

Fissural cysts of the oral region (inclusion, developmental)

**Department of Oral & Maxillofacial
Pathology**

PURPOSE STATEMENT

- ✚ At the end of the lecture, Students should describe Clinical features , radiographic features, pathogenesis , histopathology, etiology and treatment of-

Median anterior maxillary cyst

Median palatal cyst

Globulomaxillary cyst









Median mandibular cyst

Nasoalveolar cysts

Palatal cysts of neonate

Thyroglossal duct cysts

LEARNING OBJECTIVES

• N •	Learnin g Objective s	Do main	Le vel	Cri teria	Co nditi on
	Enumerate clinical features	 Co gniti ve	 Mu st Kno w	 All	
	 Write classificati on	 Co gniti ve	Must Know	 All	

CONTENTS

📖 Median anterior maxillary cyst

📖 Median palatal cyst

📖 Globulomaxillary cyst

📖 Median mandibular cyst

📖 Nasoalveolar cysts

📖 Palatal cysts of neonate

📖 Thyroglossal duct cysts

NASOPALATINE DUCT CYST (INCISIVE CANAL)

- ✚ Arises from embryonic epithelial residues in nasopalatine canal
- ✚ Epithelium included along the line of fusion of embryonic facial processes
- ✚ May occur within the nasopalatine canal or in soft tissues of palate.

CLINICAL FEATURES

- Most common non odontogenic cyst (1% of population)
- Rarely in first decade, th, 5th and 6th decades
- Blacks > Whites
- Males > Females
- Swelling in the anterior region of midline of palate,
- Swelling on labial aspect of alveolar ridge

CLINICAL PRESENTATION

- ✚ Through and through fluctuation may be elicited
- ✚ Bulging of floor of nose
- ✚ If these swelling occur posteriorly, the diagnosis of median palatine cyst is made
- ✚ Pain and discharge may be present.



- **Cyst of the incisive papilla :**
bluish discoloration

RADIOLOGICAL PRESENTATION

- Shape of the fossa may be round, oval, diamond or funnel shaped
- Found in midline of palate, above or between the roots of the central incisor
- Round or ovoid or heart shaped radiolucency
- Inverted pear shaped

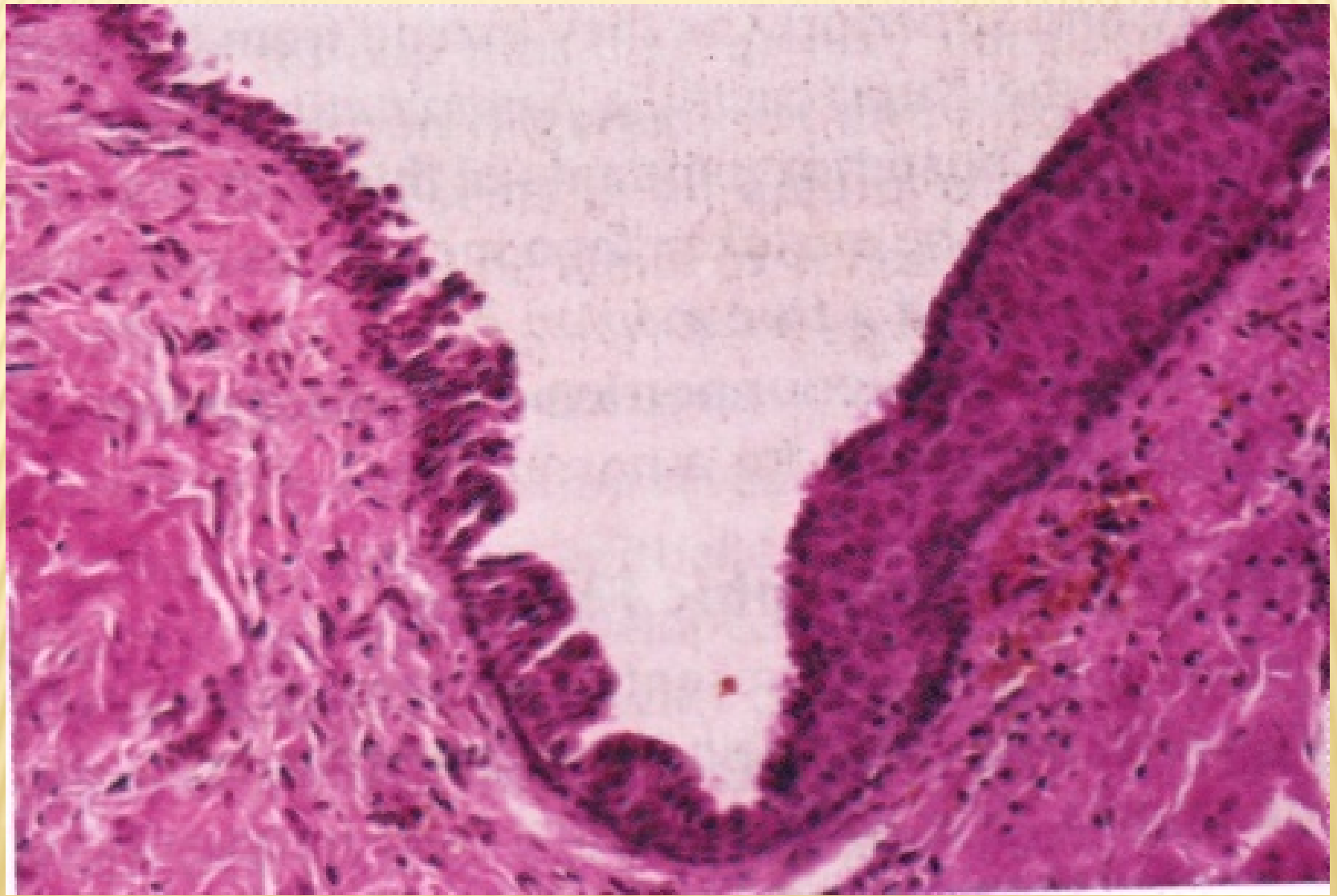


PATHOGENESIS & ETIOLOGY

- ✚ Nasopalatine duct in the incisive canal
- ✚ Epithelium of Vomer- nasal organ of Jacobson
(bilateral structures lying at the base of the nasal septum just above the nasal extremities of the incisive canal)
- ✚ Secretion of mucin from the mucous glands
- ✚ Trauma
- ✚ Bacterial infection

HISTOPATHOLOGY & TREATMENT

- ✚ Variable epithelial linings, Goblet cells
- ✚ Characteristic presence of nerves and blood vessels in fibrous capsule
- ✚ Mucous glands in capsule, Nasopalatine ducts
- ✚ Inflammation, Hyaline cartilage
- ✚ Surgical enucleation



MEDIAN PALATINE, MEDIAN ALVEOLAR CYSTS

- ✚ Questionable entities and have been excluded from WHO classification

MEDIAN MANDIBULAR CYST

- ✚ Doubtful entity
- ✚ Rare cyst in the midline of mandible
- ✚ Well defined ovoid or irregular radiolucent area and may separate roots of lower incisors
- ✚ Develops from epithelial entrapment was an earlier hypothesis and has been negated as mandible develops as a single unit

LOBULOMAXILLARY CYST

- Found between maxillary lateral incisors and canine.
- well defined inverted pear shaped radiolucency
- causing divergence of adjacent teeth.
- Doubtful entity as there is no ectoderm to ectoderm contact except at the midpalatal raphe region.



NASOLABIAL CYST (NASOALVEOLAR, KLESTADT CYST)



Rare developmental cyst



Pathogenesis two major theories

1. Epithelia remnants entrapped along the line of fusion of Maxillary, Median nasal and Lateral nasal processes
2. From misplaced epithelium of the nasolacrimal duct

- ✚ Occurs outside the bone in nasolabial folds below the alae nasi
- ✚ Swelling of the upper lip lateral to the medline,
- ✚ Resulting in elevation of the ala of the nose
- ✚ Elevates the mucosa of the nasal vestibule and
- ✚ Obliterates the maxillary mucolabial fold
- ✚ Swelling, Pain, difficulty in nasal breathing

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- ✚ Usually unilateral
 - ✚ Slow
 - ✚ Infected cysts may discharge in the nose
 - ✚ 12 - 75 years with peak in 4th and 5th decades
 - ✚ Females > Males

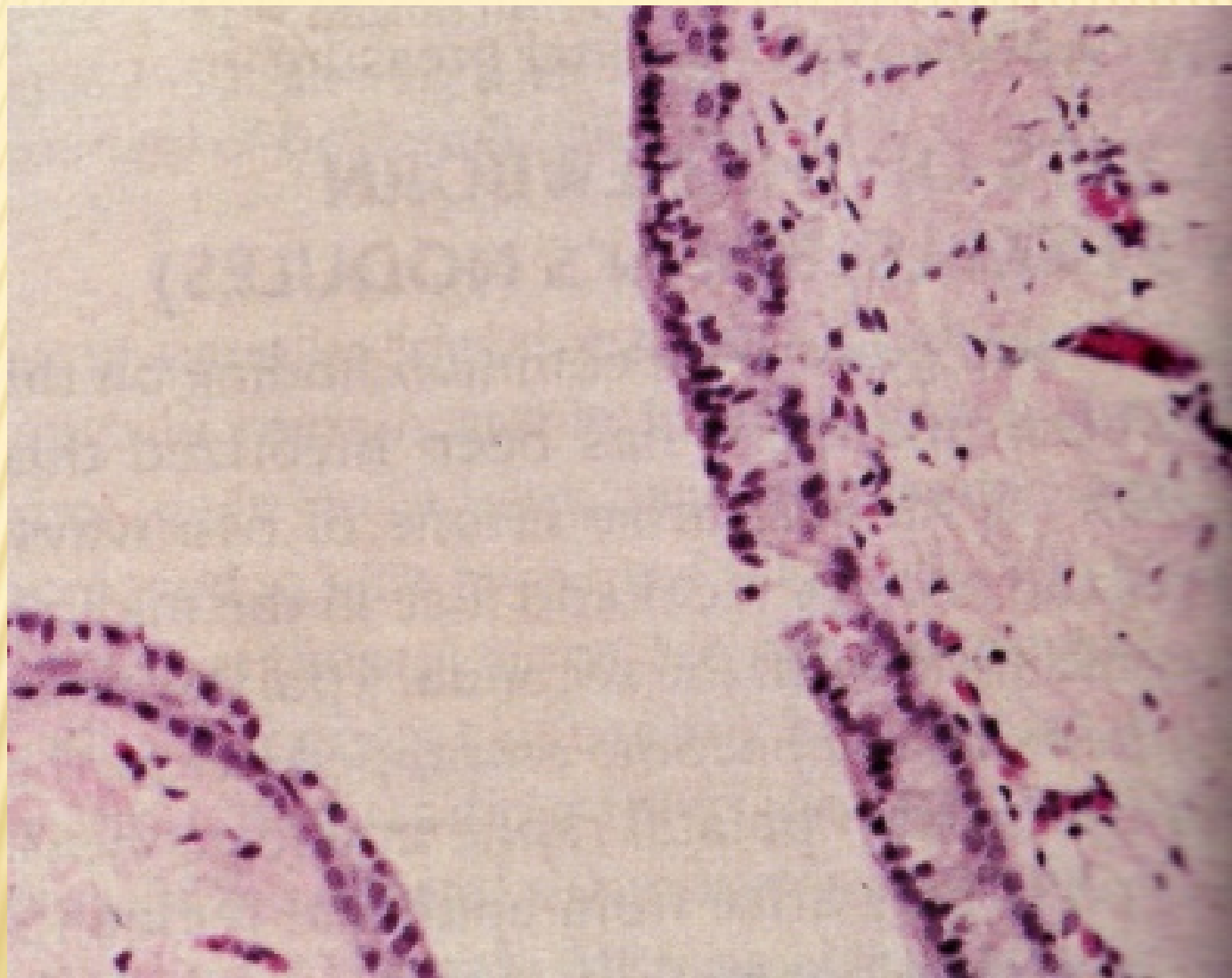


Histological features

- ✚ Lined by pseudostratified columnar epithelium
- ✚ Often demonstrates goblet cells and Cilia
- ✚ Cyst wall composed of fibrous CT with adjacent skeletal muscle
- ✚ Inflammation in secondary infected cyst

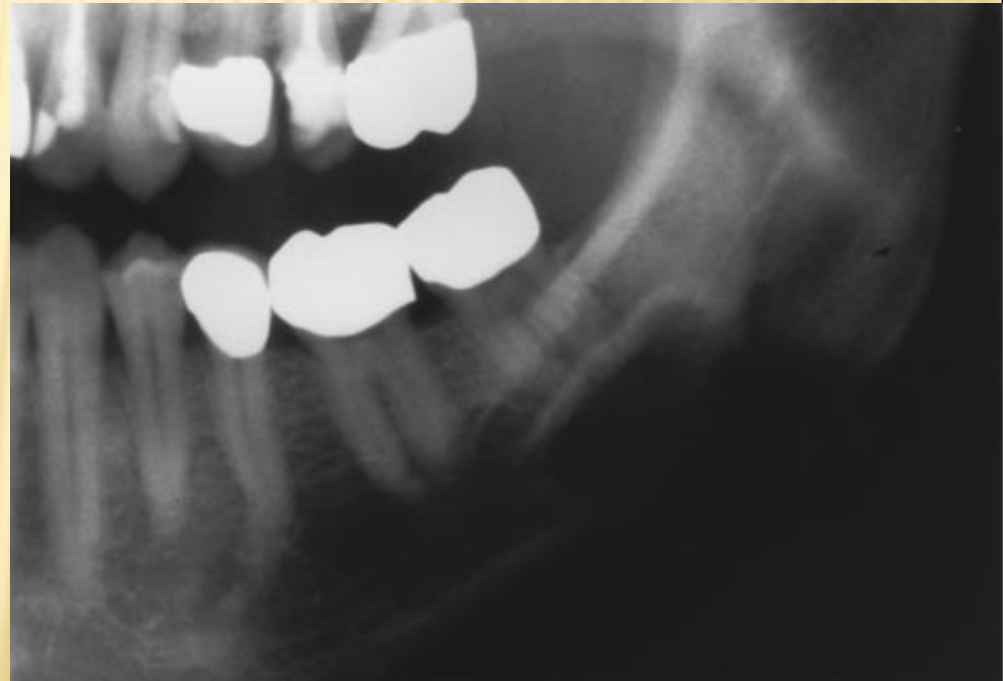
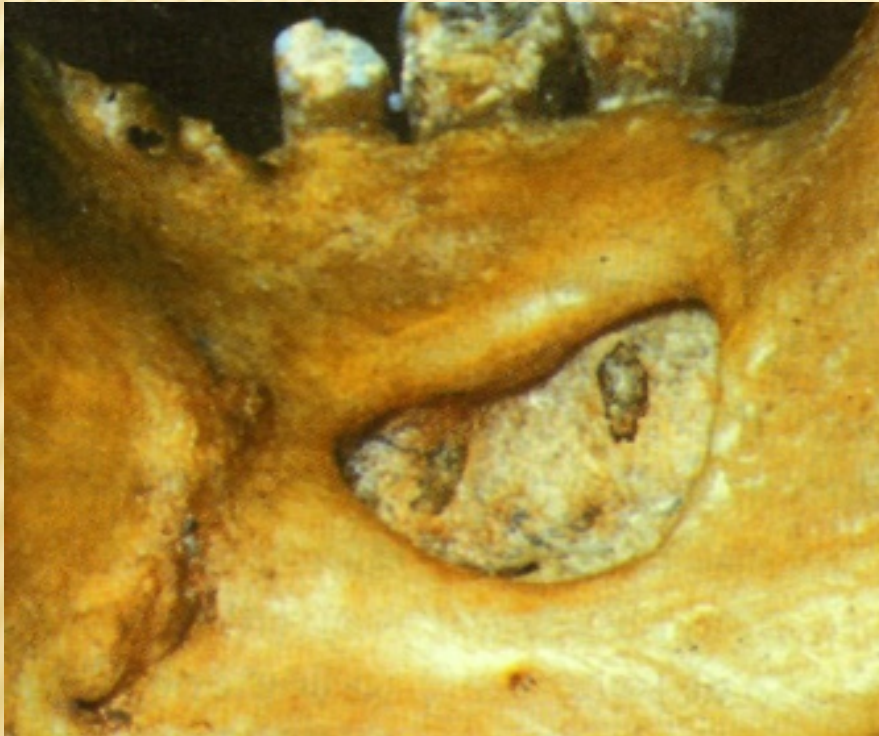
Treatment

Complete surgical excision of the cyst



LINGUAL MANDIBULAR BONE DEFECT

👉 Stafne cavity, Static bone cavity, Latent bone cyst

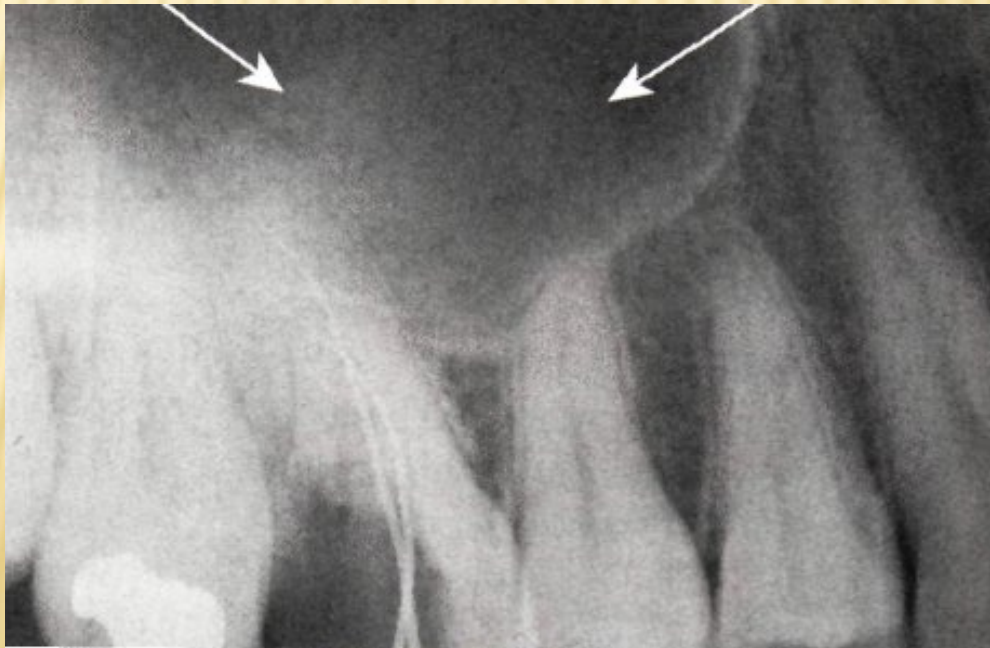


BENIGN MUCOSAL CYST OF MAXILLARY ANTRUM

- ✚ Mucocoele, Retention cyst, Intramural cyst, Mesothelial cyst, Lymphangiectatic cyst
- ✚ Secretory & Non secretory type
- ✚ 3rd decade, Males > Females
- ✚ Localized dull pain in antral region
- ✚ Fullness of cheek, Nasal obstruction
- ✚ Swelling

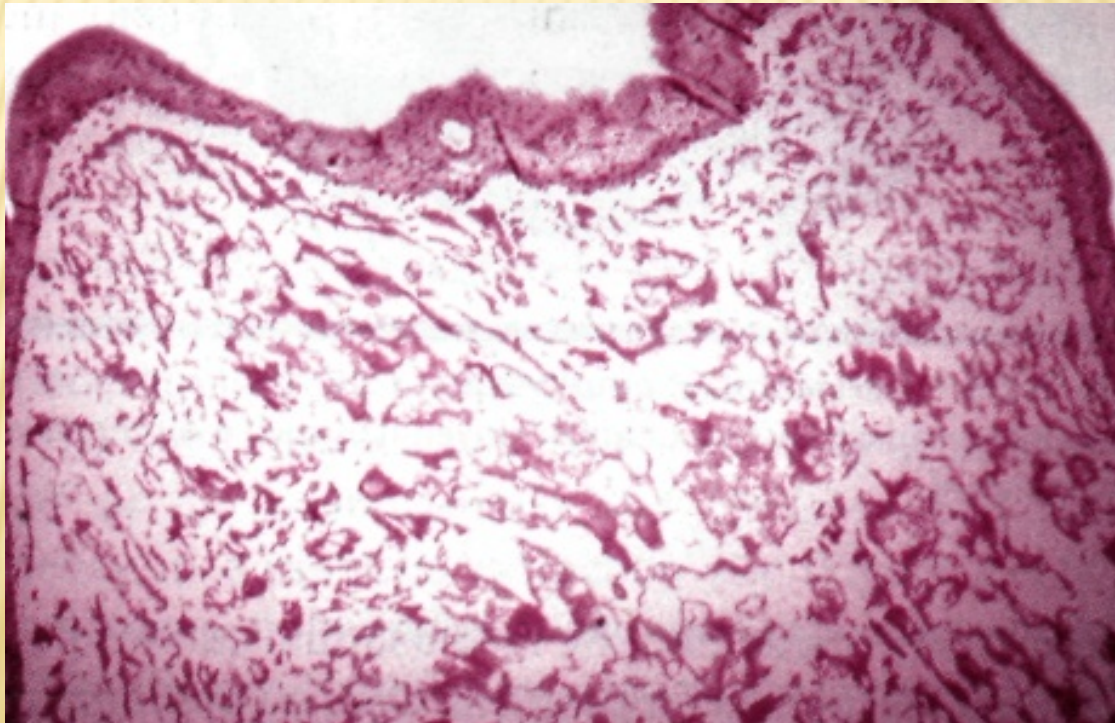
RADIOLOGICAL FEATURES & PATHOGENESIS

- ✚ Spherical, Ovoid, Dome shaped radio opacities with smooth uniform outlines.
- ✚ No resorption of surrounding bone.
- ✚ Infection from pulp and periapical areas



HISTOPATHOLOGY & TREATMENT

- Pseudostratified ciliated epithelium
- Inflammatory cell infiltration in Connective tissue
- Surgical removal



SUMMARY

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BIBLIOGRAPHY

- ✚ Shafer's text book of oral pathology 5th & 6th edition
- ✚ Oral and maxillofacial pathology Neville, 2nd edition
- ✚ Color atlas of oral diseases Cawson, R. A.
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Thank you