PARANASAL SINUSES X-RAYS

PATIENT PREPARATION

- Check patient identity

- Check patient pregnancy risk

- Remove metal objects from hair, braces, earrings or piercings, necklaces, etc.

- Explain the exam

PARANASAL SINUSES X-RAYS

PARAMETERS

- **Orientation: Portrait**
  - Detector and parameters:
    - Detector size: Cassette size:

      24 cm x 30 cm: 70 - 80 kV, 15 - 20 mAs

    - Or Digital Panel Detector:

      80 kV, 4 - 5 mAs

- **SID = 100cm**

PARANASAL SINUSES X-RAYS

PATIENT POSITION

LATERAL

- Patient standing or seated facing the straight bucky
- Oblique the body slightly
- Adjust head into a true lateral position
- Align midsagittal plane parallel to IR
- Align interpupillary line perpendicular to IR
- Adjust chin to bring the infra-orbitomeatal line perpendicular to the front edge of IR

PA CALDWELL

- The patient is seated in front of the upright detector
- The patient's forehead is placed against the image detector
- Forehead and nose are both touching the detector
- The orbitomeatal line is running perpendicular to the detector
- The petrous ridge is below orbits

PARANASAL SINUSES X-RAYS

CENTERING POINT

LATERAL	PA CALDWELL
2 cm posterior to the outer canthus	Angled caudal around 15° to exit at the nasion

PARANASAL SINUSES X-RAYS

CRITERIA FOR SUCCESS

LATERAL

- Clear visibility of sphenoid sinuses, superimposed frontal, ethmoid, and maxillary sinuses, sella turcica, and orbital roofs

PA CALDWELL

- No visible rotation by the symmetrical nature of the orbits
- Innominate lines should be equidistant from the lateral borders of the orbits
- Petrous rides projected in the lower third of the orbits
- No tilting should be evident; an imaginary line through the petrous ridges should be horizontal

PARANASAL SINUSES X-RAYS

INDICATIONS

LATERAL

Inflammatory conditions: sinusitis, secondary osteomyelitis, and sinus polyps

PA CALDWELL

Fractures and pathologies of the skull; designed to better visualize the paranasal sinuses, especially the frontal sinus