



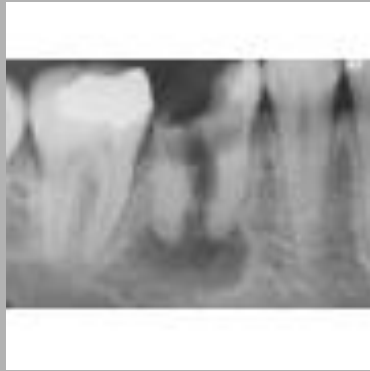
# Sequel of P.A.G.

- May continue to enlarged & be associated with resorption of the bone & or the root apex, the whole process being symptomless.
- May undergo acute exacerbation (acute abscess) & the patient may present with symptoms of acute periapical abscess. This may be evidenced clinically by the rapid onset of pain, redness, swelling of adjacent soft tissue, tenderness of the affected tooth, & tooth mobility.
- May transform to chronic abscess, this being a well circumscribed area of suppuration that shows little tendency to enlarge or to spread & present few, if any, clinical features.
- Low grade irritation to the apical tissues may result in bone deposition (osteosclerosis) rather than resorption, & or deposition of cementum on the adjacent root surface to produce hypercementosis.
- Proliferation of the epithelial cell rests of Malassez associated with the inflammation may lead to the development of an inflammatory radicular (periapical) cyst.

# Periapical cyst (Radicular Cyst)

- **A pathological cavity, lined by epithelium, surrounded by fibrous connective tissue capsule, with a lumen in its center that contains fluid & semi fluid materials**
- Pathogenesis:
  - A- stimulation of epithelial rests of Malassez by inflammation.
  - B- hydrostatic pressure of the cyst fluid
- Note: radicular cyst may arise along the lateral aspect of the root ( lateral radicular cyst) this also arise from the epith. Cell of Malassez, but the source of inflammation may be from periodontal pocket.
- Periapical cyst that is not removed at the time of extraction, may remain in the periapical area (Residual Cyst)
- **\*clinically:**
  - 1- asymptomatic, unless there is acute inflammatory exacerbation.
  - 2- the apex of the tooth show swelling, & may be tender.
  - 3- movement & mobility of adjacent tooth as the cyst enlarges.

**Radiographically: appear as well circumscribed radiolucency, often with a distinct thin line separating it from the surrounding bone. It may show resorption of the apices of the teeth & displacement of the roots it may become very large, resulting in erosion of the inferior border & bulging of the buccal & lingual cortical plates**



## HISTOPATHOLOGY:

- 1- the epith. Lining is usually stratified squamous in type, but sometimes, in radicular cyst of the maxillary teeth near the max. sinus, we may see respiratory type of epith.
- 2- the presence of hyaline bodies, called Rushton bodies in the epith. Layer, & sometimes in the C.T. capsule. These bodies are arch shaped, eosinophilic in appearance, its thought to be as either rests of blood cells which involved in the thrombus formation or as epith. Secretory products.
- 3- the wall of the cyst , consist of C.T. that is rich in collagen fibers, with infiltration of chronic inflammatory cells & some PML.
- 4- cholesterol crystals
- 5- foam cell
- 6- the lumen contain fluid with a low concentration of proteins, keratin & blood which is due to surgical procedure

