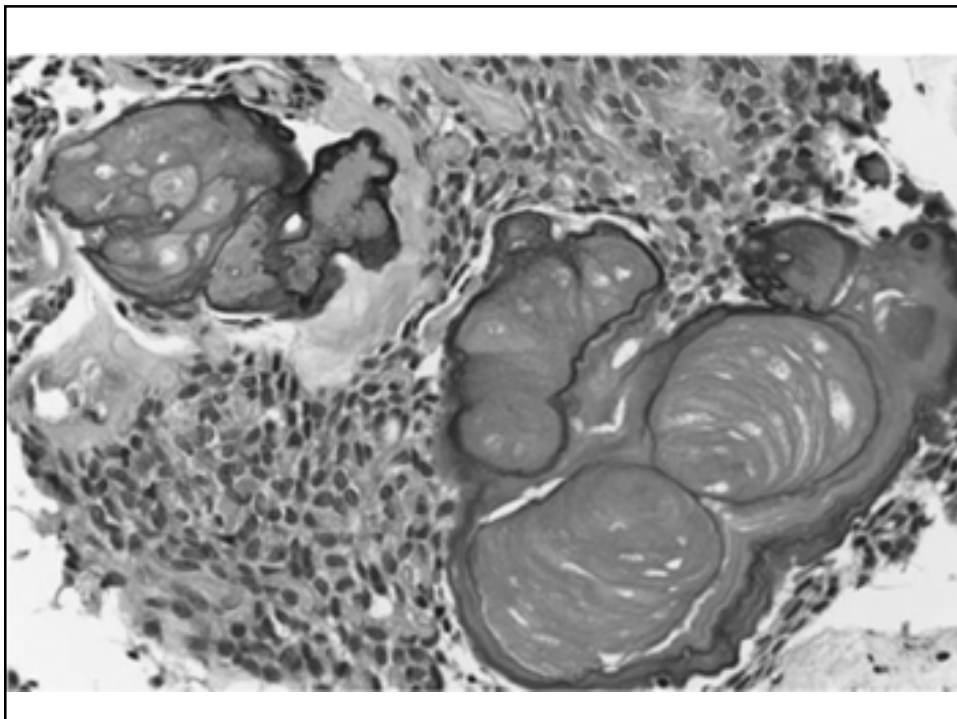
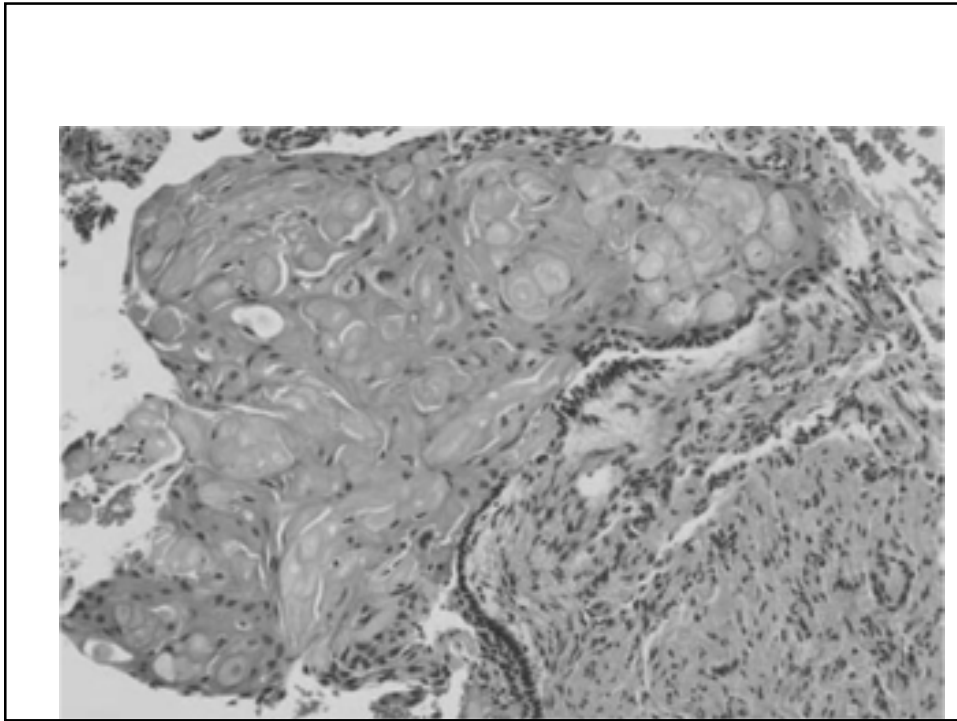




## Calcifying odontogenic cyst

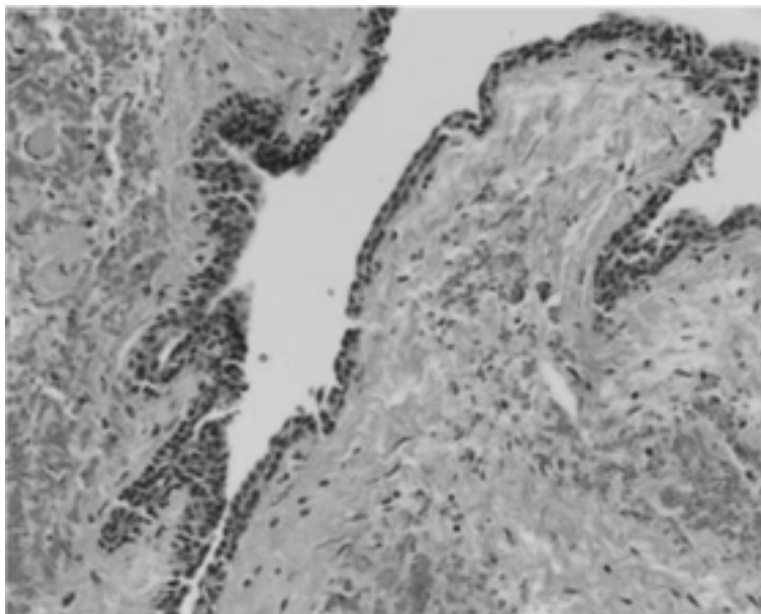
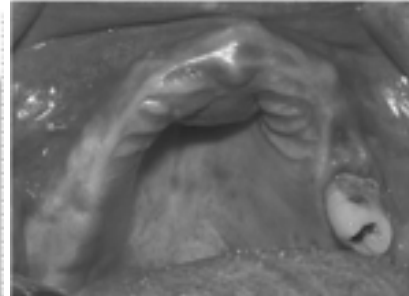
8



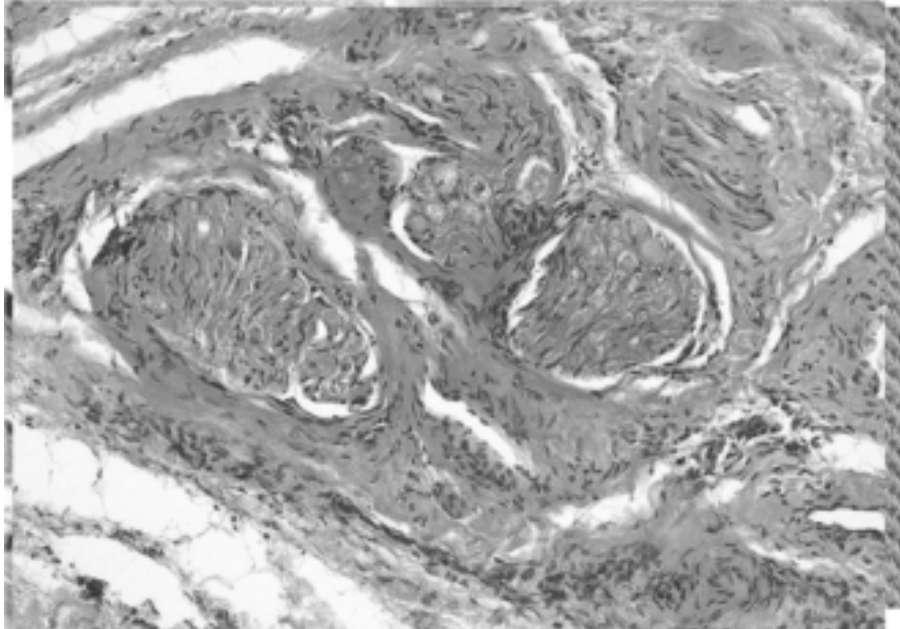


## Nasopalatine duct cyst

10



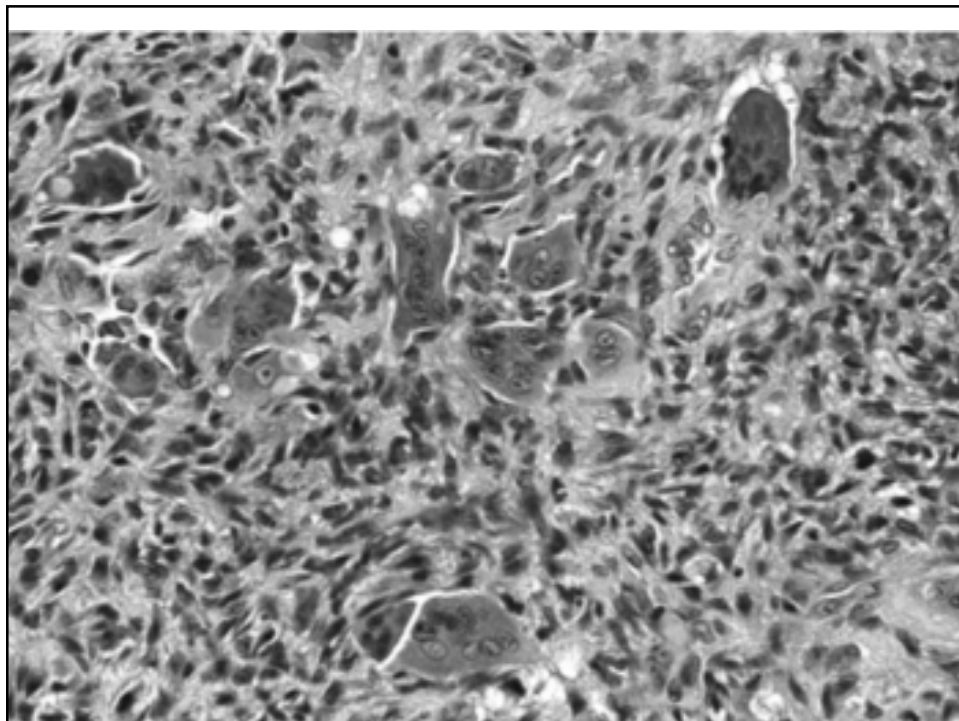
case



Aneurysmal bone cyst: right maxilla

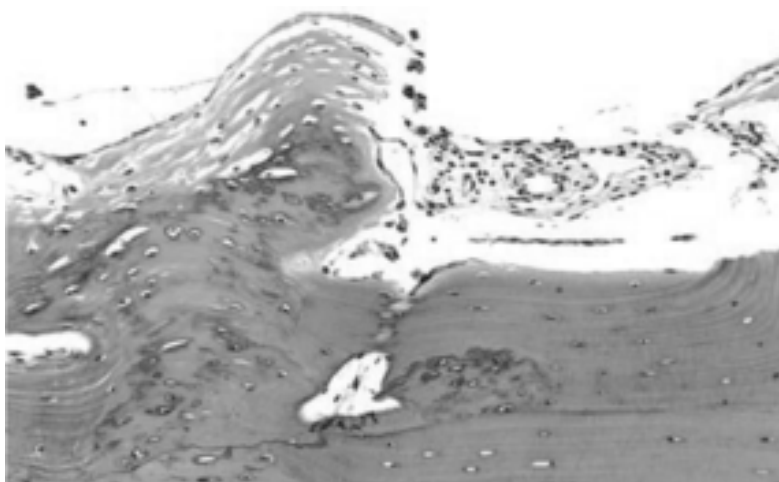
11

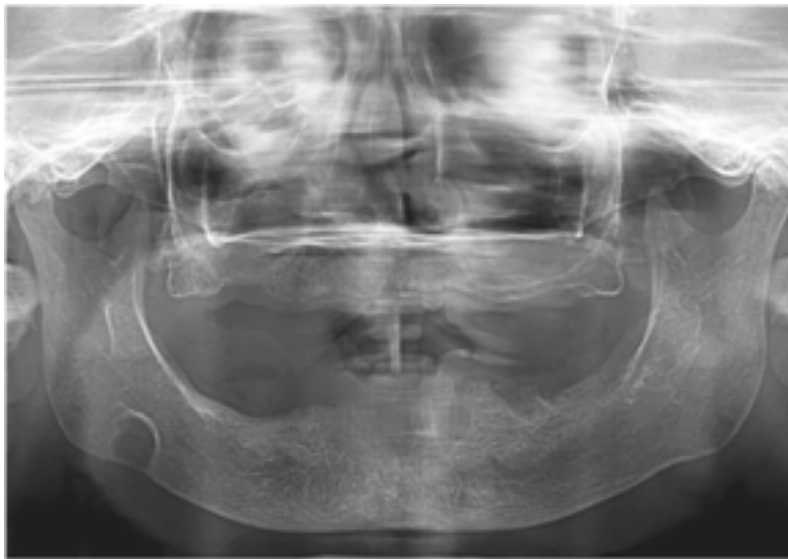




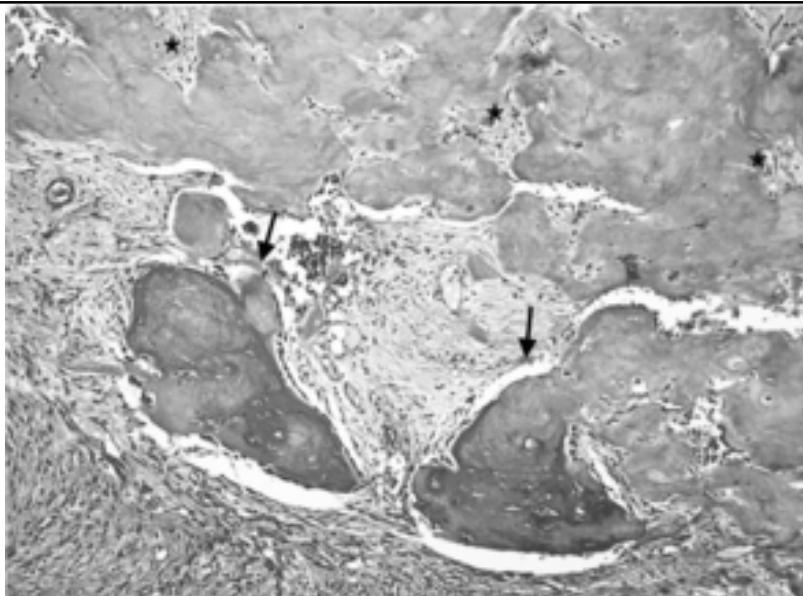
Traumatic cyst, Static bone cyst

12

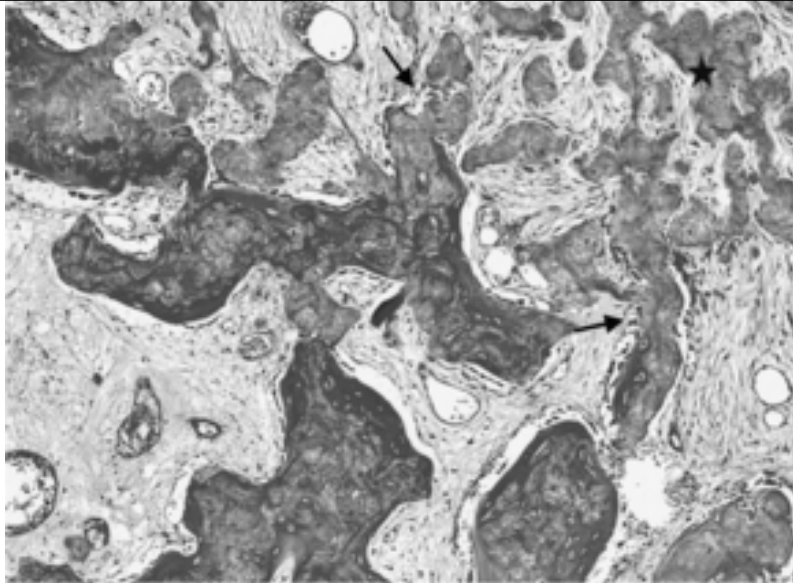




a solitary bone cyst in the mandible of an edentulous patient

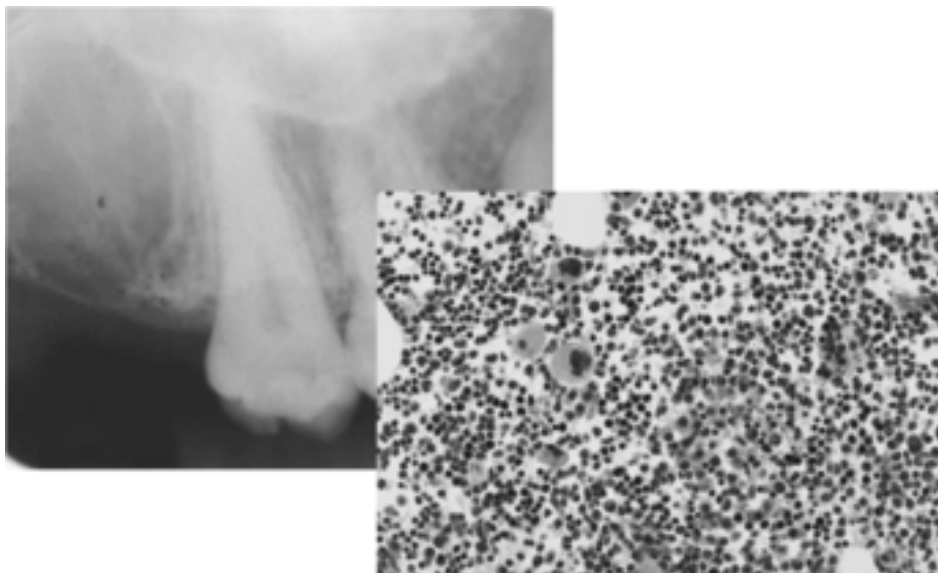


Extensive deposition of cementum-like material as globular masses (upper half) with intervening fibrovascular stroma (stars) transforming into mature bone (arrow heads)

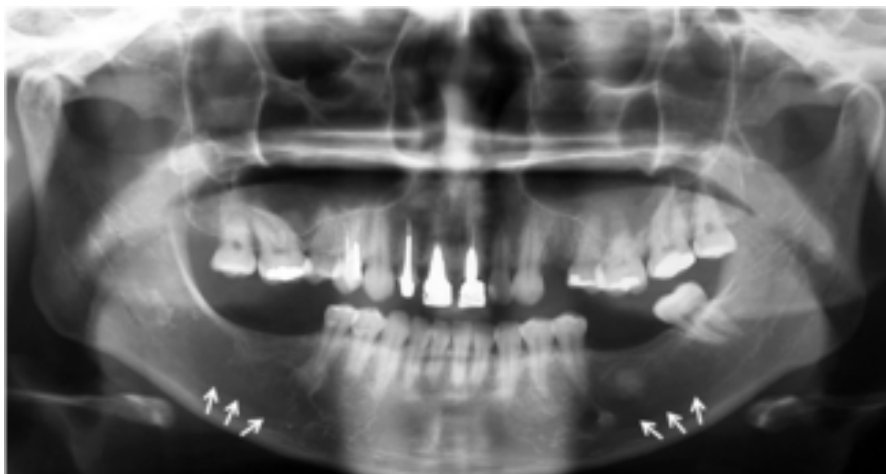


Small deposits of cementum-like material (star) with intervening fibrovascular stroma. Transformation into mature bone is evident (arrow heads)

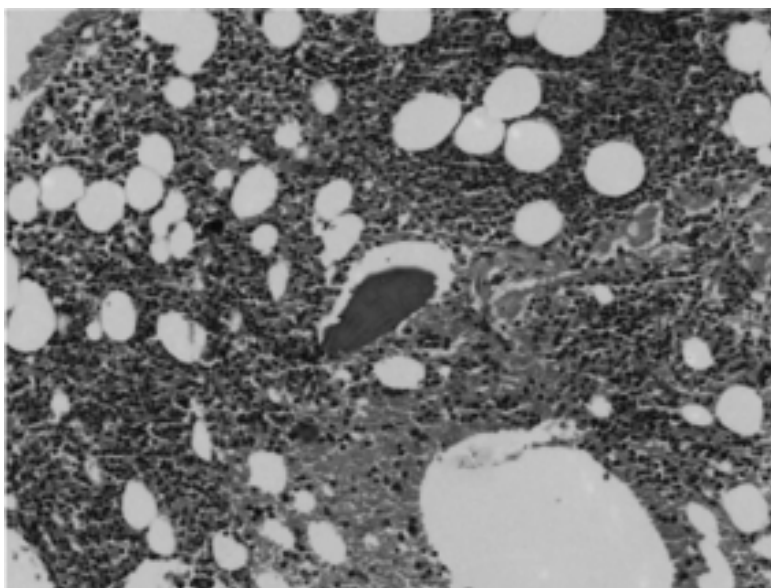
Focal osteoporotic bone marrow defects in maxillary extraction site 13



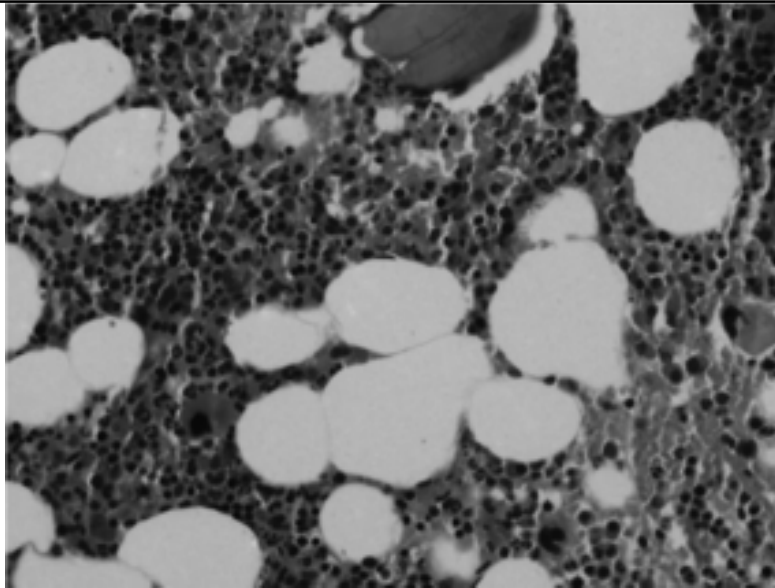




ill-defined radiolucent areas located bilaterally in the molar edentulous regions (white arrows).



Normal hematopoietic cells, fat cells and bone trabeculae.



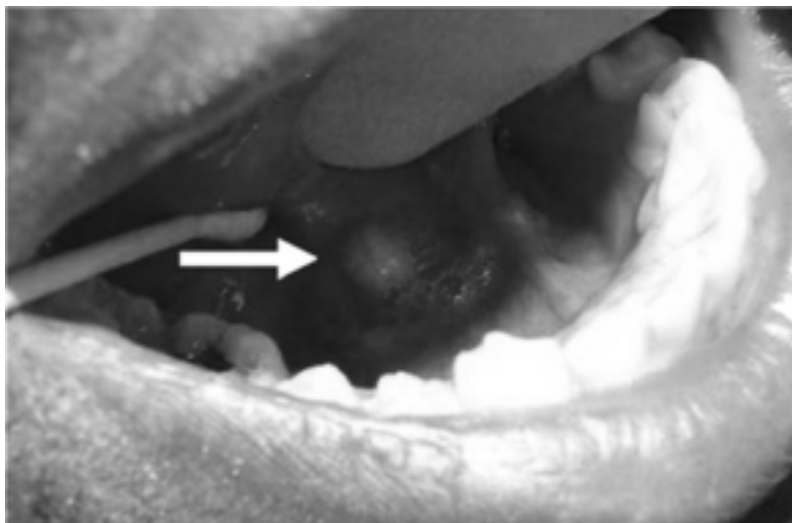
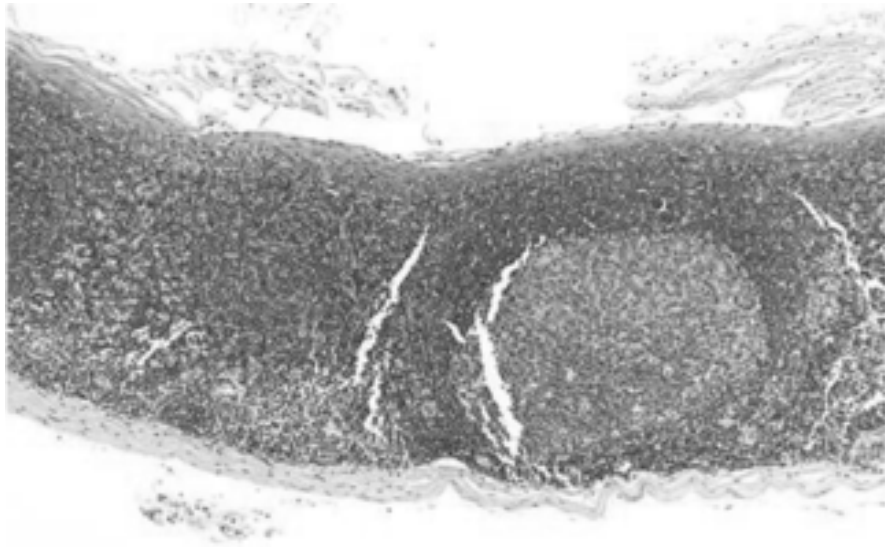
Erythroid, granulocytic, monocytic and lymphocytic series are illustrated, as well as megakaryocytes.

## Lymphoepithelial cyst

15

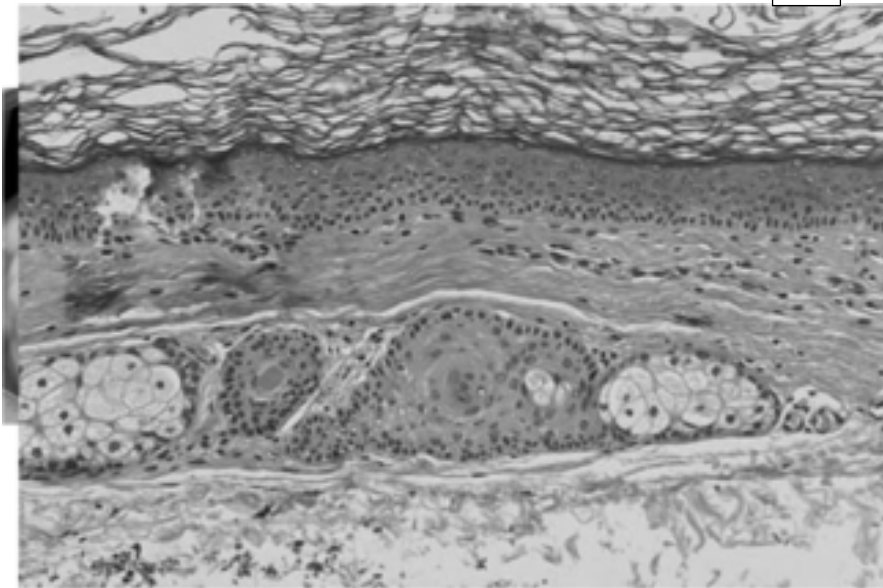


Left submandibular: lymphoepithelial cyst



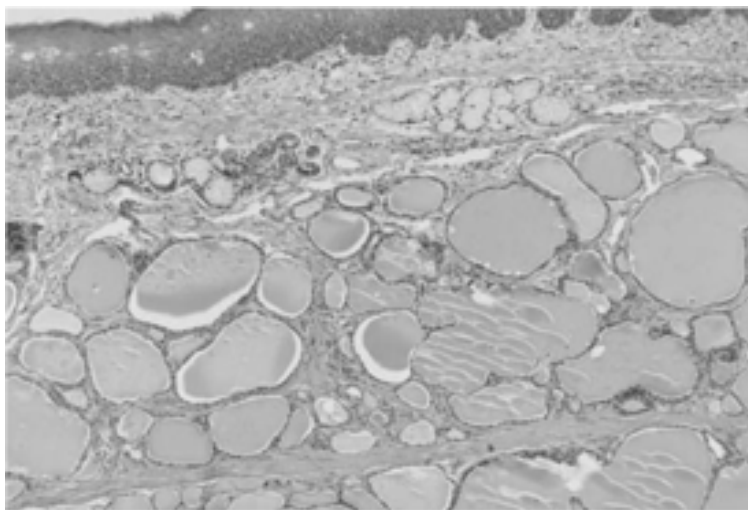
Dermoid cyst

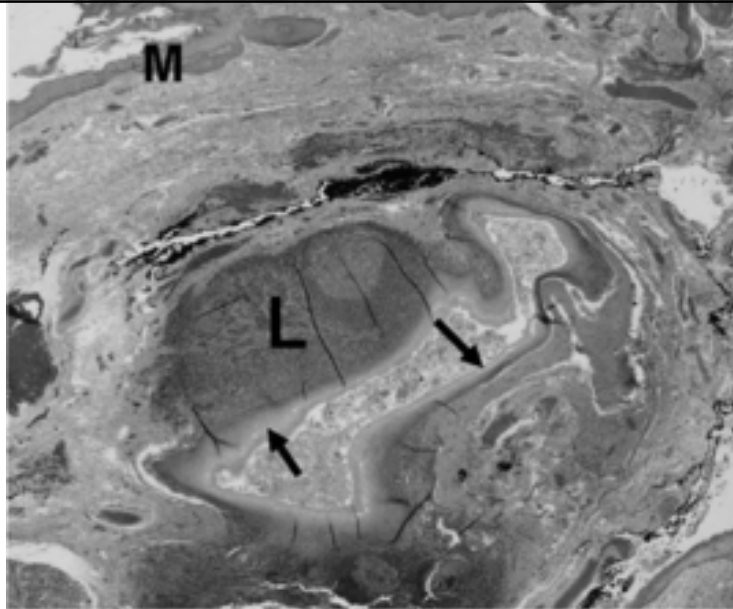
16



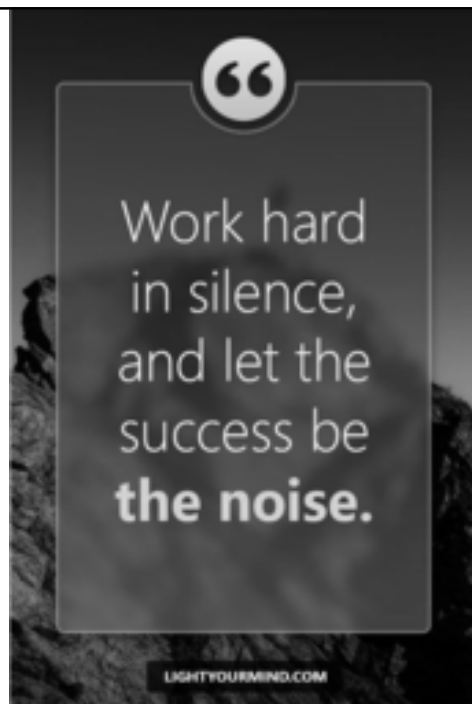
Lingual thyroid

17





Lymphoepithelial cyst lumen lined by stratified squamous epithelium (arrows). Cyst wall contains lymphoid nodules



Thank you...

