

What type of imaging is useful
for evaluating facial trauma?

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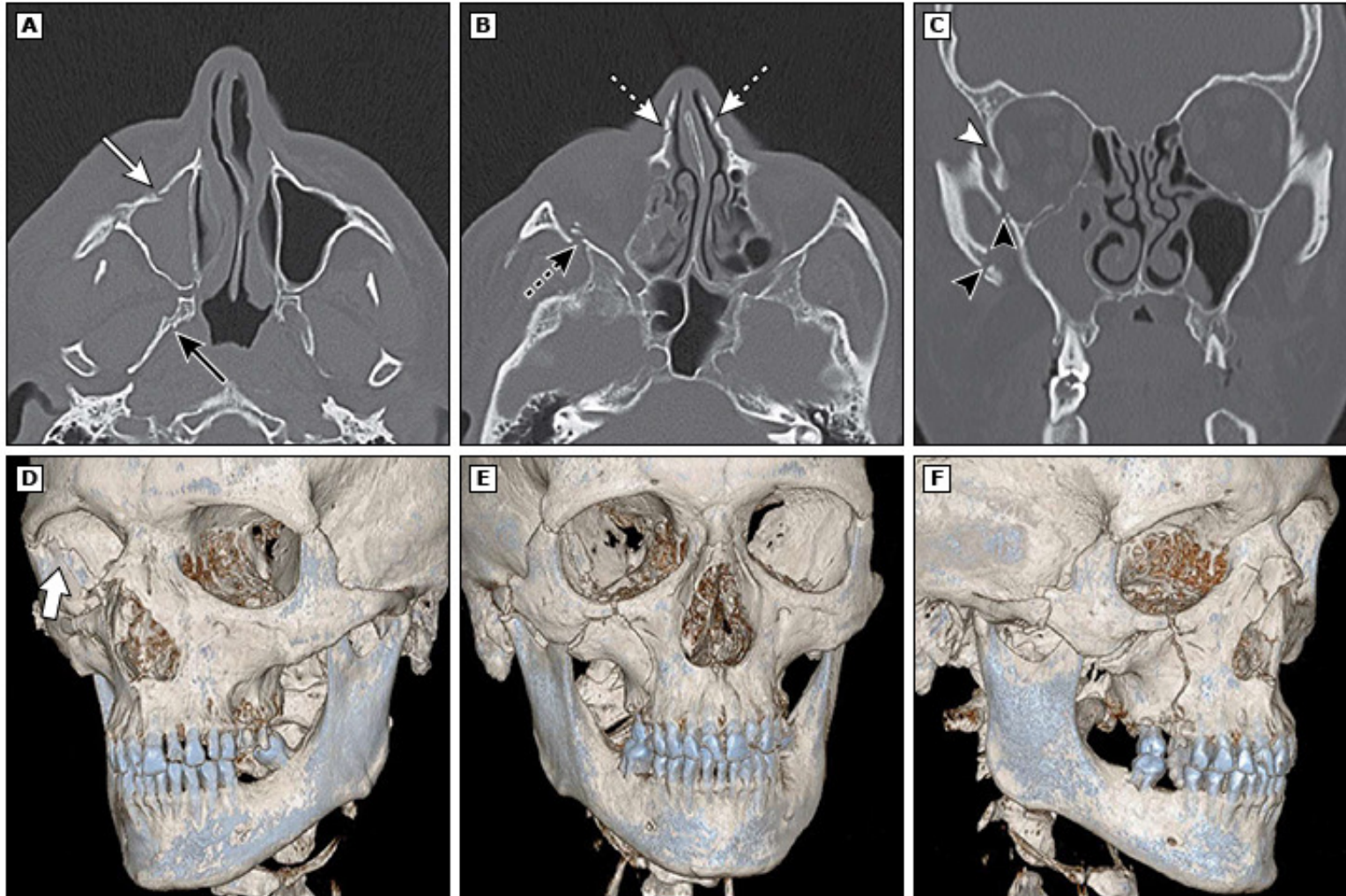
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What is Facial Trauma?

Type of Imaging Used?

- **Bone or soft tissue damage to the face caused by:**
 - Motor vehicle accidents,
 - Assaults (including gunshots),
 - Sports injuries, falls,
 - Chemical exposures,
 - Thermal burns or
 - Animal bites.
- **Computed tomography CT**
 - is the most effective way to assess face trauma, since it allows imaging of bone, soft tissue, blood vessels and other structures.
 - 2D and 3D facial CT
 - CT angiography
 - Plain radiographs X-rays (useful for screening minor facial trauma eg Nasal injury)
 - Bedside ultrasound (Ocular and orbital injury)
 - Panorex imaging(mandibular fractures, dental fractures, or fractures of the alveolar ridge)
 - Face MRI can also be Used

2D and 3D facial CT

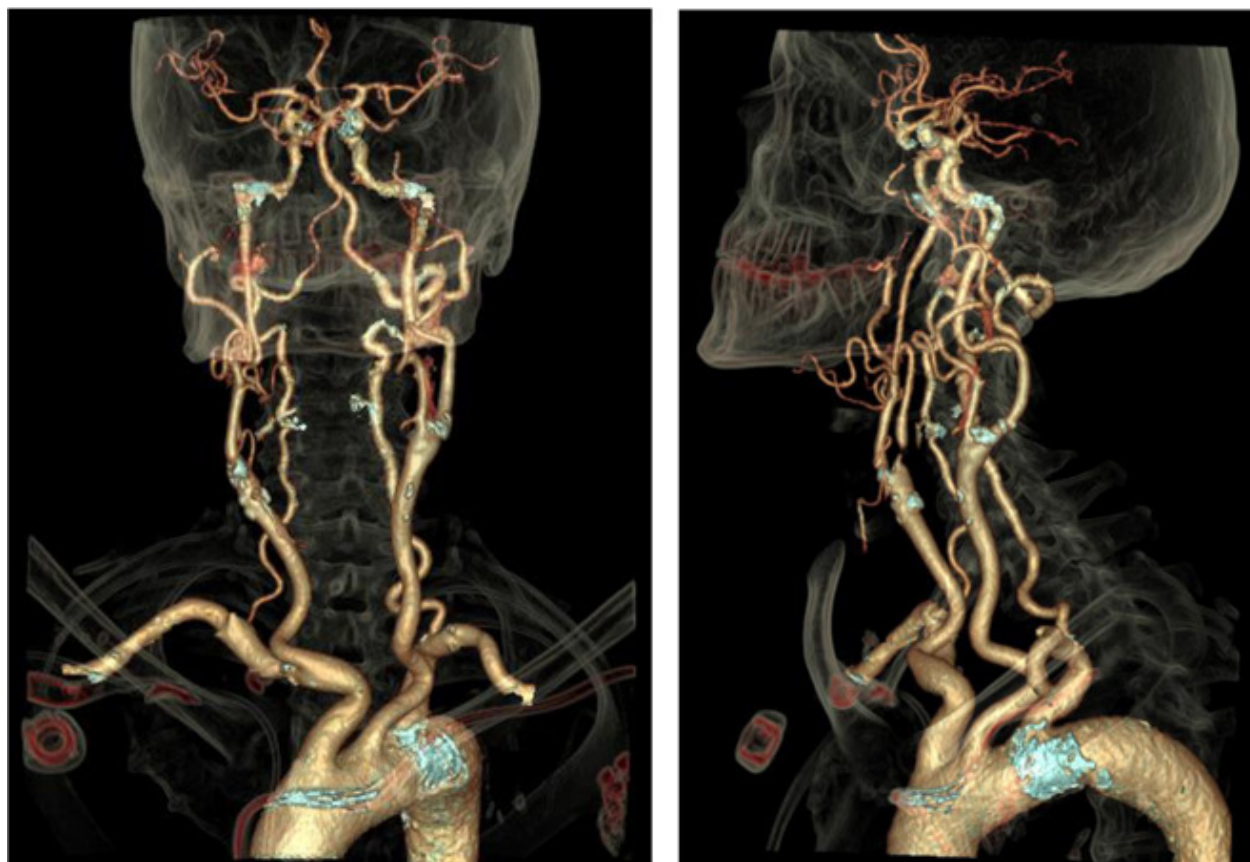


47-year-old
victim of closed-fist assault

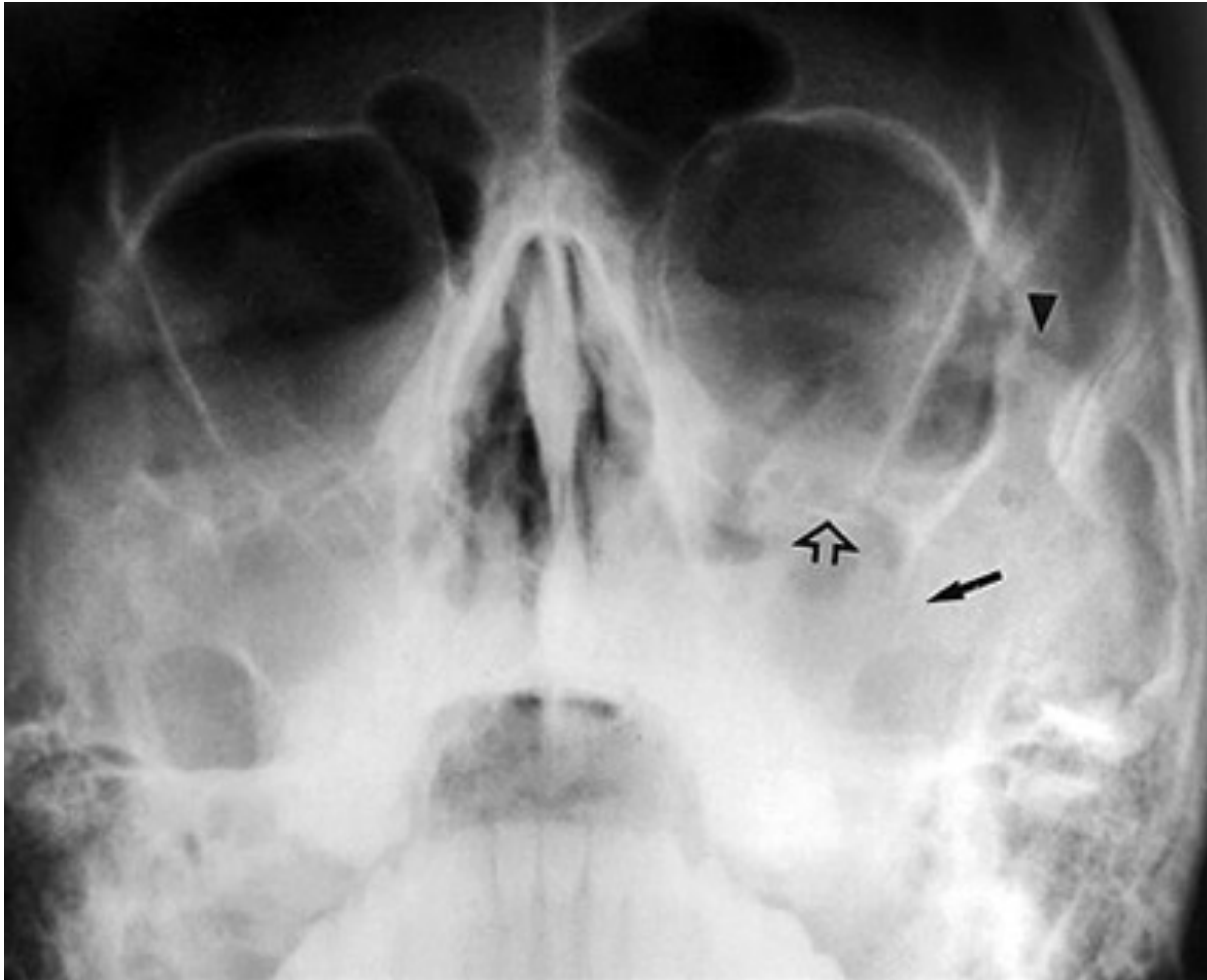
Axial bone CT (A-B),
Coronal bone CT (C), and
3D reconstructed CT (D-F)

Zygomaxillary
complex
(ZMC) fracture

CT Angiography of the Head or Neck



X-ray Plain radiographs



Zygomaticomaxillary complex fracture on the left

- Fractures of the floor of the orbit (open arrow),
- Lateral maxillary wall (long arrow)
- Lateral wall of the orbit (arrowhead) on the left.
- Soft tissue swelling over the entire face.

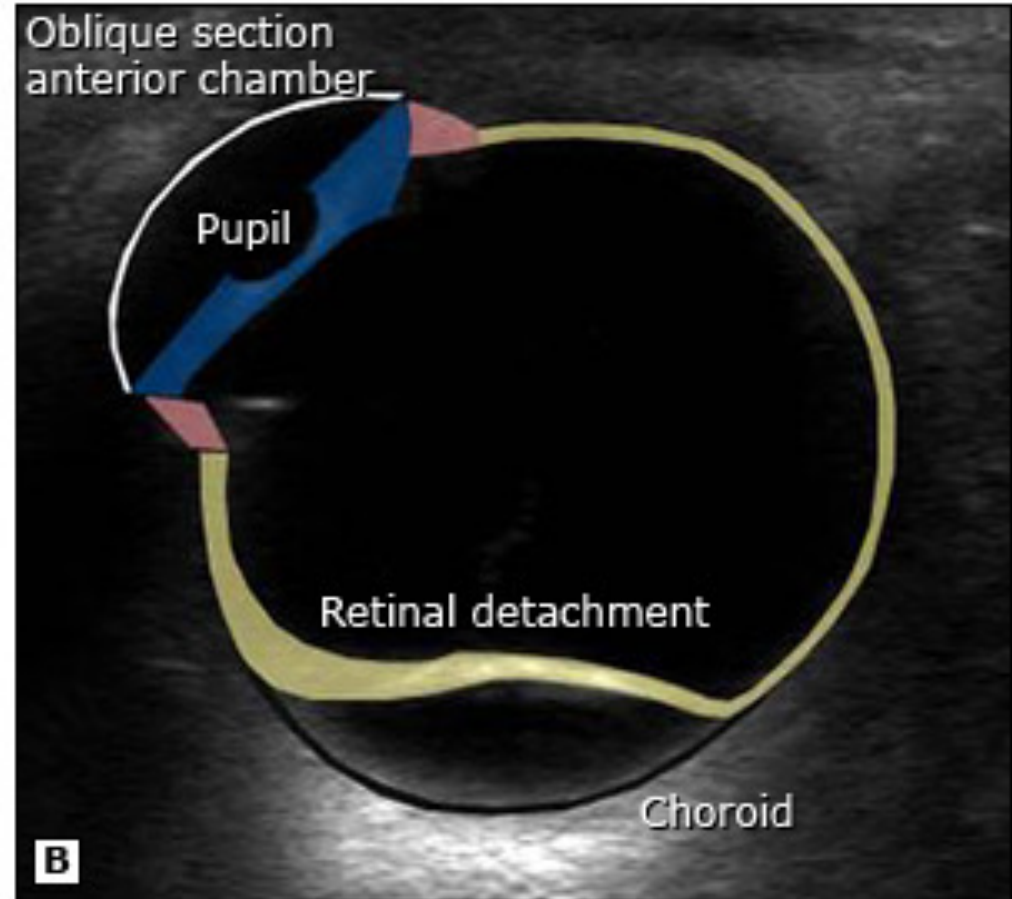
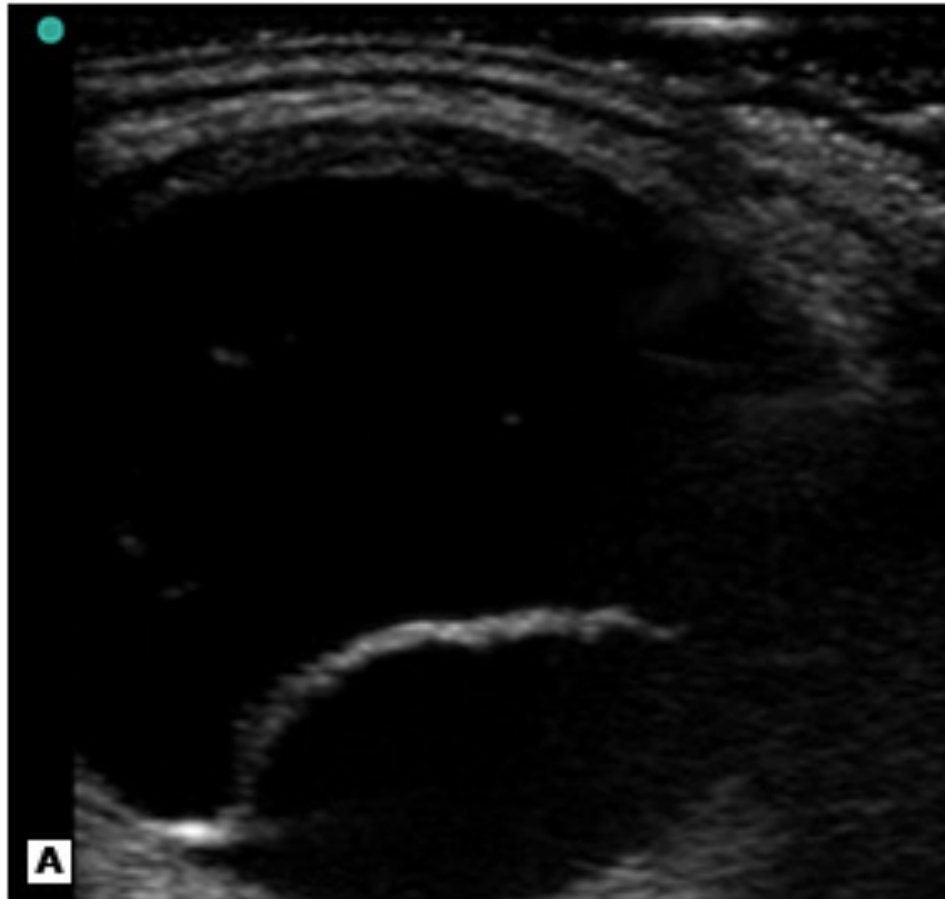
Mid-treatment Panorex



Panorex showing orthodontic treatment and mechanics to extrude lower left second molar.

A panorex is an x-ray that provides a full view of the upper and lower jaws, teeth, temporomandibular joints (TMJs) and sinuses.

Ultrasound of retinal detachment



Reference

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