Radicular Cyst ➔ Necrotic tooth/carious tooth/root resorption.
- Dentigerous Cyst ➔ Unerupted 8 or canine, attached to cemeto-enamel junction.

Cone beam CT.
- Useful for surgical management.
- 3D and aids with diagnosis.
- Greater detail of location.
- Greater detail of surrounding structures (e.g. ID nerve in mandible).
- Around apical region of tooth – likely to be a Radicular Cyst.
- Around the crown of a tooth – likely to be a Dentigerous Cyst.

Vitality/Sensibility Testing
- Radicular cysts are associated with non-vital teeth.
- Discoloured tooth/history of trauma/sinus/abscess.
- Always test healthy/asymptomatic teeth first in order to ascertain ‘normal’ response.
- Endofrost (-50°C) Vs. Ethyl Chloride (-4°C). Electric pulp testing.
  - No response to cold/EPT – non-vital
  - Hyperresponsiveness (pain or early response) to cold/EPT – pulpitis.
    - Not normal, could indicate nerve is inflamed (hyperalgesic).

Aspiration of Cyst
- Adjunctive test not always necessary.
- Fluid filled cavity rules out granuloma/tumour (solid) or maxillary sinus (air).
- Straw coloured fluid +/- shimmering due to cholesterol content cyst.
- Creamy, viscous fluid – presence of Keratin Odontogenic Keratocyst.
- Radicular & Dentigerous cysts do not contain keratin.
- BUT pus is also creamy.

Straw coloured, shimmering fluid – colour due to cholesterol content.
Creamy fluid (pus) viscous (ODK) – Presence of Keratin in an Odontogenic Keratocyst (ODK).

To Biopsy or Not?
- If appearance not typical of cyst then consider aspirate then incisional biopsy if necessary.
  - May be useful if concerned lesion is solid/tumour or likely to recur (Odontogenic Keratocyst).
  - Excisional biopsy of the cyst is effectively definitive treatment.
    - I.e. cyst enucleation & specimen sent to histopathology for diagnostic assessment.

MANAGEMENT OF CYSTS
Removal of source of bacteria (usually the tooth)
- Root canal treatment of non-vital tooth (+ cyst lining).
- +/- enucleation of cyst.
- +/- apicectomy.

Marsupialisation
- +/- delayed enucleation/excision.

Enucleation – removal of whole cyst (peeling it off the wall).
- +/- curettage
- +/- peripheral ostectomy
- +/- Carnoy’s Solution
- +/- liquid nitrogen.

Excision – removal of cyst as well as the adjacent area of bone.
- Wide local excision.
- +/- adjunctive radio/chemotherapy.
- +/- reconstructive surgery.