

- Radicular Cyst → Necrotic tooth/carious tooth/root resorption.
- Dentigerous Cyst → Unerupted 8 or canine, attached to cemento-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 a 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 osteotomy
- +/- 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.

Marsupialisation

