Other ENT & Maxillofacial Conditions

Otitis Externa

- Most common ear infection in adults
- Initially dermatitis then frank infection
- Infection often follows swimming or trauma to ear (cleaning)
    - Pseudomonas aeruginosa, staph, proteus, candida
- Purulent discharge, swollen canal, tragal tenderness
- Rx:
    - Ear toilette & swab → lab.
    - Keep dry
    - Steroid/Abx drops e.g. Sofradex (**dexamethasone+framycetin+gramicidin**) or **ciprofloxacin+hydrocortisone** 3 drops tds x7-10d (instill with tragal pumping)
    - Choose antifungal if suspected or found: e.g. **triamcinolone+neomycin+gramicidin**
    - Ear wick to help drop absorption / drainage. Review/change wick in 2d.
    - If localised boil/erysipelas → **flucloxacillin** or **cephalexin**
- Cx: Invasive OE (usually Pseudomonas) → osteomyelitis of base of skull, can → death.

Tympanic Perforation

- Causes: Blast injury, trauma (cleaning, children), barotrauma (air travel, diving), 2° to OM, cholesteatoma
- Features: Pain, hearing & d/c. Vertigo/severe hearing loss suggests inner ear damage.
- Mx:
    - Keep dry & avoid ototoxic ear drops.
    - Traumatic: remove debris, surgery if >50% of drum else r/v weekly for healing in ~6wk. ABx only if active infection or SCUBA-related.
    - Infective: Should heal spontaneously (quickly in children). If not in 3mo → ENT.
    - Retraction: Usually upper & assoc with cholesteatoma → mastoid XR or CT & ENT.

Acute Sinusitis

- 50% bacterial (H. influenzae, strep, moraxella), rest viral from URTI. Rare<6yo.
- Lasts<7d with viral. Green-yellow d/c. Pain worse on palpation or leaning forward.
- Site: Maxillary – 90%, Ethmoid, Frontal (>12yo), Sphenoid (>puberty)
- Inv: Sinus XR for opacification/fluid level. CT/MRI are better. Sinus culture only useful if done endoscopically. Nasal d/c not specific enough.
- Mx:
    - Nasal decongestants – Drixine (**oxymetazoline** 0.5%) drops TOP or **pseudoephedrine** PO for <3d or risk rebound congestion.
    - ABx if >5d symptoms: **amoxicillin** 15mg/kg tds x10d or **azithromycin** 500mg od x 3d (second line: **co-amoxiclav** or **cotrimoxazole**)
    - Refer to ENT if not improving after 2 courses or Cx.
    - Cx: Osteomyelitis of frontal bone, meningitis (sphenoid), extradural abscess or subdural empyema (frontal), brain abscess, orbital cellulitis (ethmoid)

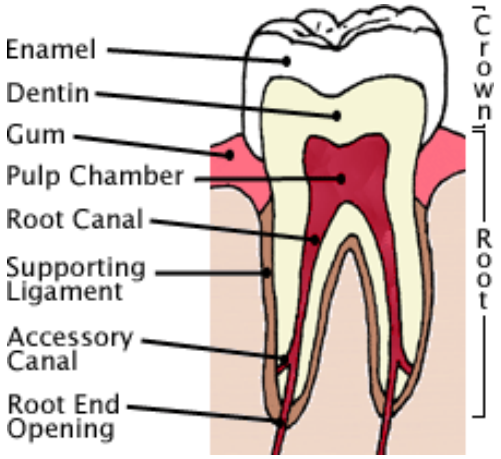
Cerebra-Rhino-Orbital Phycomycosis (Mucormycosis)

- Invasive Phycomycetes fungal infection.
- RF: Immunosuppressed patients, DM, on desferrioxamine
- Direct invasion of sinuses ± orbital involvement
- Clin: Facial pain, ↑T, peri-/orbital cellulitis, black eschars periorbitally, sinuses & mouth.
- Cx: cavernous sinus thrombosis, intracerebral abscess, central retinal art obs. airway obs
- Inv: CT, biopsy
- Mx: IV & topical amphotericin B. Aggressive surgical debridement.
- 50% mortality

Dental emergencies

Tooth Anatomy

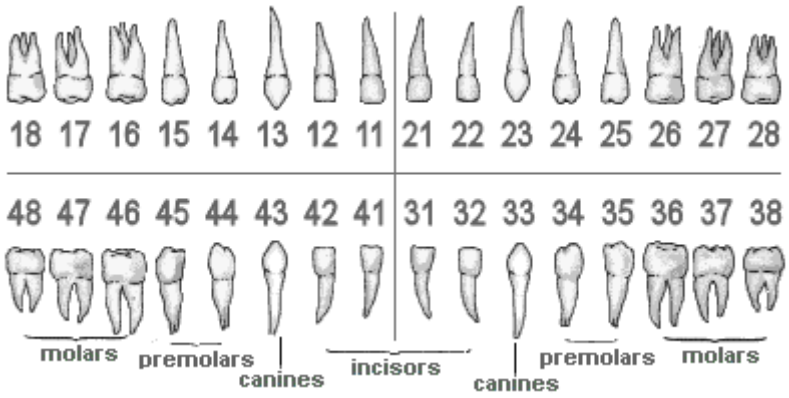
- Pulp - central portion, neurovascular supply
- Dentin - surrounds pulp, majority of tooth
- Enamel - white visible portion of tooth
- Periodontium - attachment apparatus (gingiva, periodontal ligament, alveolar bone)



Teeth numbering: Q, N (Q=quadrant, N=no. tooth from front centre.)

FDI two-digit tooth numbering system
Teeth numbering chart for adult teeth

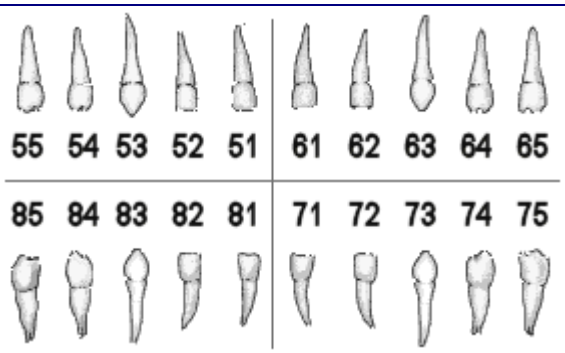
upper right	upper left



lower right	lower left

FDI two-digit tooth numbering system
Teeth numbering chart for primary teeth

upper right	upper left



lower right	lower left

Toothache: **oil of clove**, **ibuprofen**/**codeine**, dentist
Dental infection: warm NaCl washes, analgesia, ABx (**amoxicillin** & **metronidazole**), dentist (I&D)
Dental Trauma

- A/B: Assess risk of aspiration so if loose/displaced tooth - do not manipulate
- C: Haemorrhage control - gauze and direct pressure
- Avulsed tooth – if 1° tooth do not replace but f/u dentist <2wk, otherwise:
  - Handle by crown only. Avoid damage of periodontal ligament.
  - Keep tooth in transport medium, saline, milk or saliva
  - Gently rinse tooth in saline, do not wipe root and ligament
  - Suction socket, irrigate with saline, re-implant tooth firmly within 60-90min
  - Bite on gauze & splint to adjacent teeth and gingiva
  - F/U by dentist for root canal treatment
- ID all # fragments: in case some aspirated, lodged in mucosa, intruded into alveolar bone
- Consider: CXR, OPG, ADT and ABx (**Penicillin V**, **clindamycin**)

Dental Fractures

Ellis Class I

- Through enamel
- Pulp necrosis risk = 0-3%
- Mx: smooth sharp edges with emery board if causing pain & f/u with dentist PRN

Ellis Class II

- Through enamel and dentin (yellow/pink appearance)
- Pulp necrosis risk = 1-7%
- Painful and temperature sensitive
- Mx: Dry tooth with gauze and apply $Ca(OH)_2$. Soft food diet. Dentist f/u 24-48h.

Ellis Class III

- Involving pulp (pink appearance, blood often visible)
- Pulp necrosis risk =10-30%
- Severe pain, temperature sensitive
- Mx: Dental emergency - contact on call Dentist. If delay as for Ellis Class II + liquid diet.

Alveolar Fracture

- Tooth involvement from alveolar bone #
- Associated with high impact trauma
- Diagnose and preserve tissue, repair mucosal tissue
- Mx: Diagnose, ?repair mucosa, contact on call dentist/oral surgeon as dental emergency

Salivary Gland Diseases

Parotid enlargement

- Chronic EtOH, infection (mumps, other viruses & bacteria, TB), drugs (IV contrast, Hg), sarcoid, leukaemia, NHL, tumour

Sialothiasis

- Mostly submandibular (85%) or parotid (15%)
- Pain esp on eating
- Swollen gland, palpable duct stone, turbid saliva.
- Inv: plain XR (80% submandibular stones opaque, but 90% parotid stones lucent), sialography, USS, CT (more sensitive)
- Mx: bimanual massage, lemon drop lollies (↑saliva production may push stone out), analgesics, prophylactic ABx, surgery.