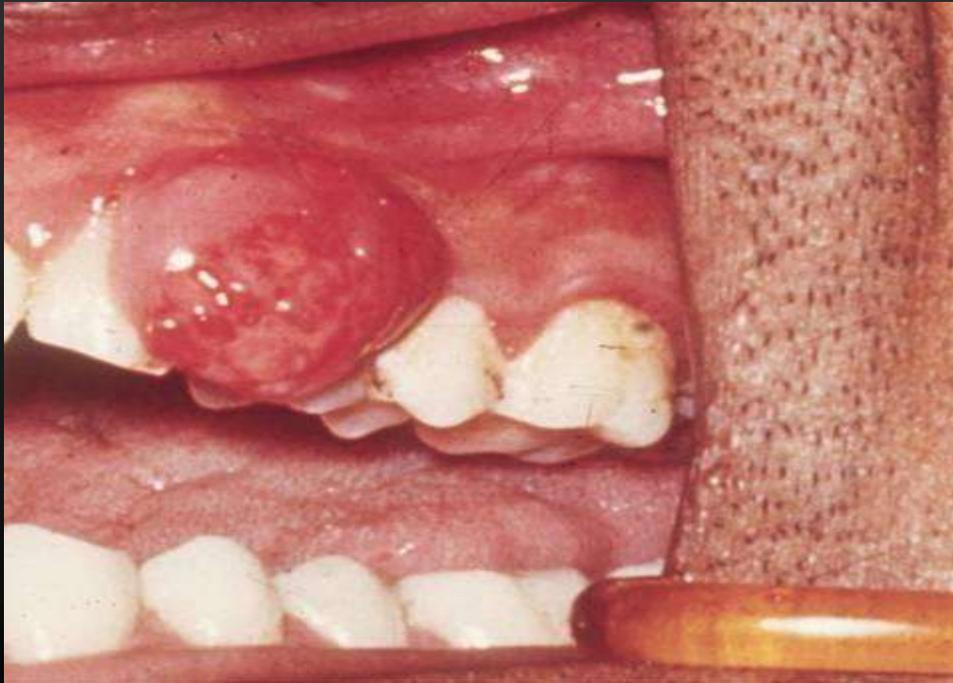


# *Non Epithelial Tumors of Oral Cavity*

Dr. Venu Naidu  
Dept. Of Oral Pathology

# NON-EPITHELIAL TUMOURS OF ORAL CAVITY

- PERIPHERAL GIANT CELL GRANULOMA

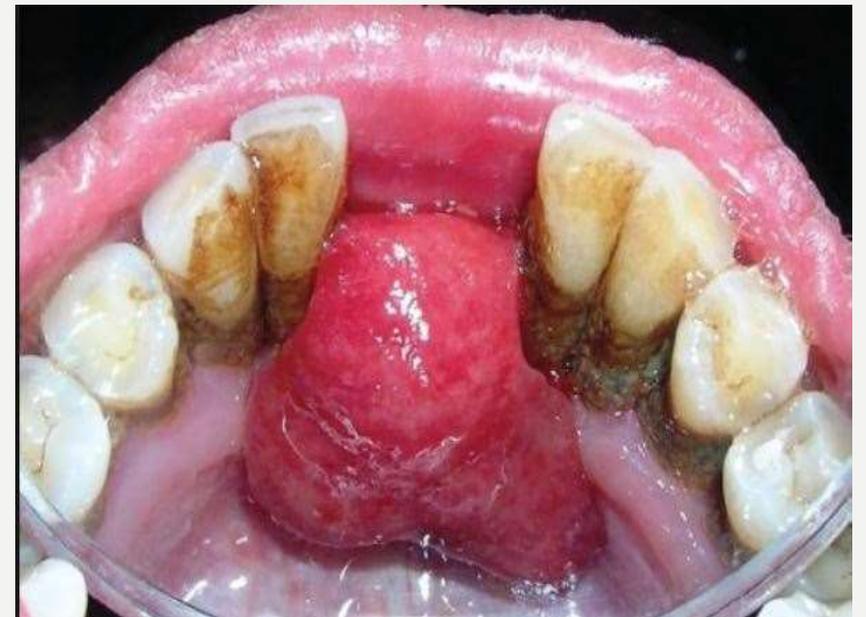


- CENTRAL GIANT CELL GRANULOMA



# PERIPHERAL GIANT CELL GRANULOMA

- Introduction:
- Relatively common tumour like growth of oral cavity
- Originates from the periodontal membrane or mucoperiosteum of the alveolar bone
- Also known as ~ *Peripheral Giant Cell epulis*
- ~ *Peripheral Giant Cell reparative granuloma*
- Represents soft tissue counterpart of CENTRAL GIANT CELL GRANULOMA
- Definition: An extraosseous nodule composed of a proliferation of mononuclear and multinucleated giant cells with an associated prominent vascularity found on the gingiva or alveolar ridge.



## ■ AETIOLOGY:

- Local irritation due to plaque or calculus
- Periodontal diseases
- Poor dental restorations
- Ill-fitting dental appliances
- Dental extractions

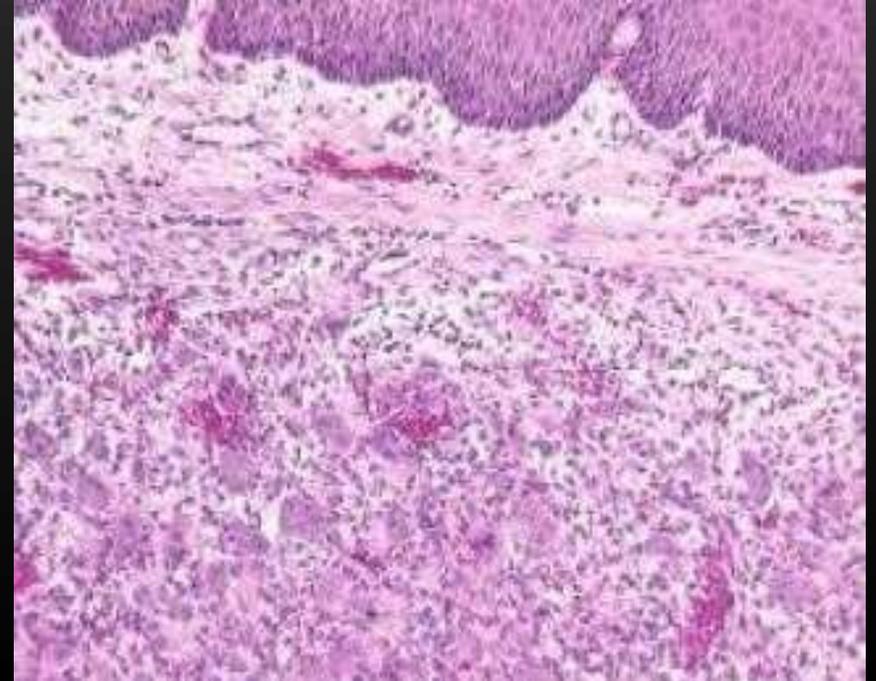
## ■ CLINICAL FEATURES:

- Age: 4<sup>th</sup> to 6<sup>th</sup> decades
- Gender : Childhood: Boys > Girls
- ~ females(65%) > Males(35%)
- Site: Mandible > Maxila
- ~ Premolar -Molar region >> Incisor- Canine region
- Clinical presentation:
- ~ Generally asymptomatic
- ~ well-defined, soft swelling, pedunculated or sessile, red or red-blue nodular mass ; may or may no be ulcerated
- ~ <2 cm in diameter



## • H/P FEATURES:

- Consists of non-encapsulated mass of tissue
- Covering epithelium is mostly hyperplastic with occasional ulceration
- Shows proliferation of multinucleated giant cells within background of plump ovoid and spindle shaped mesenchymal cells
- The giant cell may contain only a few nuclei or up to several dozen
- Nuclei may be large, vesicular or small, pyknotic
- Mitotic figures are present in delicate reticular and fibrillar connective tissue
- Numerous capillaries are found around periphery of the lesion
- Foci of haemorrhage,
- Liberation of hemosiderin pigment
- Inflammatory cell infiltration



- Radiographic features:

- *In edentulous areas:* superficial erosion of the bone with peripheral 'cuffing' of bone
- *In dentulous areas:* superficial destruction of alveolar margin or crest of interdental bone
- Widening of adjacent periodontal space
- Small spicules of newly formed osteoid or bone extending vertically into the base of lesion--- SAUCERIZATION



- TREATMENT AND PROGNOSIS:

- Conservative or complete excision
- When periodontal membrane is involved, associated teeth may need to be extracted
- Lesion may reoccur occasionally
- Recurrence rate of 10-15 % has been reported

# CENTRAL GIANT CELL GRANULOMA

## INTRODUCTION:

- Uncommon ; benign; proliferative Non-neoplastic lesion
- Also known as GIANT CELL LESION  
GIANT CELL TUMOUR  
GIANT CELL REPARATIVE GRANULOMA

## DEFINITION:

- An intraosseus destructive lesion of the anterior mandible and maxilla in which larger lesion expand the cortical plates, causes movement of teeth and produce root resorption.

- **AETIOLOGY:**

- Unknown

- **CLINICAL FEATURES:**

- Age: 2-80 years; most common in < 30 yrs of young people

- Gender : females >> males

- Site: Mandible >> Maxilla

- Lesions are more common in Anterior segment of jaw and crosses midline

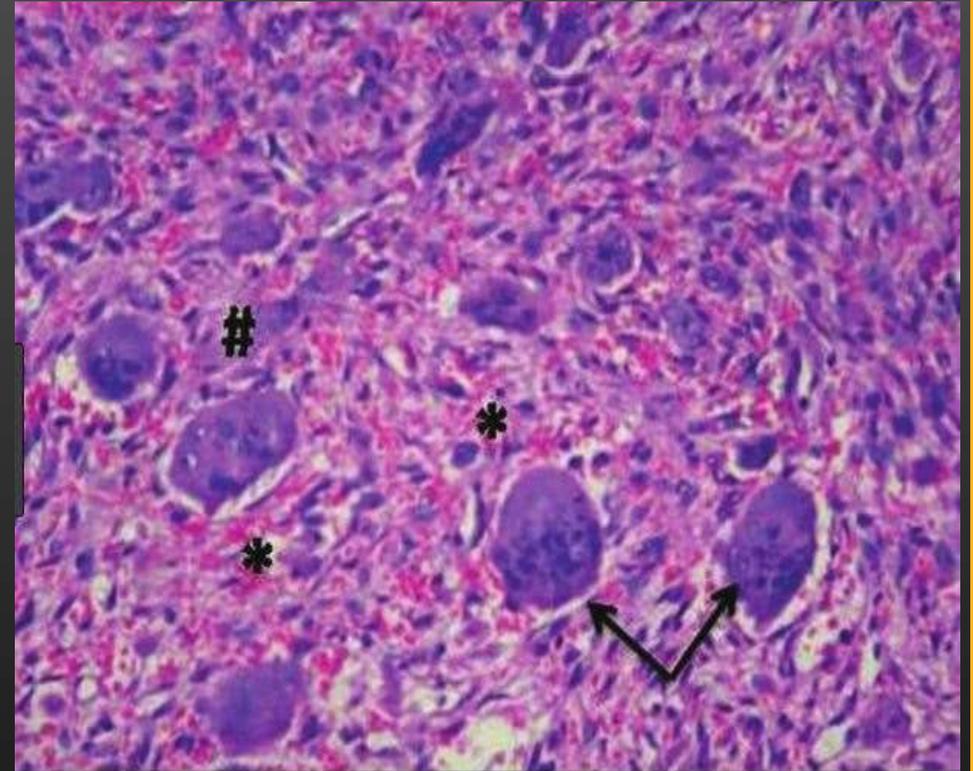
- C/P: mostly asymptomatic  
painless expansion of the bone  
mobility displacement and root resorption

Occasionally resulting in ulceration of mucosal surface by underlying lesion



## H/P:

- Loose fibrillar connective tissue stroma
- Proliferating fibroblast and small capillaries
- Multinucleated(5-20) giant cells
- Collagen fibres shows whorled appearance
- Prominent erythrocyte extravasion and hemosiderin deposition
- Older lesion may show considerable fibrosis of the stroma
- Foci of osteoid are occasionally present
- In less aggrasive lesions, giant cells are within distinct nodules separated by wide zones of cellular fibrous tissues
- In more aggrasive lesions, proportion of mono nuclear and giant cell tissue is decreased.



ARROWS: GIANT CELLS

# STROMAL CELLS

\* CONGESTED CAPILLARIES

- **RADIOGRAPHIC FEATURES:**

- Large radioluscent area
- Smooth or ragged border or faint trabeculae
- Indistinct line of demarcation with adjacent normal bone
- Definite loculation
- Cortical plates of bone are thin n expanded
- Buccal and lingual expansion seen on occlusal radiographs, often exhibits cortical bone loss
- Movement of associated teeth and root resorption



- TREATMENT AND PROGNOSIS:

- Curettage or surgical excision
- Tendency of recurrence is higher in younger patients
  
- *Calcitonin sc inj.*
- *Triamcinolone inj*
- *C/I : Radiotherapy*

THANK YOU