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)

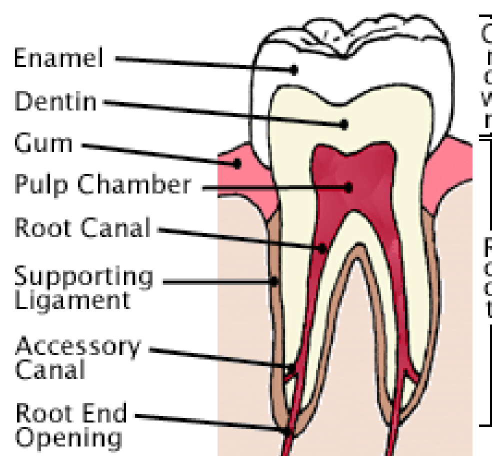
Cerebra-Rhino-Orbital Phycomycosis (Mucormycosis)

- 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
18 17 16 15 14 13 12 11	21 22 23 24 25 26 27 28
48 47 46 45 44 43 42 41	31 32 33 34 35 36 37 38
molars, premolars, canines, incisors	canines, premolars, molars
lower right	lower left

FDI two-digit tooth numbering system Teeth numbering chart for primary teeth	
upper right	upper left
55 54 53 52 51	61 62 63 64 65
85 84 83 82 81	71 72 73 74 75
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
- ID all # fragments: in case some aspirated, lodged in mucosa, intruded into alveolar bone
- Consider: CXR, OPG
- Complicated #/avulsions may require 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.