FACIAL INJURY

SEMEEHA SADIQ

CLASSIFICATION OF FACIAL INJURIES

✓BONY INJURIES

- Simple
- Compound
- Comminuted
- Complicated
- Pathological

Fractures-undisplaced,minimally displaced,displaced

- SOFT TISSUE INJURIES
  - Lacerations
  - Incised wound

SOFT TISSUE INJURIES

- d/t blunt or sharp trauma
- Exclude any associated nerve,parotid duct or underlying bones
- Mostly repaired under LA in 24hrs-clean and close in layers
- Facial skin-blood supply-healing-debride frankly necrotic tissues
- Small superficial clean incised wounds-cyanoacrylate glue
- Facial nerve function should be assessed-nerve stimulator or monitor to identify transected nerve ends

- Parotid duct injury-saliva leak-methylene blue injected intraorally-assess for leakage
- ANIMAL & HUMAN BITES-clean

  closed in layers,

  antibiotics

  HIV ,HEP B serology

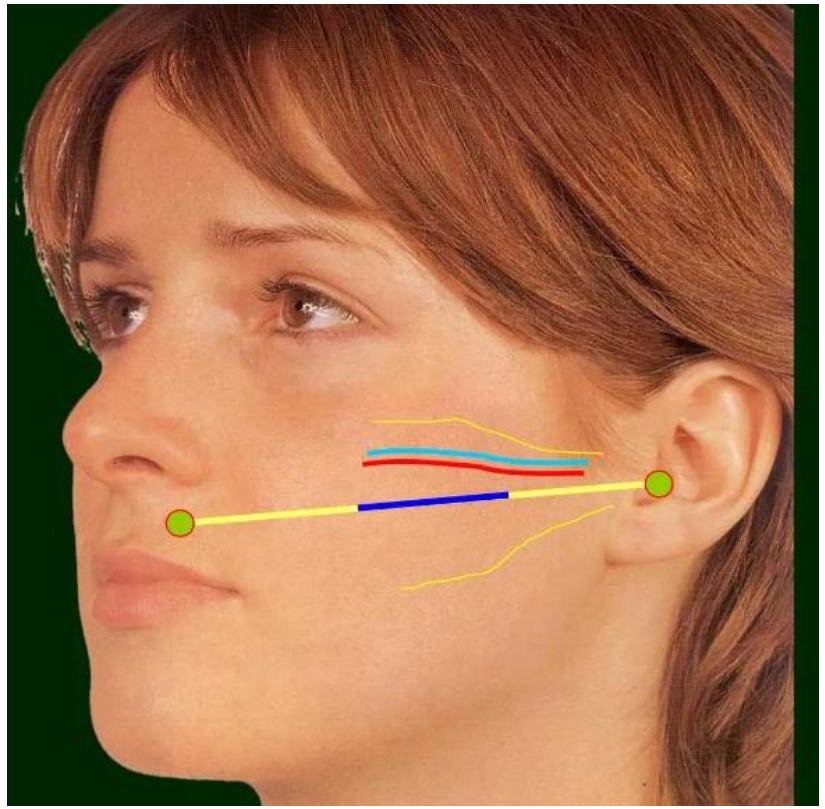
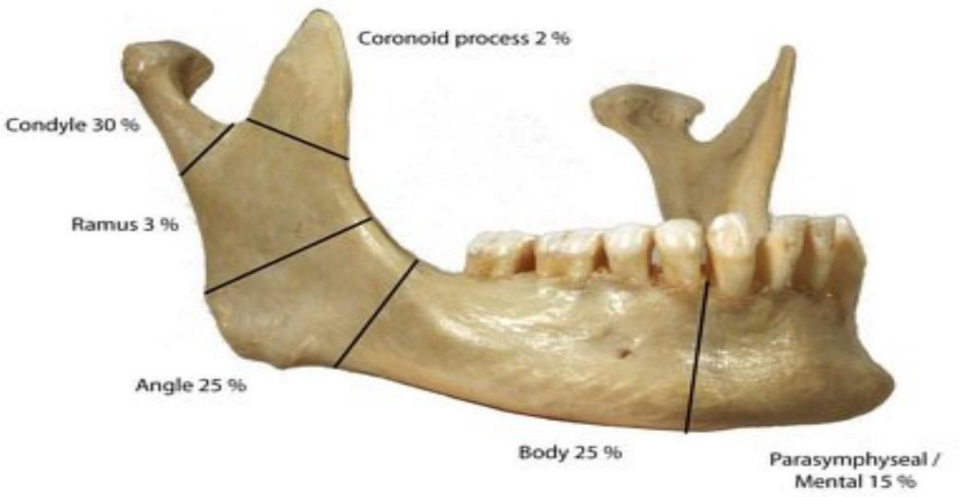


Figure 1. 4 year old female patient with dog-bite wounds. Wounds include two facial thirds, **a)** and **b)** after the aggression, **c)** and **d)** after cleansing and primary closure, **e)** and **f),** control pictures after 4 months.

MANDIBULAR FRACTURES

- Commonest fracture patterns-parasymphisis and angle fractures or parasymphisis and condylar fractures
- paraesthesia?-in lower lip or chin-inferior alveolar nerve damage
- ORIF-open reduction and internal fixation-for displaced



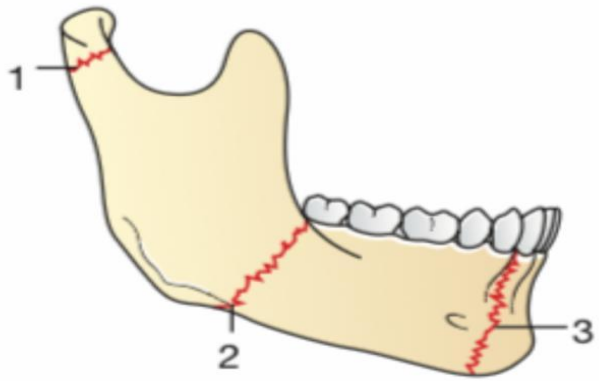
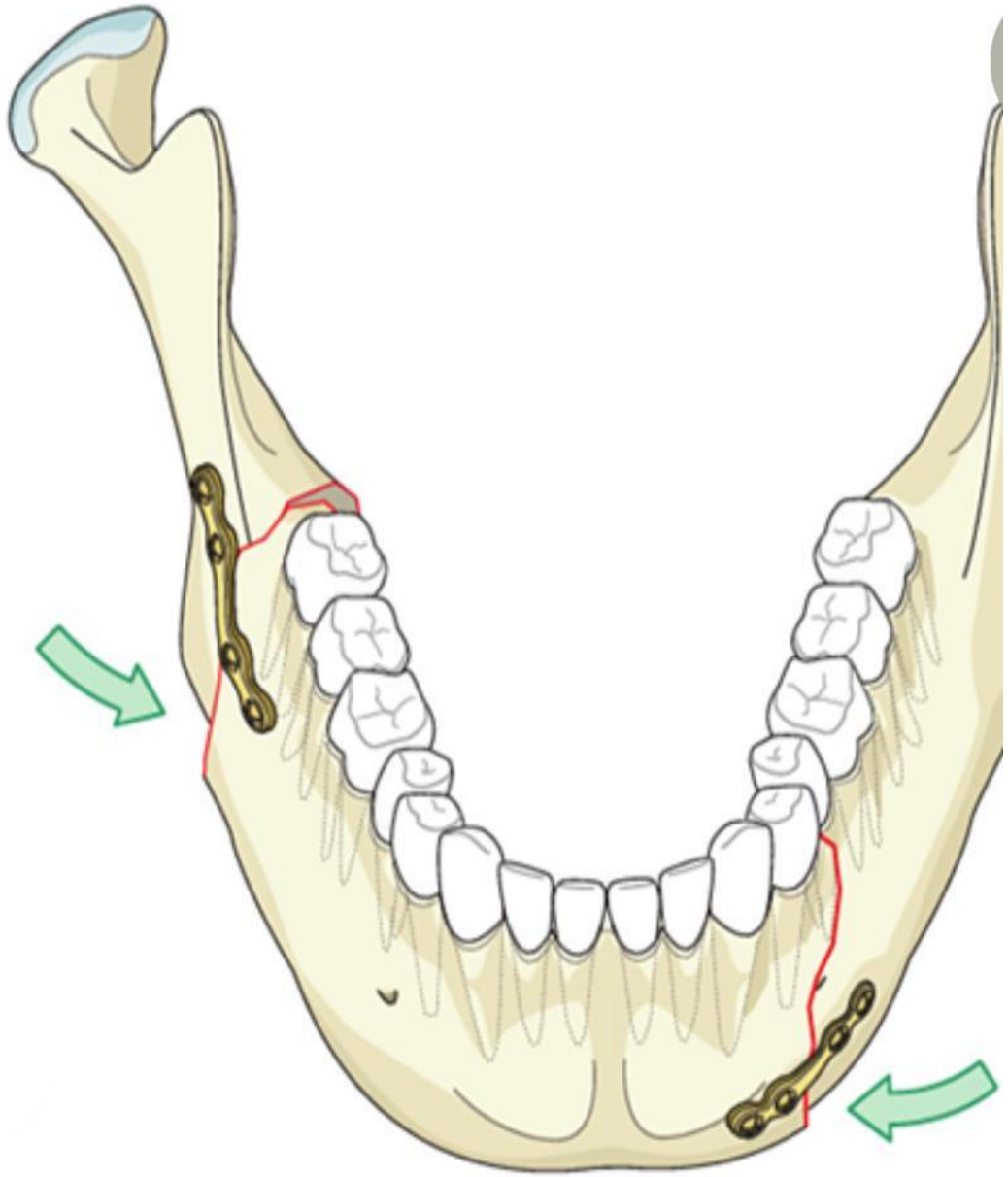
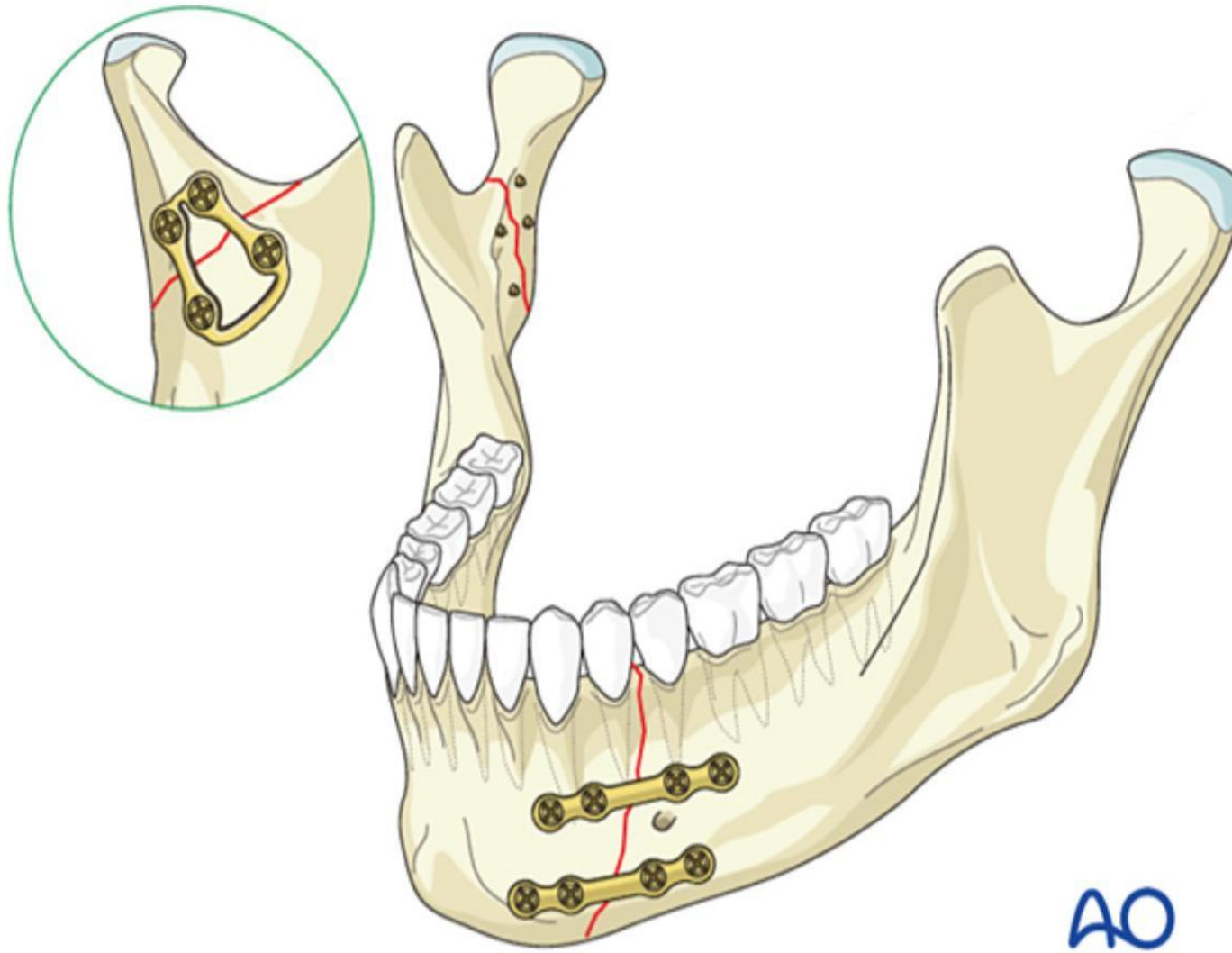


Figure 31.8 Fractures of the mandible. (1) The neck of the condyle is the most common site, followed by (2) the angle of the mandible. (3) The third point of weakness is in the region of the mental foramen.





ZYGOMATIC FRACTURES

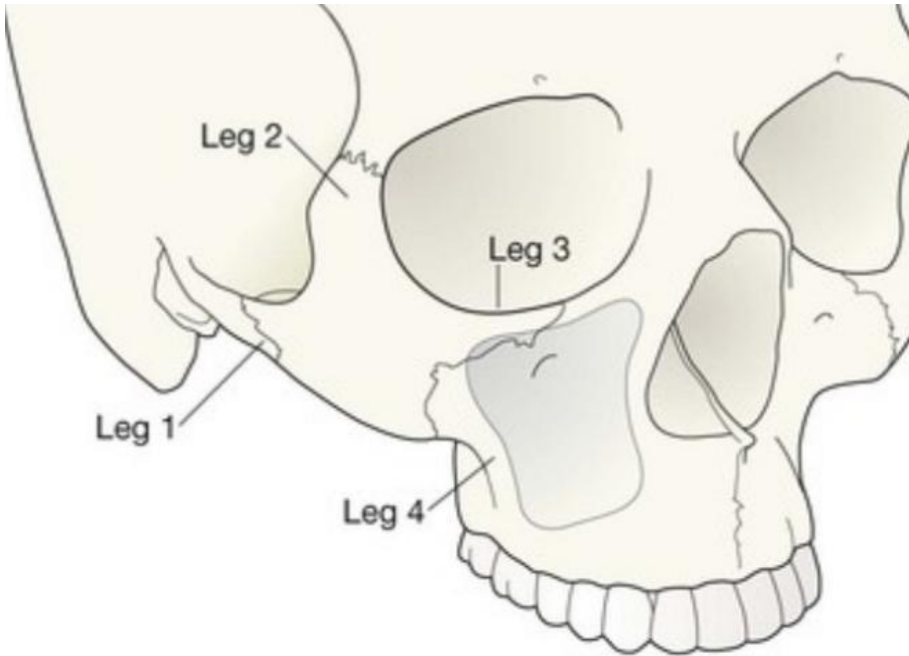
- d/t blunt trauma to midface
- Four legged stool-

leg 1-zygomatic arch

leg 2-zygomatic process running vertically to join the FZ

leg 3-infraorbital rim

leg 4-maxillary buttress



- Facial swelling,periorbital,subconjunctival hemorrhage with no posterior border limit
- Indication for surgical intervention-asymmetric cheek bone prominence,eye symptoms,restricted mouth opening

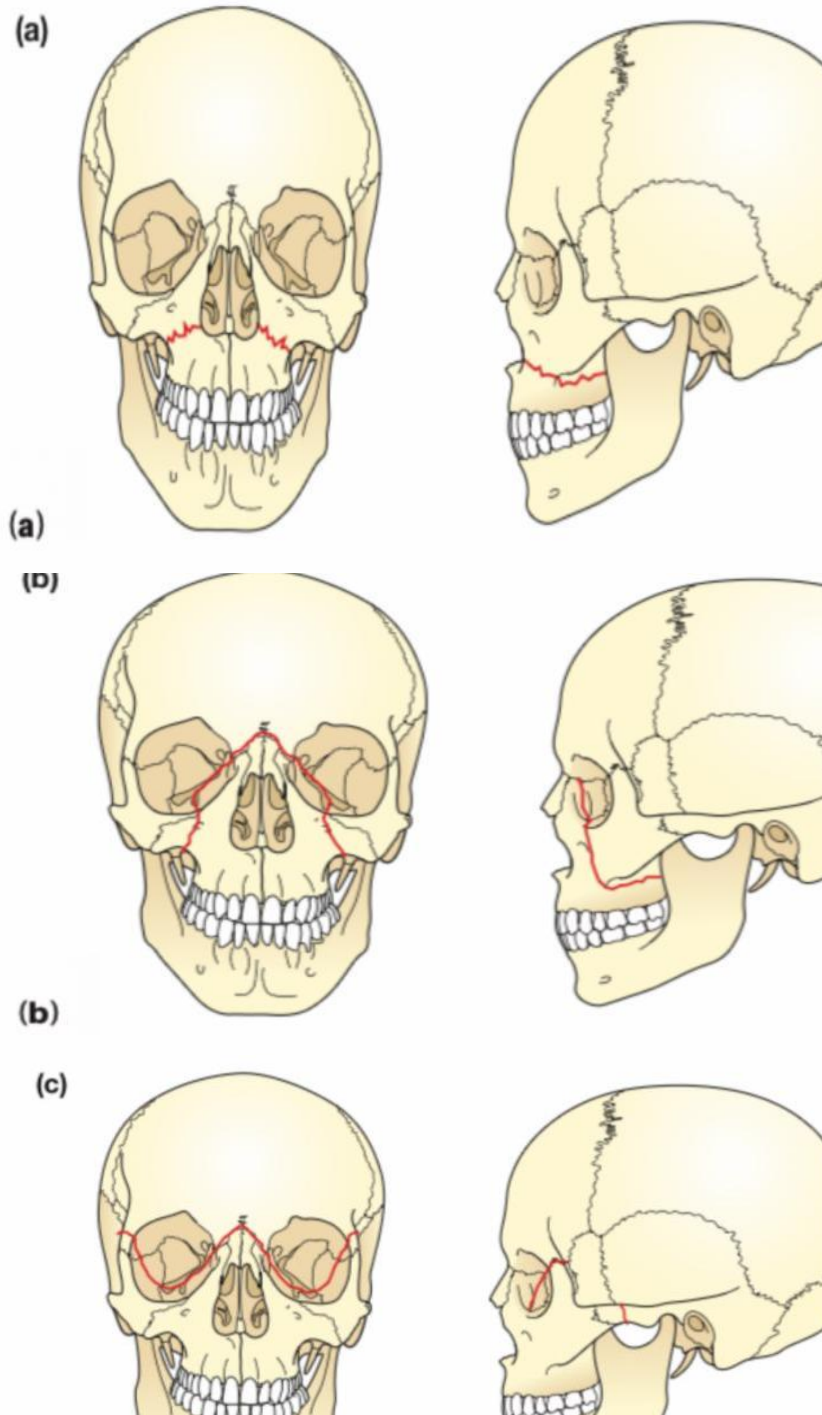
MAXILLARY FRACTURES

- Classified acc to anatomical level

Le FORT I-pterygoid plates-lateral wall of maxillary sinus-piriform aperture of nose

Le Fort II-dentition bearing areas of maxilla and nasal bones

Le Fort III-whole midface separated from skull base



ORBITAL FRACTURES

- Isolated or in conjunction with maxillary or zygomatic
- Invole orbital floor,medial wall,lateral wall or roof
- Inferior rectus entrapment in children-occulocardiac reflex
- Blow in and blow out fractures
- Trapdoor effect
- Retrobulbar hemorrhage- surgical emergency-blindness secondary to pressure induced reduced flow on retinal artery-ischemic damage to optic nerve-altered perception of red colour-canthotomy

Figure 31.15 This 11-year-old boy presented with an oculocardiac reflex secondary to a 'white eye' blow-out left orbital floor fracture following a rugby injury.

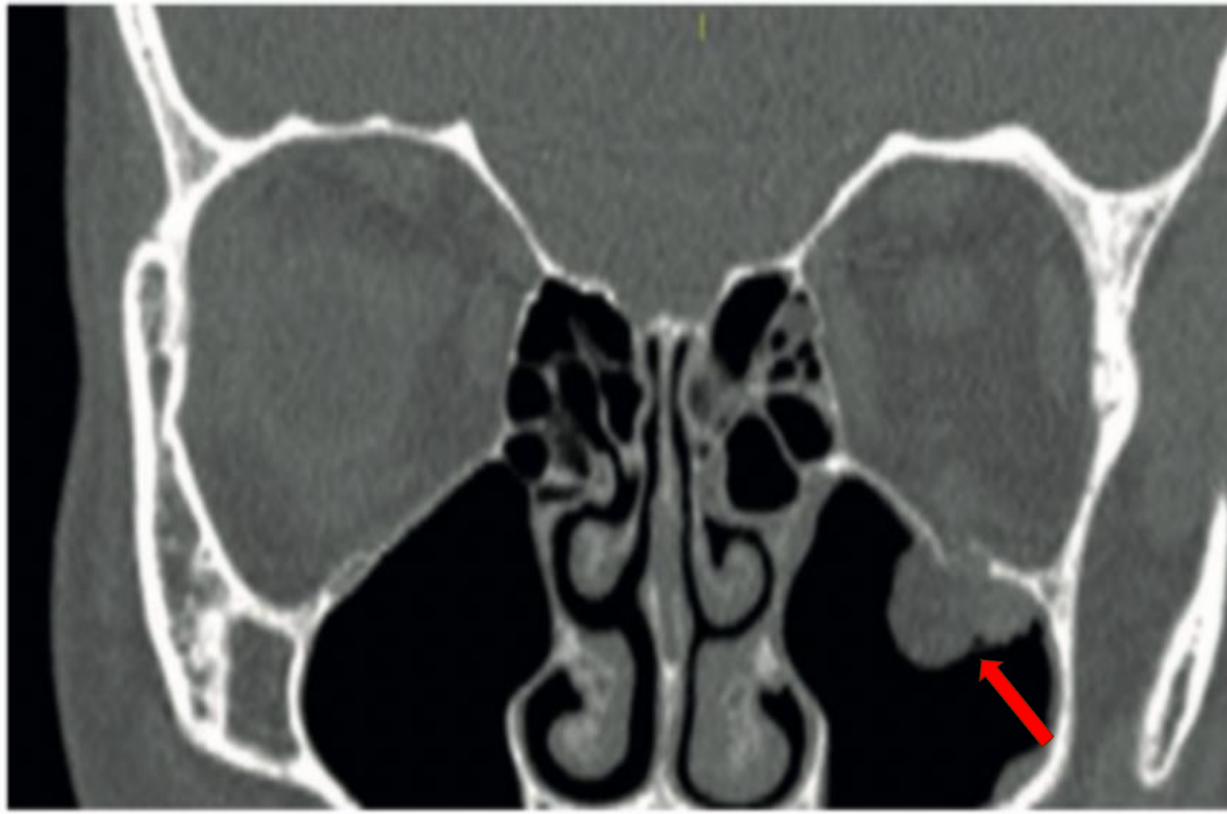


Figure 31.14 Coronal computed tomography (CT) scan dem
ing a left orbital blow-out fracture, with soft-tissue herniation
maxillary antrum.

FRONTAL SINUS FRACTURE

- Large amount of force to cranium
- If dural tear-csf rhinorrhoea
- Fracture management-aim-”safe sinus”
- CT @ 6 months to 1 yr

PANFACIAL FRACTURES

- Combined fracture
- Some of the most complex of facial injuries-significant force
- Often associated with intracranial, spinal or other organ injuries
- Reformatted CT –extent and natur

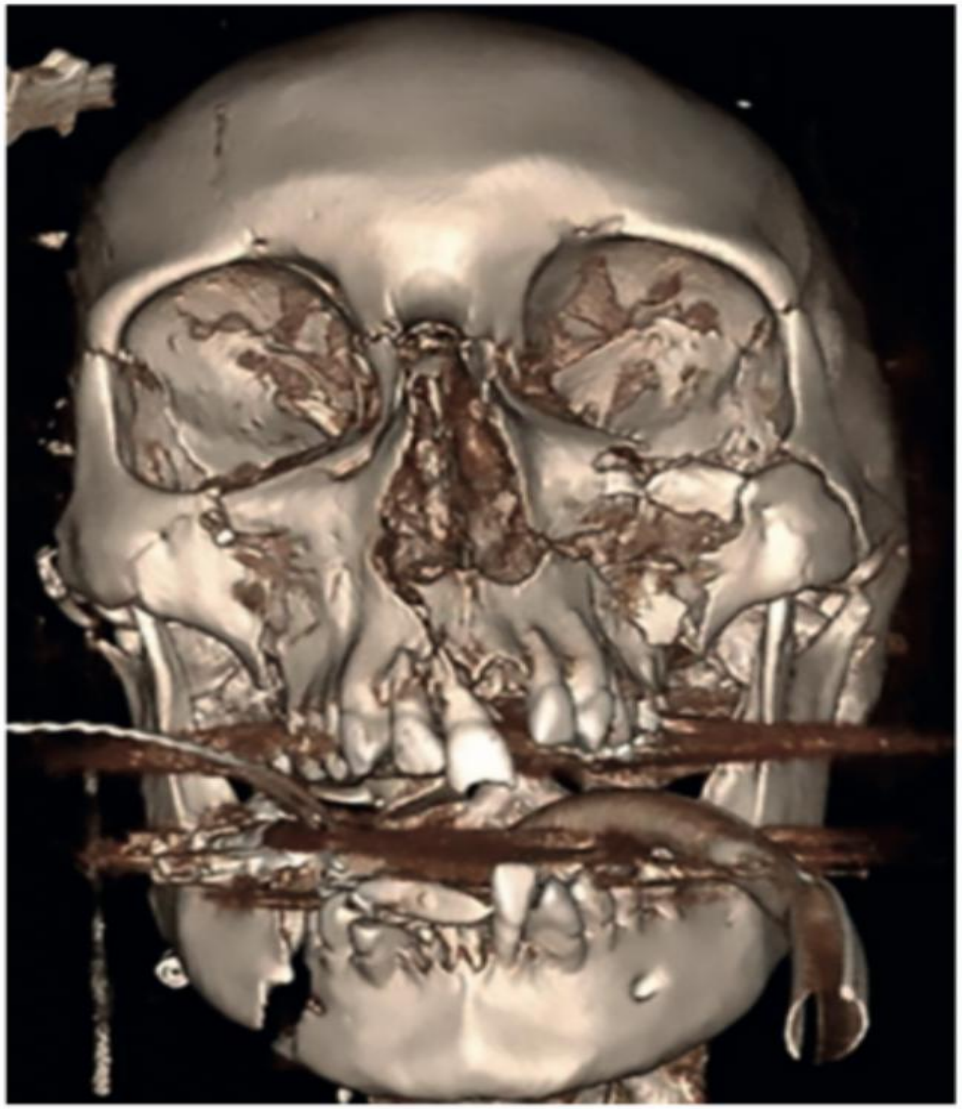


Figure 31.18 A three-dimensional reformatted CT scan demonstr
ing extensive midface and mandibular fractures (endotracheal a
intracranial pressure tubes *in situ*).