جامعة المستقبل
كلية التقنيات الصحية والطبية
قسم تقنيات الاشعة
المرحلة الثالثة

Radiography
Facial bones and sinuses

BY
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Paranasal sinuses
Occipito-frontal

Direction and location of the X-ray beam

- The collimated horizontal beam should be centered to the Bucky/receptor before positioning is undertaken.
- To check the beam is centered properly the crosslines on the Bucky/receptor should coincide with the patient's anterior nasal spine.
- Collimate to include all of the sinuses.

Essential image characteristics

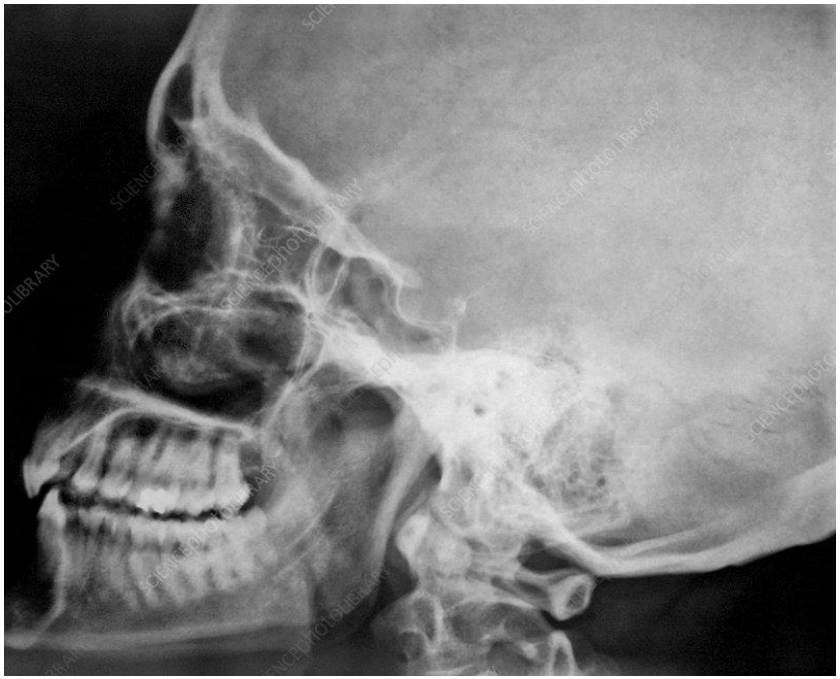
- The petrous ridges must appear below the floors of the maxillary sinuses.
- There should be no rotation. This can be checked by ensuring the distance from the lateral orbital wall to the outer skull margins is equidistant on both sides.

IR - 18× 24 cm
• Grid
SID: 40” (102 cm)
Analog: 70–80 kV
Digital Systems: 75–85 kV

Lateral

- Position of patient and image receptor
- • The patient sits facing the vertical Bucky/receptor and the head is then rotated
- such that the median sagittal plane is parallel to the Bucky/receptor and the
- interpupillary line is perpendicular to it.
- • The shoulders may be rotated slightly to allow the correct position to be attained
- and the patient may grip the Bucky for stability.
- • The head and Bucky heights are adjusted so that the centre of the Bucky/receptor
- is 2.5 cm from the outer canthus of the eye.
- • If used, an 18 × 24 cm CR cassette is positioned longitudinally in the erect
- Bucky such that its lower border is 2.5 cm below the level of the upper teeth

• Grid
SID: 40” (102 cm)
Analog: 70–80 kV
Digital Systems: 75–85 kV



Facial bones
Lateral

Position

- Erect or semiprone on table
- Adjust head to true lateral position with side

o interest closest to IR

- Collimation: On our sides to area of facial bones
- Respiration: Suspend during exposure

Analog: 65–75 kV
Digital Systems: 70–80 kV
- 18 × 24 cm (8 ×10″) portrait
- Grid

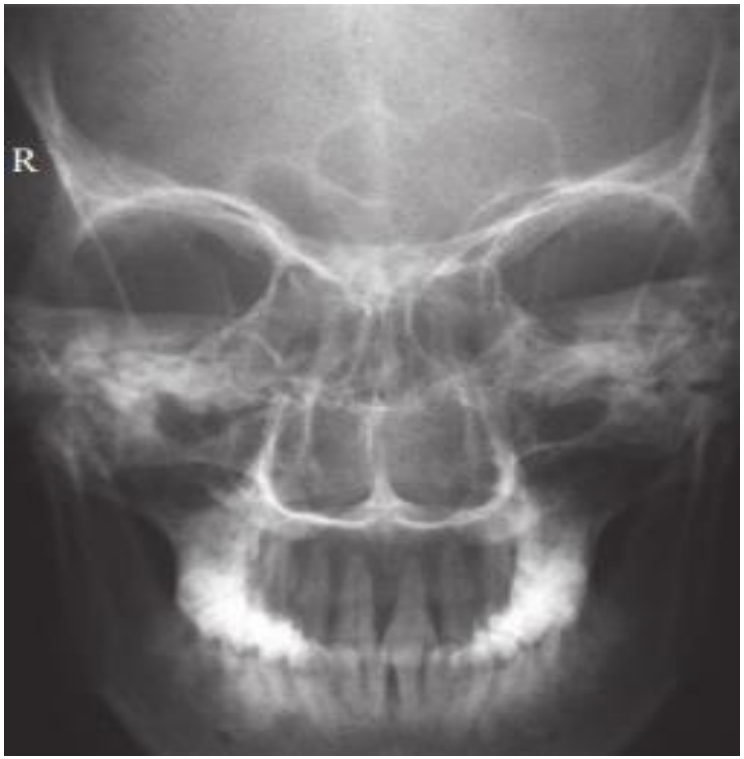
SID: 40″ (102 cm)

PA Axial (1 5 °): Facial Bones Caldwell Method

- Position
- • Seated erect or
- prone on table, MSP
- aligned to CR and
- to midline o the
- table and/or IR
- • With forehead and
- nose resting on
- imaging device, adjust head to place OML perpendicular to IR;
- ensure no rotation or tilt
- • Center IR to projected CR (to nasion)
- Central Ray: CR 15° caudal to OML, centered to exit at nasion

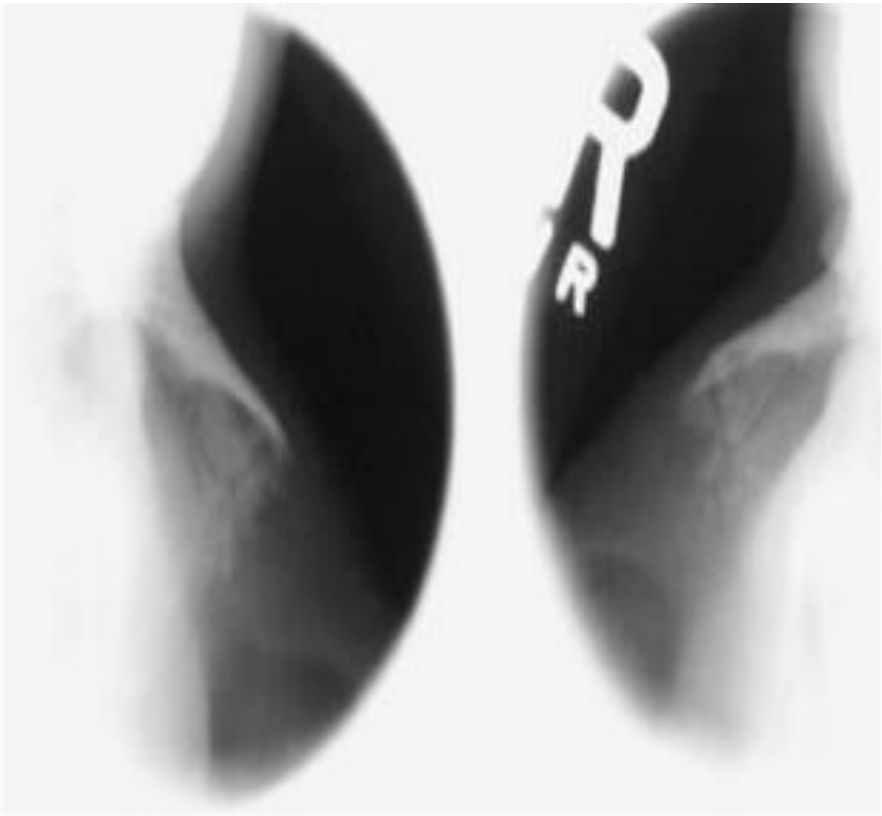
- *OML= Orbitomeatal line
- *MSP =Midsagittal plane (plane dividing the body into right
- and le halves)

SID: 40” (102 cm)
Collimation: On our sides to skull (facial bones) margins
Respiration: Suspend during exposure
Analog: 70–80 kV
Digital Systems: 75–85 kV
18 × 24 cm (8 × 10”)
portrait or 24 × 30 cm
(10 × 12”) portrait
• Grid



Lateral: Nasal Bones

- Bilateral projections
- generally taken or
- comparison
- • 18 × 24 cm (8 × 10″)
- landscape
- • Nongrid —detail
- screens (analog)
- SID: 40″ (102 cm)
- Collimation: Closely collimate to ≈4″ (10 cm) square
- Respiration: Suspend during exposure
- Analog: 60–70 kV
- Digital Systems: 65–75 kV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THANK YOU
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