CYSTS OF ODONTOGENIC ORIGIN-V

DEPT. OF ORAL PATHOLOGY& MICROBIOLOGY

Purpose Statement

At the end of the class the students will be able to,

 Describe classification, clinical features, pathogenesis, radiographic features, histologic features, differential diagnosis, treatment & prognosis of the lesion.

Learning Objectives

S.N.	Learning Objectives	Domain	Level	Criteria	Condition
1	Enumerate clinical features	Cognitive	Must Know	All	
2	Write classification	Cognitive	Must Know	All	
3	Write pathogenesis	Cognitive	Must Know	All	
4	Write radiographic features	Cognitive	Must Know	All	
5	Write histologic features	Cognitive	Must Know	All	
6	Enumerate differential diagnosis	Cognitive	Nice to Know	All	
7	Write treatment & prognosis	Cognitive & Psychomotor	Must Know	All	

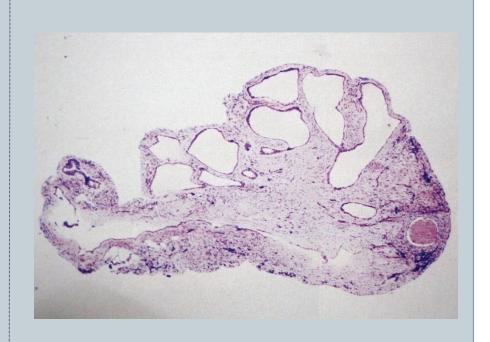
Contents

- **▶** Botryoid odontogenic cyst
- Gingival cyst of adult
- **♥**Glandular odontogenic cyst

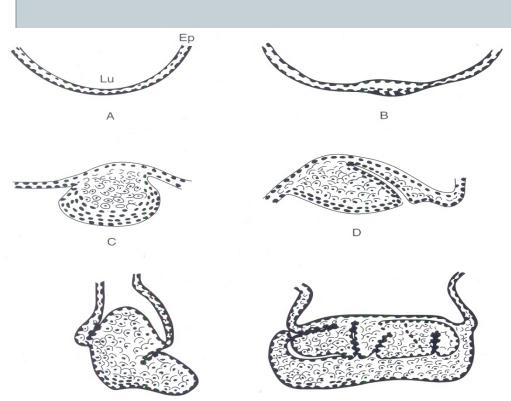
Botryoid odontogenic cyst

Gross resemblance of cystic cavities to that of a cluster of grapes

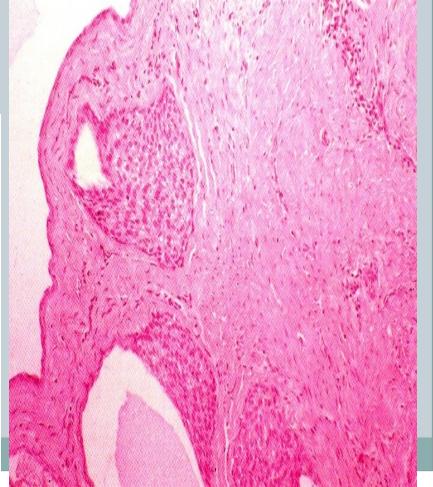




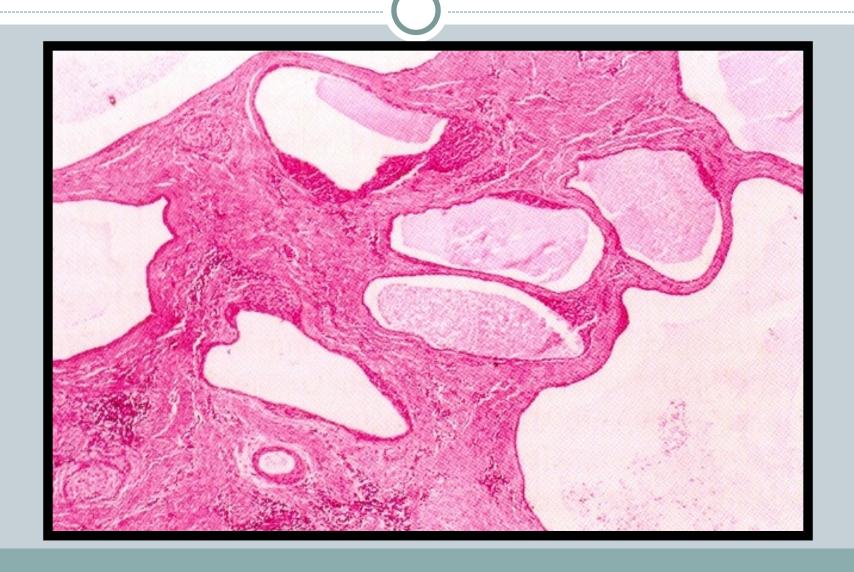
Mode of epithelial plaque formation by localized proliferation of cells



Pinched-off' plaques forming microcysts



Numerous daughter cysts



Gingival cysts of adults

Pathogenesis

- Odontogenic epithelial cell rests
- ♣ Traumatic implantation of surface epithelium
- Cystic degeneration of deep projections of surface epithelium
- ♣ Heterotrophic glandular tissue

Clinical Features

Slow growing, Painless swelling

5th – 6th decades

Mandible > maxilla

Premolar – canine region



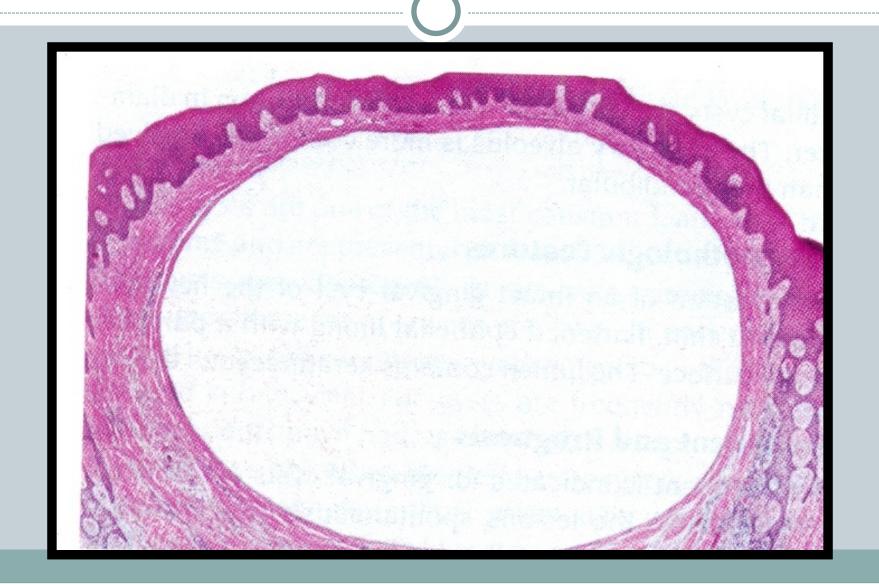
- Dome-like swelling < 0.5cm in diameter
- Normal or bluish in color
- Soft, smooth, fluctuant.
- Occur in attached gingiva or interdental papilla on the facial aspect
- Adjacent teeth vital



Radiographic features

No radiographic change
Faint shadow indicative of
superficial bone erosion or
cupping out of bone

Histopathology

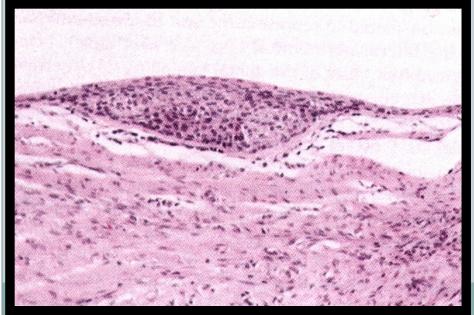


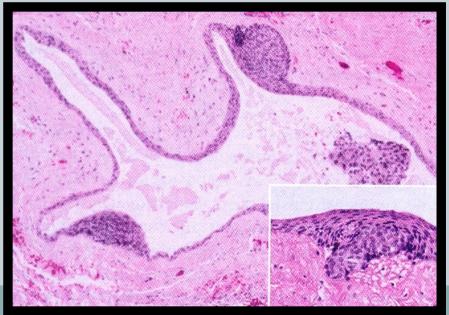
Gingival Cyst Of Adult OR

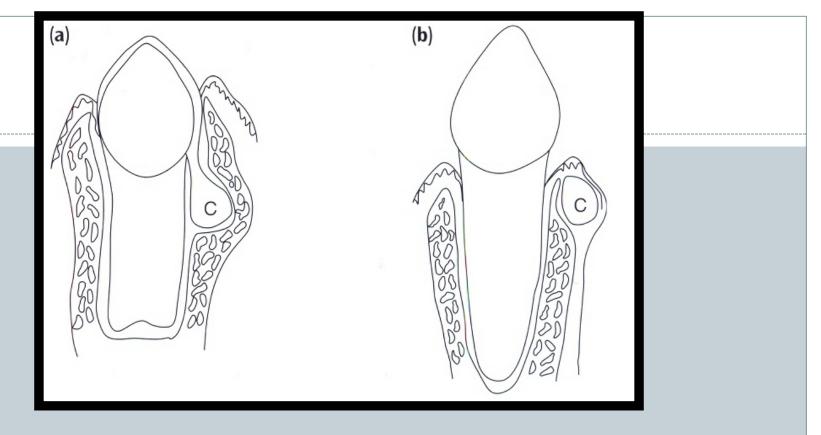
OR Lateral Periodontal Cyst?

Gingival cyst of adult

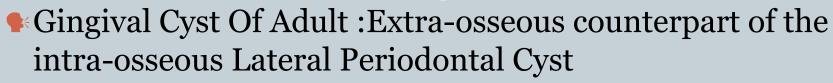
Lateral periodontal cyst





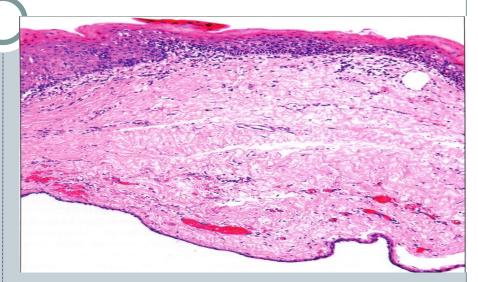


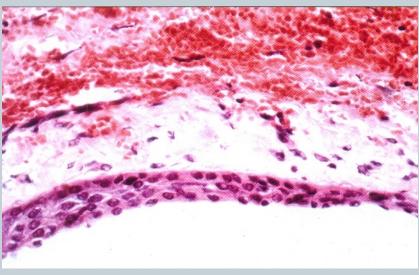
- ◆ Lateral Periodontal Cyst (a) —formed from the REE by dilatation of the follicle before eruption of the tooth
- Gingival Cyst Of Adult (b) formed from the REE after eruption of the tooth

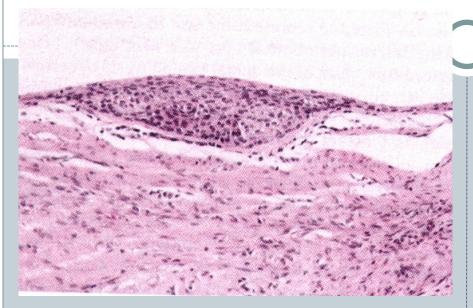


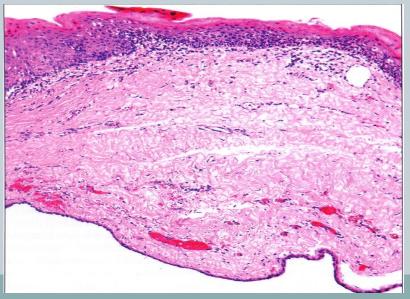
Origin from postfunctional epithelium (REE), explains the unaggressive nature compared with the OKC

- **♥** Variable pattern
- Ranges in thickness from simply one flattened cell to several cells
- A thin stratified squamous epithelium, closely resembling REE.









- Focal areas of plaque like thickenings that may contain clear cells.
- Nests of these glycogen rich clear cells, represent rests of dental lamina

The attachment of epithelium to connective tissue is tenous & easily peels off, leaving epithelial discontinuties.

The fibrous connectine tissue wall is usually relatively uninflammed.

Glandular o Glandular odontogenic cyst Glandular odontogenic cyst dontogenic cyst

Derived from odontogenic epithelium with characteristics including salivary gland features such as mucus producing cells

Diagnosis made when ---

- Epithelial lining consists of columnar & cuboidal cells with cilia
- Epithelium has glandular & pseudoglandular structure with intraepithelial crypts and microcysts

Clinical features:

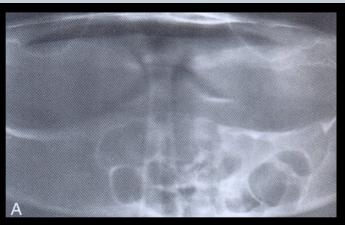
- **Rare**
- **♣** Aggressive
- Female predominance
- Wide age range -- Middle age (Rare before 20 yrs of age)
- ♣ In either jaws, mandible > maxilla
- Strong predilection for anterior region of jaw



Radiographic features

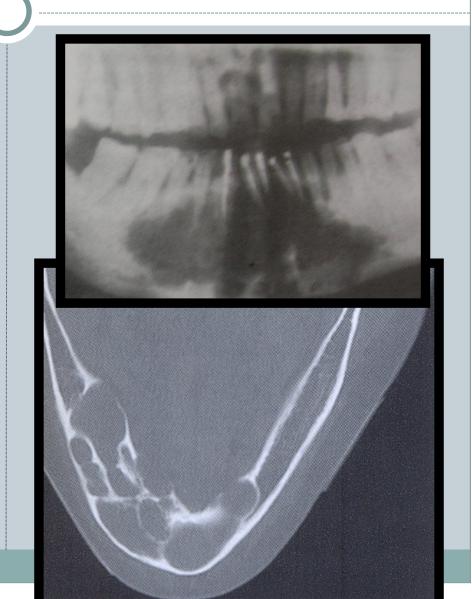
- Radiolucency with corticated boundary
- Outline-smooth or scalloped
- Unilocular or multilocular





Effect on surrounding structures:

- Expansion of cortical plates with areas of perforations
- ♥ Displacement of teeth



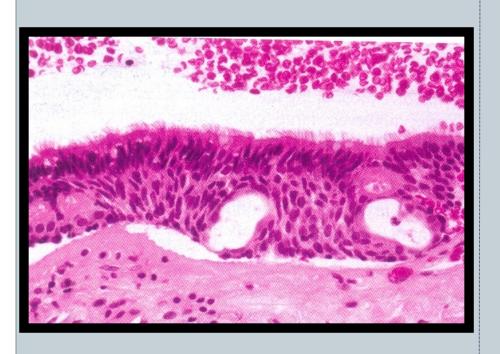
Differential Diagnosis

- **♥**Ameloblastoma
- Odontogenic keratocyst

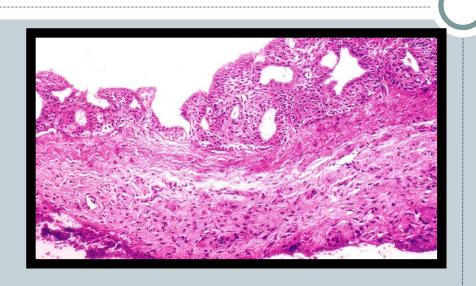
Pathogenesis

Similar to lateral periodontal cyst

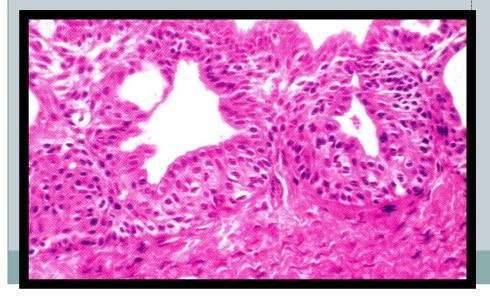
Histopathology

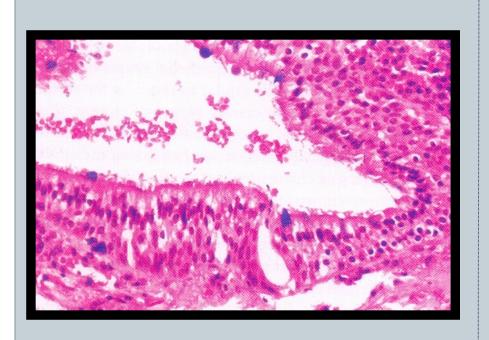


- Non-keratinized stratified squamous epithelium of variable thickness.
- PEpithelium has a glandular or pseudoglandular structure with goblet cells as well as intraepithelial crypts or microcysts containing mucus.



Microcysts may open onto the surface of epithelium giving a papillary or corrugated appearance.





- Sometimes cells may be ciliated.
- Occasionally epithelium is thinner, similar to REE.
- Epithelial plaques may be present.
- Interface between epithelium & connective tissue is flat.

SUMMARY

Clinical features, Pathogenesis, Radiological

features, Histopathological features & Treatment of

Botryoid cyst, Gingival cyst of adult & Glandular odontogenic cyst

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