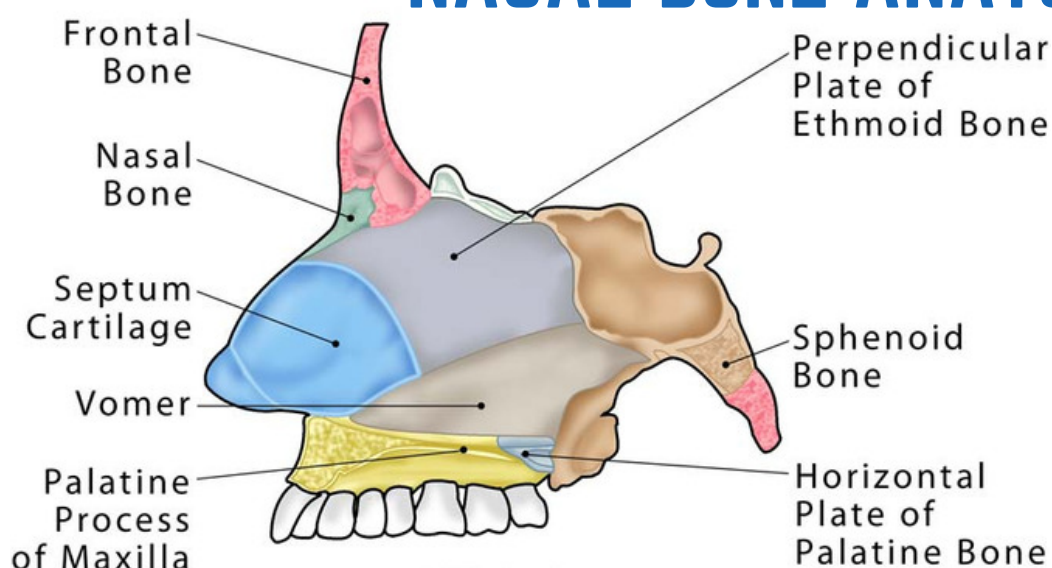


FACIAL FRACTURES "NASAL"

Episodes 4.1-4.2

NASAL BONE ANATOMY



CLASSIFICATION OF FRACTURES

Type I -- simple, unilateral

Type II -- simple, bilateral

Type III -- comminuted

A -- unilateral, B -- bilateral, C -- frontal

Type IV -- complex

A -- associated with septal hematoma, B -- associated with open nasal laceration

Type V -- nasoorbitoethmoidal (NOE)



PHYSICAL EXAM

- Possible findings: deformity, deviation, lacerations, mucosal tears, ecchymoses, lid edema, conjunctival hemorrhage
- Perform intranasal exam with speculum and/or endoscopy
- Palpate for tenderness, mobility and stability

MANAGEMENT

Repair within first 1-3 hrs or 7-10 days after injury

Closed Reduction (requires intranasal and external splints)

Unilateral or bilateral fracture of nasal bones alone

Fractures with deviation less than ½ width of the nasal bridge

Open Reduction

Extensive dislocation bones and septum

Open septal fracture

Persistent deformity after closed reduction

Septal hematoma (also requires drainage and nasal packing)

History of recent intranasal surgery

COMPLICATIONS

Emergent - severe bleeding, CSF rhinorrhea, visual loss

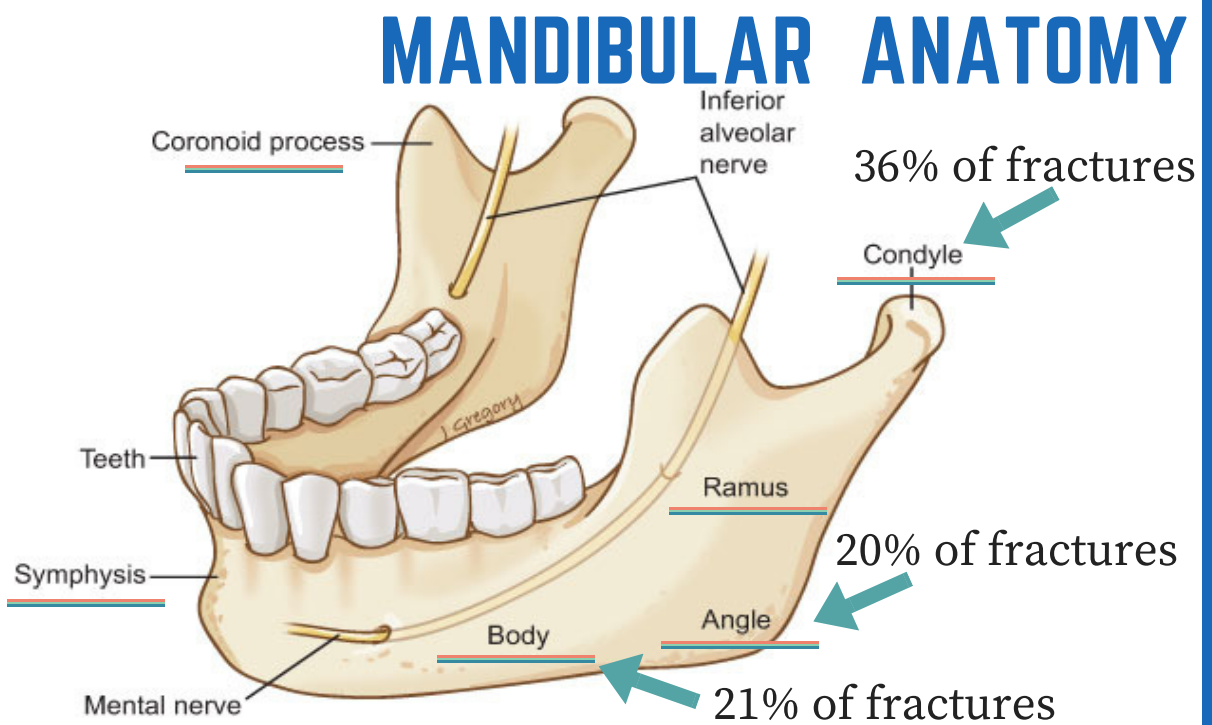
Early - hematoma to abscess formation, infection, CSF leak

Late - fibrosis, saddle nose/deformity, septal perforation



FACIAL FRACTURES "MANDIBULAR"

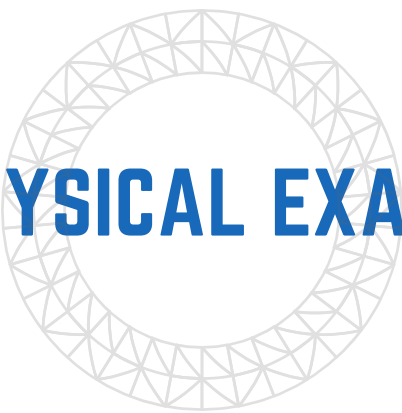
Episodes 4.1-4.2



CLASSIFICATION OF FRACTURES

Based on **anatomic location**, "favourability" / displacement, and **type of fracture** eg. simple, compound, comminuted

PHYSICAL EXAM

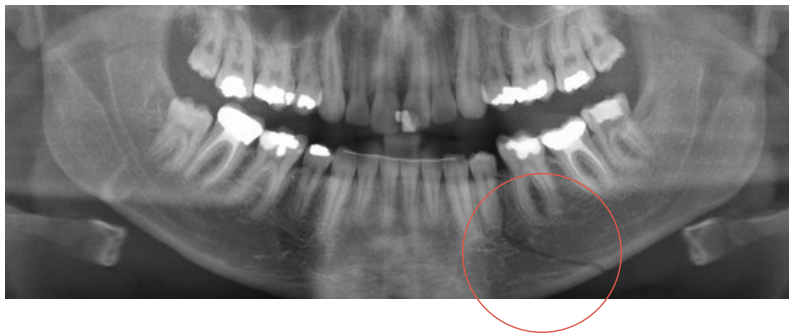


Possible findings: pain, malocclusion, trismus (<35 mm), CN V (V3) sensory deficit, floor of mouth hematoma, step-off bony deformity, open bite, crepitus or bloody otorrhea

EVALUATION

Panorex (panoramic view x-ray)

CT scan not as diagnostic as x-ray for non-displaced #. Better for condylar fractures



MANAGEMENT

- **Closed reduction** → for favourable / non-displaced #, and edentulous mandible. # reduced in normal occlusion and achieved by mandibulomaxillary fixation (MMF) → arch bars, wires, dental splints or dentures
- **Open reduction** → for unfavourable / displaced #, and associated midface fractures. Intraosseous wiring, lag screws or compression plates
- **External fixation** → for grossly comminuted fractures, contaminated fractures or non-union injuries. Rarely utilized