

# FACIAL FRACTURES

## MANDIBULAR FRACTURES

- get PA and OPG views
- give oral abx if open or through a tooth
- often need operation within 24hrs

## ZMC (zygomatic complex) FRACTURES

- look for depression of cheek bone from above
- numb in region of infraorbital nerve
- often affects orbit, so check vision
- can also cause retrobulbar haemorrhage: proptosed eye that cannot see or move and is very painful
- usually need ORIF but not immediately: discharge with analgesia, sinus precautions, antibiotics

## ISOLATED ZYGOMATIC ARCH #

- dent in side of head
- can't open or close mouth
- repair before swelling comes down, usually on next acute list

## LE FORT

- tooth-bearing bone is disjunct from cranial base at some point & extends posteriorly through pterygoid plates
- I is just separation of teeth; II is pyramidal, via orbits & bridge of nose; III is total facial separation from cranium
- can be hemi Le Fort, involving just one side, often with a fracture around front incisors
- may also involve cribriform plate & be leaking CSF - contact neurosurg
- Le Fort features need immediate reduction, otherwise swelling & haematoma makes it impossible to bring bone fragments together

## ORBITAL FRACTURES

- orbital floor & medial wall are likely areas
- TRUE entrapment of inf rectus is rare, but a surgical emergency: pain, impending doom, nausea & vomiting on trying to look up; may also become brady with this
- there may be limited eye movements & some diplopia due to muscular swelling/herniation & air entrapment around the globe, but associated symptoms above are concerning
- presentation often delayed, as swelling fills volume defect of orbit initially; eye sinks as swelling goes down, with diplopia developing
- for very well-looking, uncomplicated orbital fractures, can go home for outpatient follow-up without acute MaxFax review

# BLOCKS

## INFERIOR ALVEOLAR NERVE BLOCK

- anaesthesia of all teeth in quadrant, ipsilateral tongue, lip & chin, oral mucosa from first molar back
- mainly for toothache & broken jaws (can repeat process with marcaine 1-2ml for approx 4hrs analgesia)
- facial nerve palsy may occur if injection is too deep; resolves
- Inject white column at back of open mouth (Raphe), above posterior teeth (with thumb in space laterally, insert halfway up thumbnail)
- barrel of syringe over opposite lower premolars (aiming laterally)
- advance slowly, injecting en route; will hit bone in about 3cm, withdraw 1mm & inject whole cartridge
- if whole needle is in and still no bone, likely into parotid; withdraw & aim more laterally
- sit pt up; lip will feel "fat" (numb)

## SUPRAORBITAL NERVE BLOCK

- blockade of ipsilateral forehead to vertex
- nerve associated with medial aspect of ridge, BLOCK Supra-Trochlear branch also (medially to SON)
- approach from opposite side, infiltrate approx 2cm along ridge

## INFRAORBITAL NERVE BLOCK

- blockade of ipsilateral lower eyelid, skin of malar region, upper lip & tip of nose
- feel foramen/notch to side of nose
- from canine/premolar border, measure distance to notch on outside (e.g. needle hub at tip of teeth) then insert needle upwards aiming for notch
- infiltrate 0.5-0.75ml & massage

## MENTAL NERVE BLOCK

- blockade of ipsilateral oral mucosa anterior to premolars, lip & chin
- exits between roots of lower premolars
- aim approx towards roots (approx 2x height of tooth itself)
- once you hit bone, inject 0.5ml
- bilaterally, can numb entire lower lip

## Dental Syringe Set Up

Lignocaine/adrenaline injection (green top) is also useful to inject around bleeding sockets

- contains 30mg lignocaine
- if block unsuccessful, can repeat attempt

Gold topped cartridge is good for local infiltration around a tooth for toothache