

Skull views

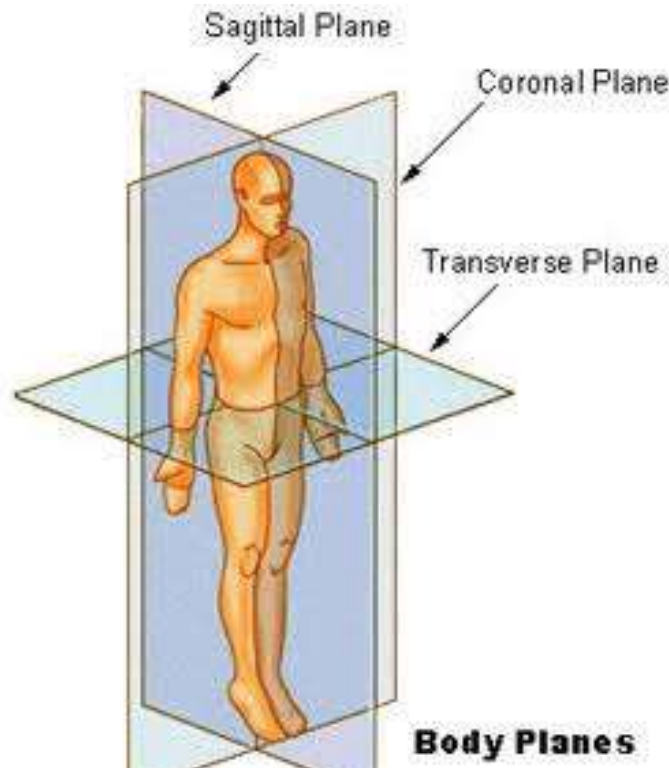
Radiographic landmarks

1. **Nasion** : a point between both eyes , where root of the nose starts.
2. **Glabella** : A point in saggital plane in midline , at the top of forehead about 3" from rootbof the nose.
3. **External canthus** : the outer most point of lateral aspect of eyes.
4. **External auditory meatus** : the bony ring of external ear in temporal bone.
5. **vertex** : the highest point on cranila vault.
6. **Submental** : the region below the mandible.
7. **Angle of mandible** : the part of body of mandible, which turns upwards to join the temporal bone.

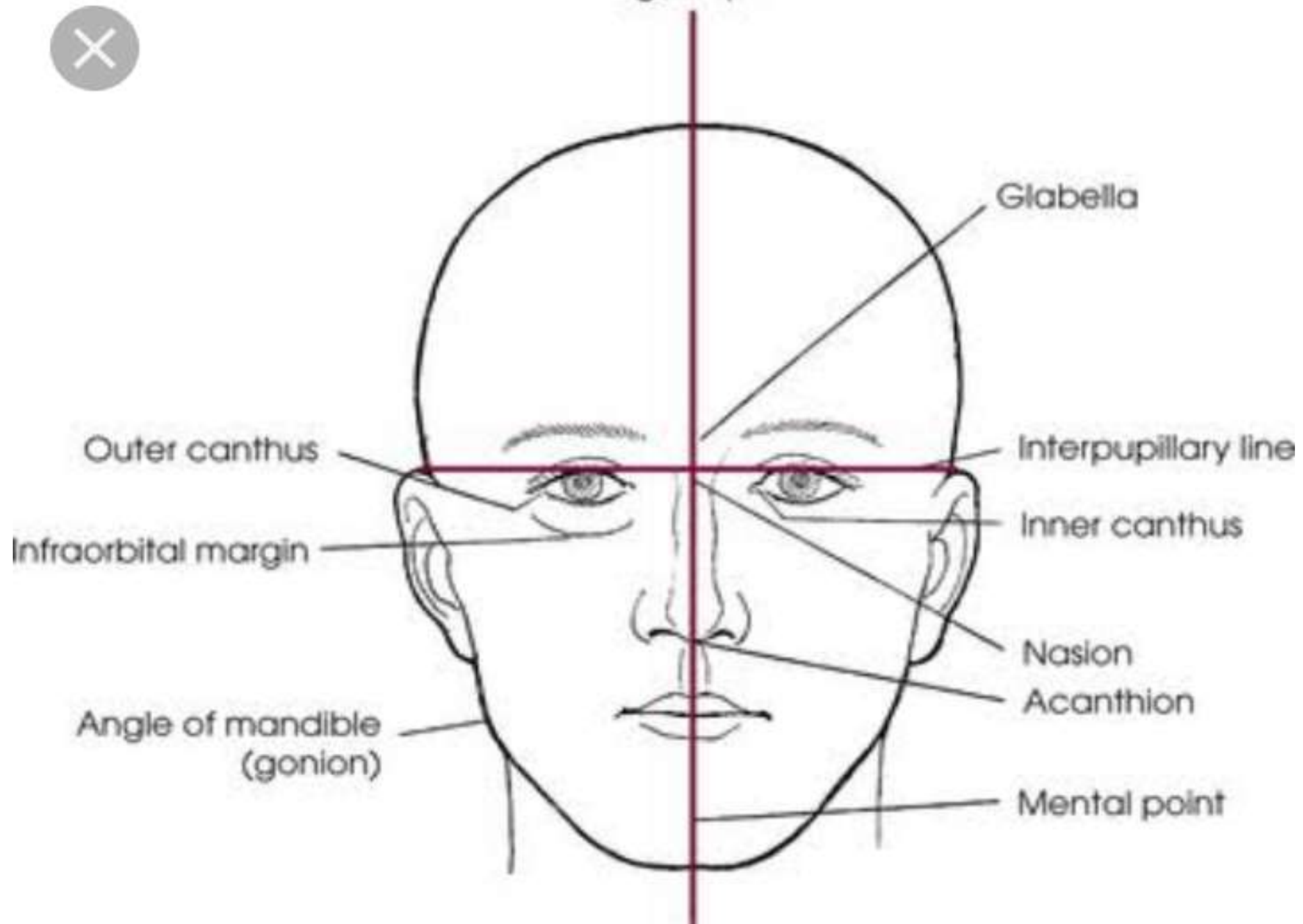
8. Median saggital plane (MSP) : The plane of skull cutting through its center, in its longitudinal plane.

9. Inter- pupillary line (IPL) : the line joining pupils of both eyes . This is also known as inter orbital line.

10 Radiographic base line(RBL) : the line joining External canthus of each eye to respective external auditory meatus . This is also known as orbito meatal line.

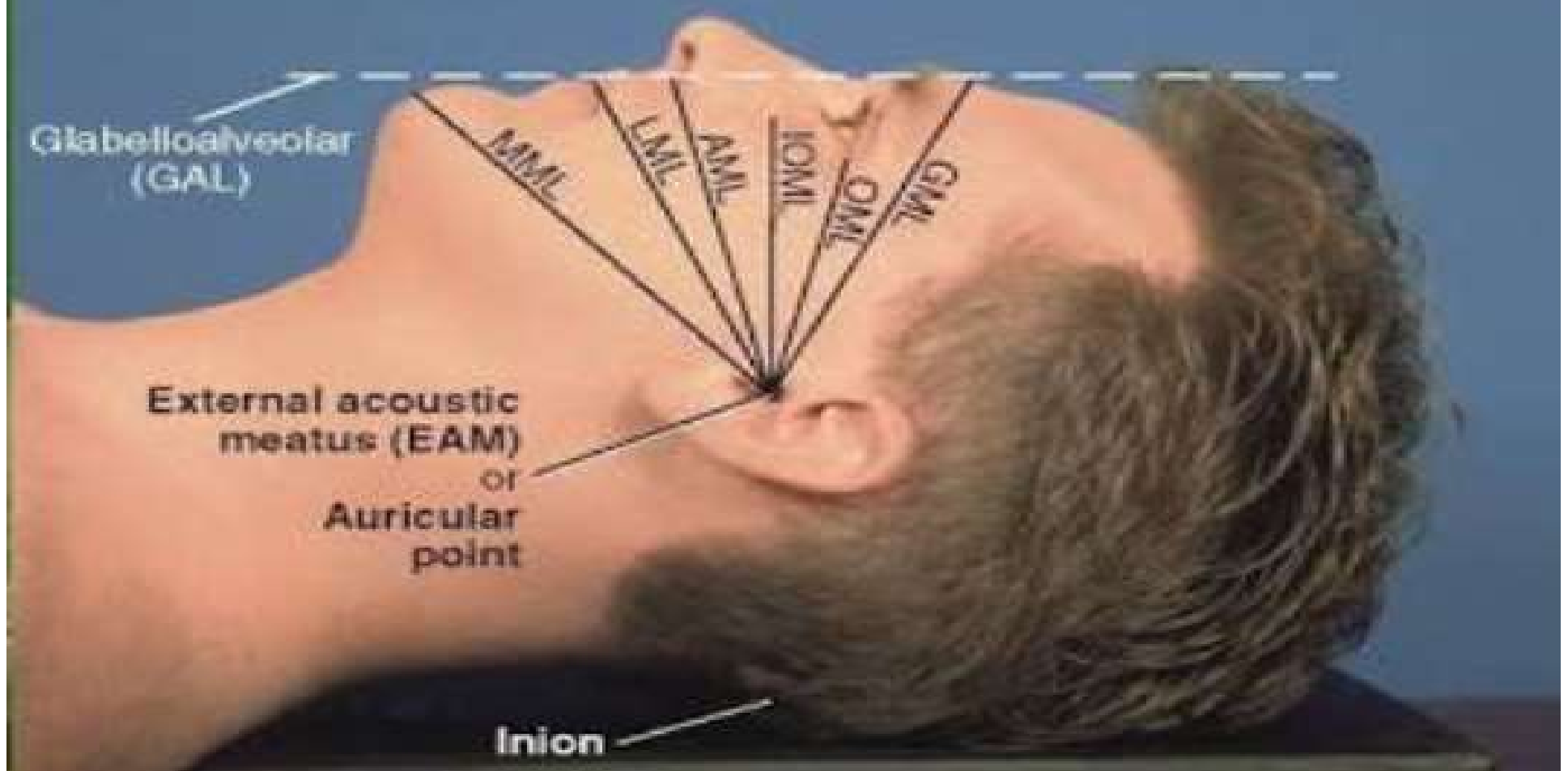


Midsagittal plane



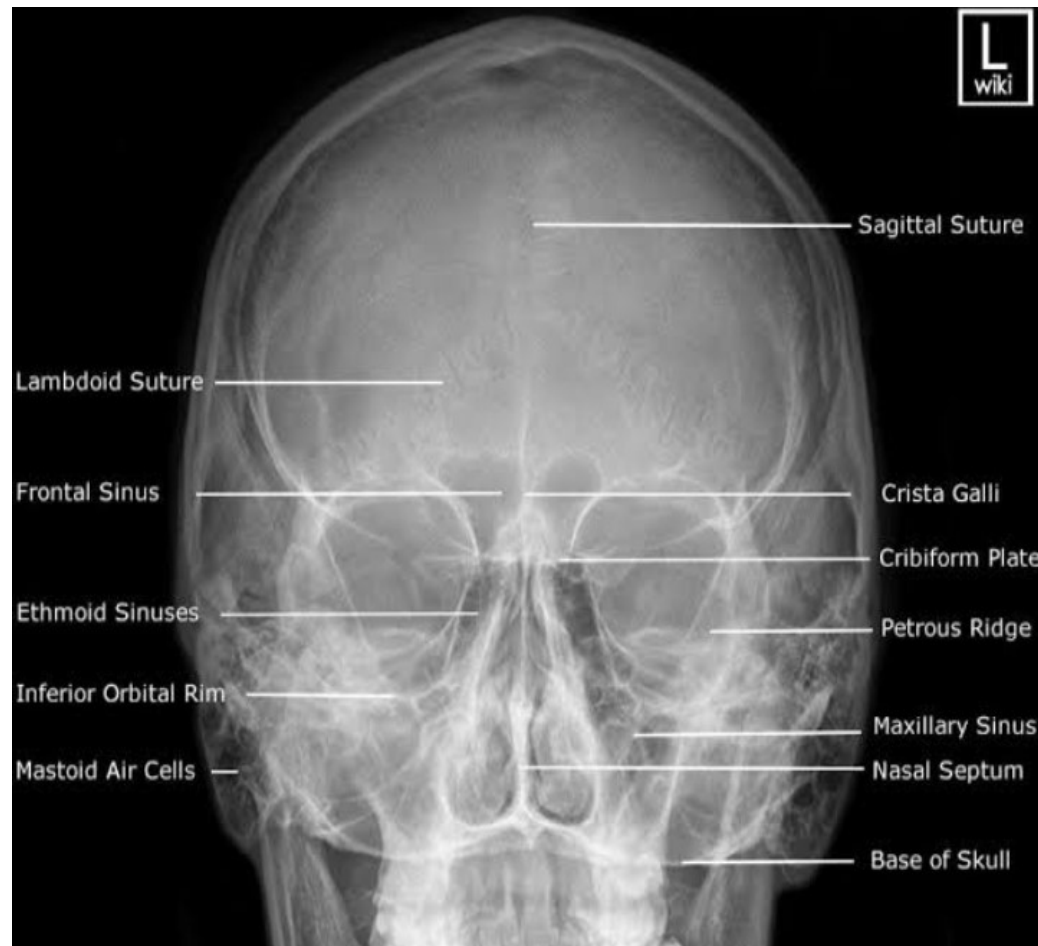
- Acanthiomeatal line (AML)
- Lips-meatal line (LML)
- Mentomeatal line (MML)

- Glabellomeatal line (GML)
- Orbitomeatal line (OML)
- Infraorbitomeatal line (IOML) (Reid's base line)



Occipitofrontal view (PA 20 °)

- ◆ Also known as Caldwell view.
- ◆ The projection is used to demonstrate the frontal and ethmoid sinuses especially for frontal sinus.



Contraindications

Pregnancy

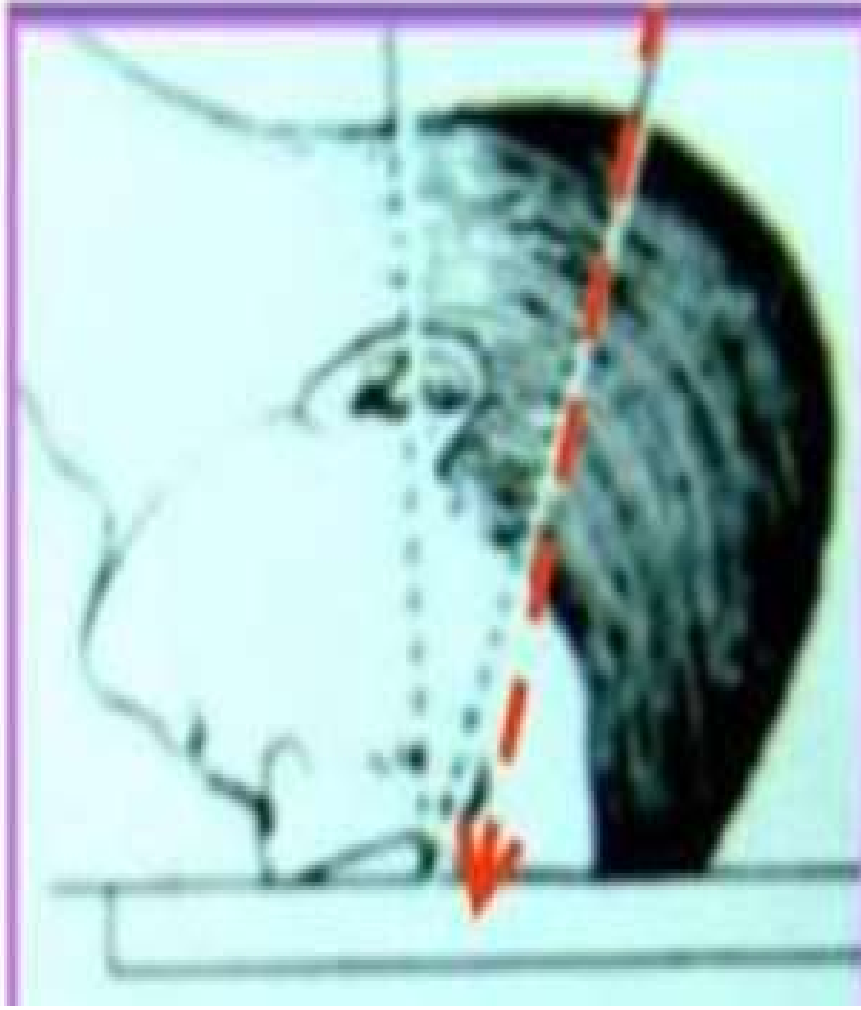
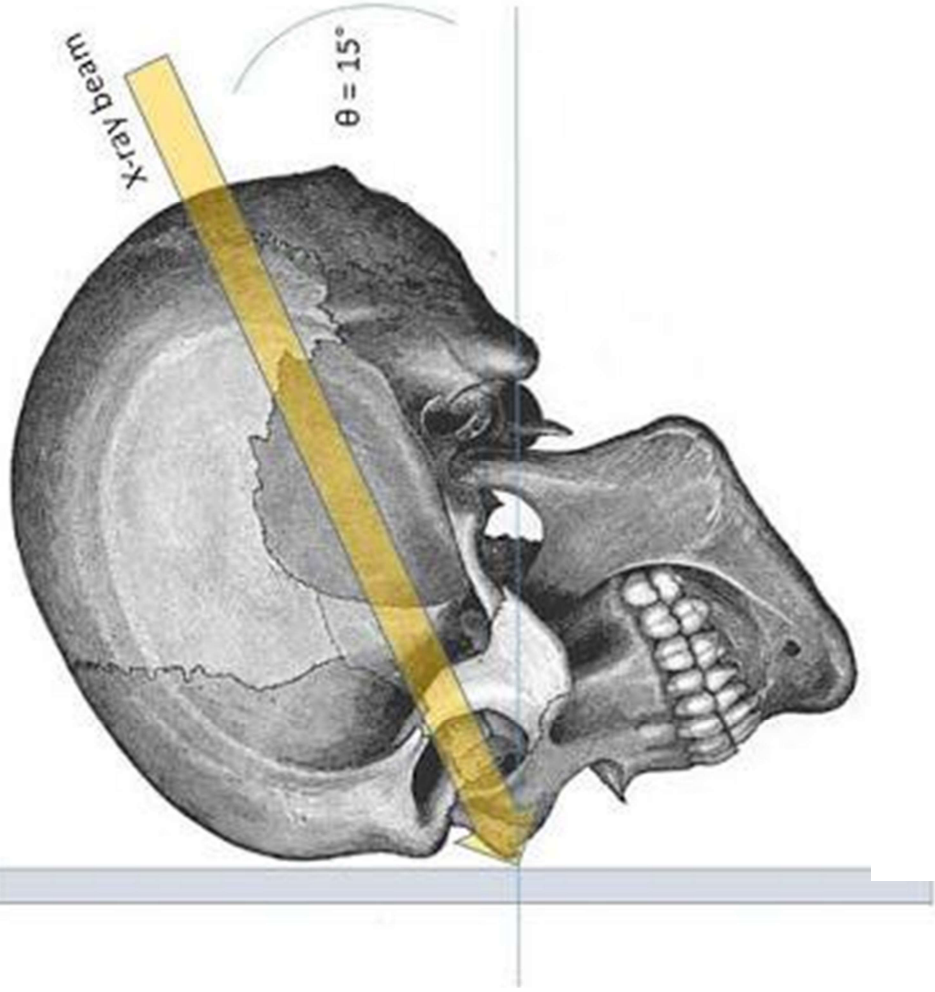
Preparation

- ① **Collect History from patient.**
- ② **Patient is asked to remove all radiopaque materials.**
- ③ **Wear hospital gown.**
- ④ **If female patient come to x ray , chaperone is necessary.**
- ⑤ **Shielding is provided to patient.**

Positioning

- Patient lies prone with midline of his body on midline of x ray table.
- The chest is raised and rested on folded arms.
- Nose and forehead are placed on the midline table touching it.
- Head is positioned such that MSP and RBL are both at 90° to table top.
- It is important to ensure that the skull is not rotated.
- All the relevant sinuses should be included with in the image.
- Head is immobilised , side is marked and beam is collimated.

X-ray detector



Centering

- ◆ It is done on nasion in midline.
- ◆ Central beam is directed 15 to 20° to vertical in caudad direction , passing through the occipital bone.

Technique

KVP : 80

mAs : 90

Fss : small.

FFD : 100 CMS.

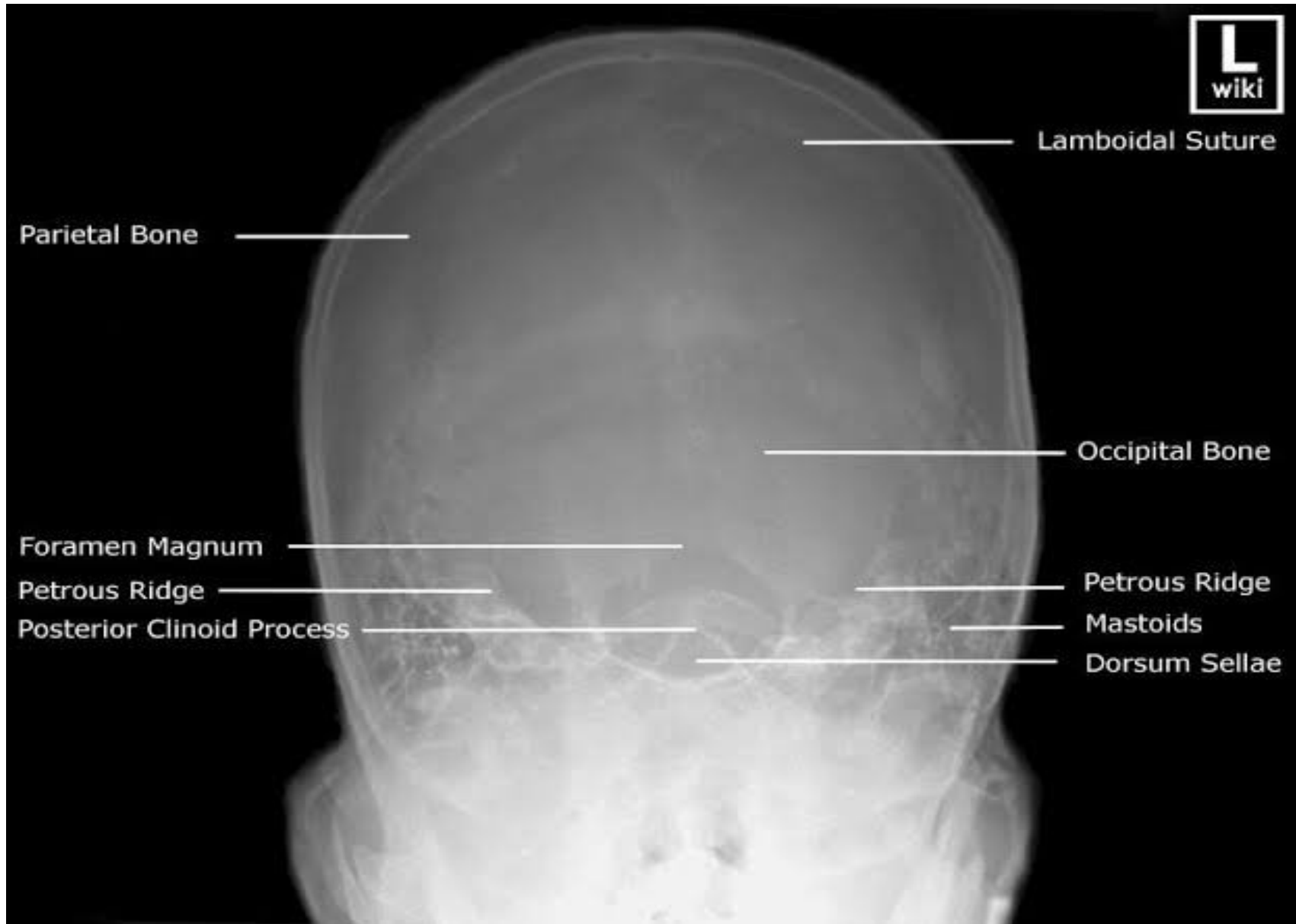
WITH GRID

CASSETTE SIZE : 12" X 10"

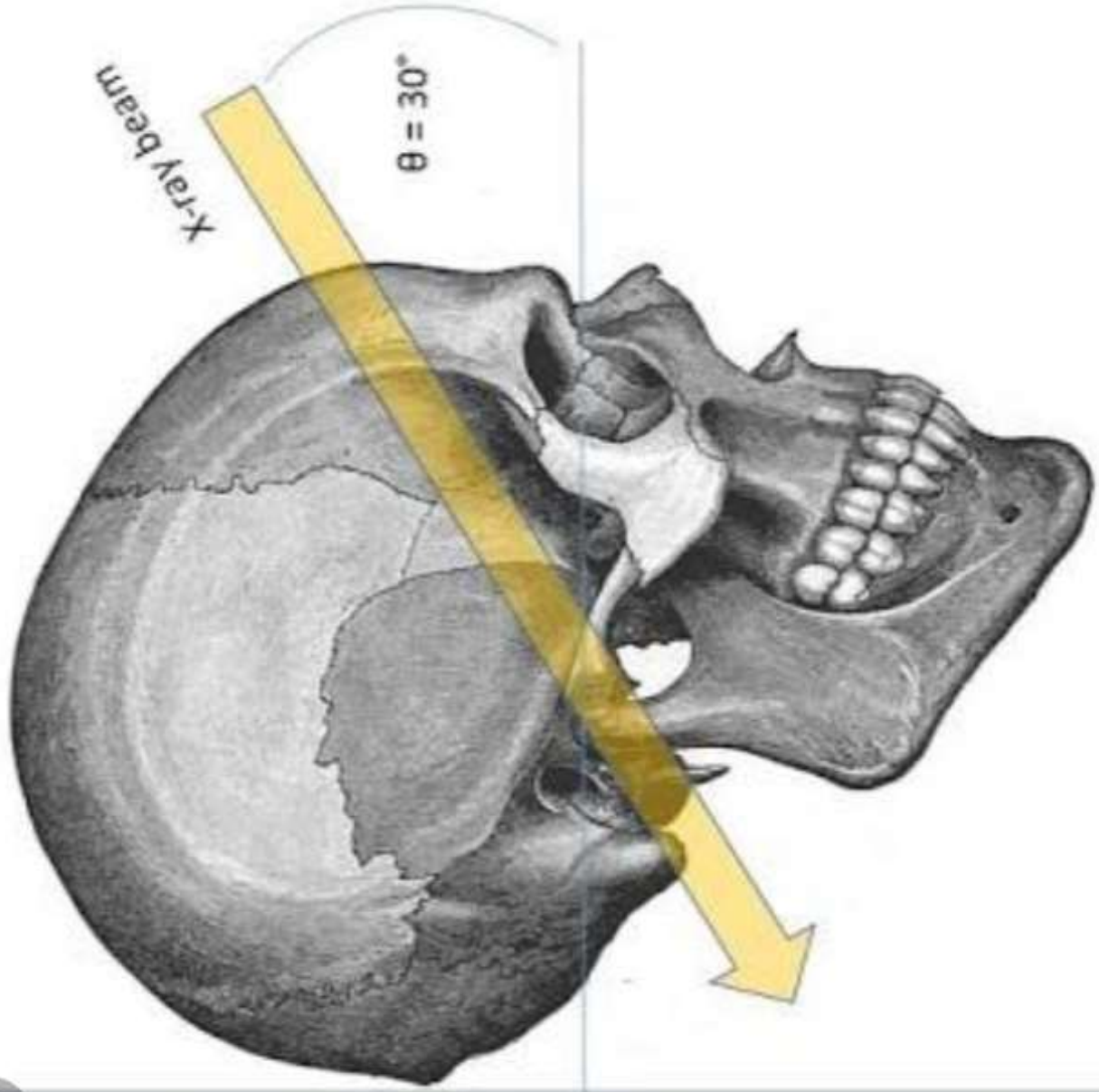
Fronto-Occipital view.(AP 30°)

- Also known as Towne's view.
- The Towne view is an angled AP radiograph of the skull, used to evaluate for fractures of the skull and neoplastic changes.
- This view is used for study of petrous bone pyramids, mastoid air cells, dorsum sella, foramen magnum, temporal bones and parietal bones.

Towne's view



X-ray detector



X-ray beam

$\theta = 30^\circ$

Positioning

- ✓ Patient is supine in midline of x ray table, with chin fully touched to to chest and occipital of skull with midline of x ray table.
- ✓ Head is adjusted so that ,MSP and RBL are perpendicular to table top.
- ✓ It is ensured that head is not rotated.
- ✓ Head is immobilised, side is marked and beam is collimated.

Centering

- ① It is done in midline on forehead (anterior hair line).
- ② Central beam is directed 30° caudad to vertical, so that it enters through glabella and exits through foramen magnum.

Technique

KVP : 80

mAs : 100

Fss : small.

FFD : 100 CMS.

WITH GRID

CASSETTE SIZE : 12" X 10"

An aerial photograph of a city grid, likely New York City, showing a dense pattern of buildings and streets. A large, dark 'X' shape is formed by the shadows cast by the streets, creating a prominent visual element. The text is overlaid on the center of the image.

**THE BEST PREPARATION
FOR TOMORROW IS DOING
YOUR BEST TODAY.**

@_MOTIVATIONALMENTOR

Lateral view of skull

Indications

- Fracture of cranium and skull base.
- Sinusitis.
- Tumours of pituitary gland.
- Abnormal head shapes.
- **Multiple myeloma:** The plasma cells are a type of white blood cell in the bone marrow. With this condition, a group of plasma cells becomes cancerous and multiplies. The disease can damage the bones, immune system, kidneys and red blood cell count.

Positioning

- Patient lies prone on x ray table. Only head is turned to true lateral position , affected side in contact with table top.
- Chin is supported by fist of patient.
- His head is adjusted such that MSP is parallel to table top as is the RBL.
- Head is immobilised side is marked and beam is collimated.



Centering

- It is done on temporal region midway between glabella and occipital protuberance.
- Central beam is vertically at 90° to the table top.

Technique

KVP : 80

mAs : 60

Fss : small.

FFD : 100 CMS.

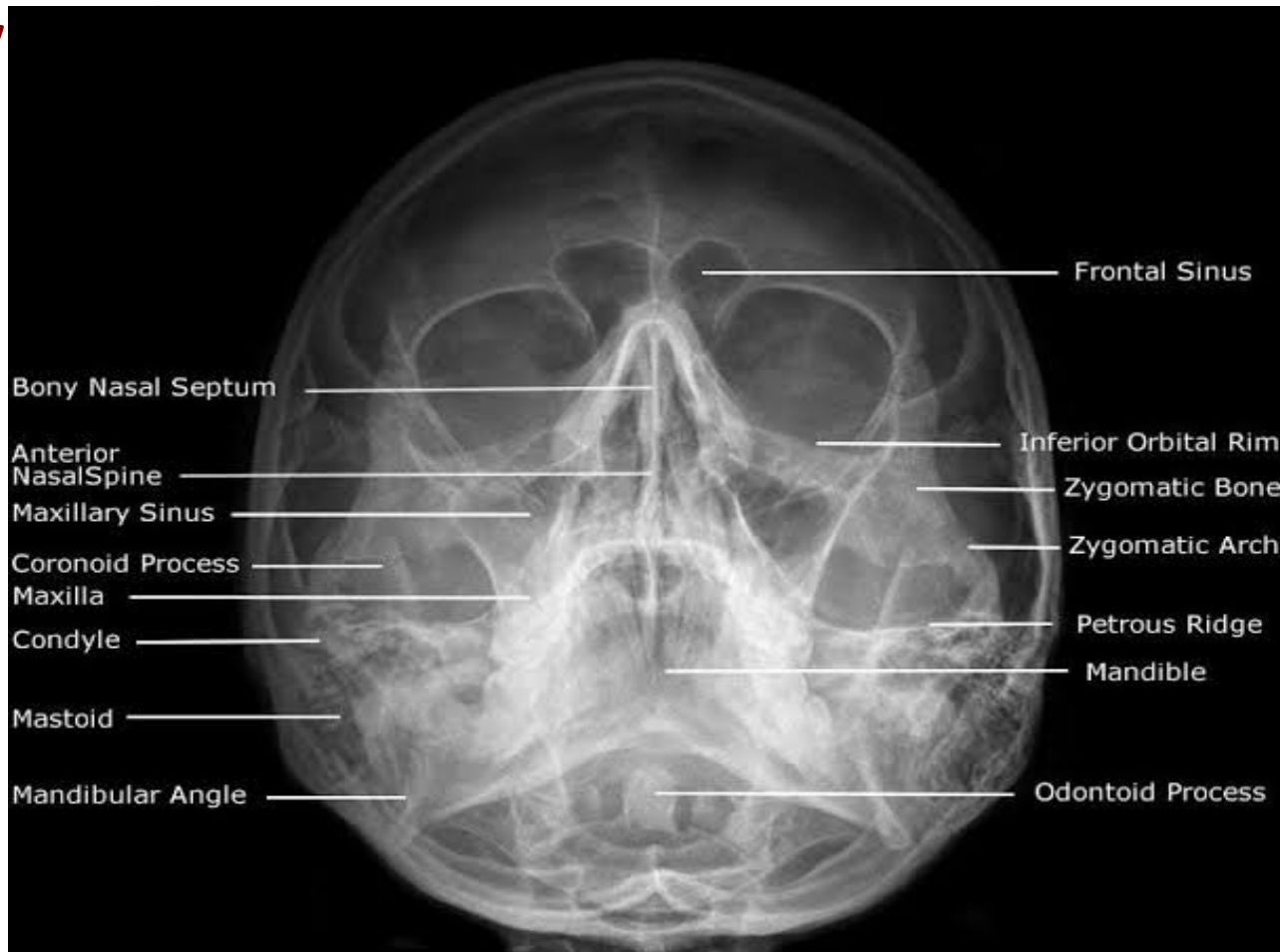
WITH GRID

CASSETTE SIZE : 12" X 10"

Occipitomenal view for paranasal sinuses

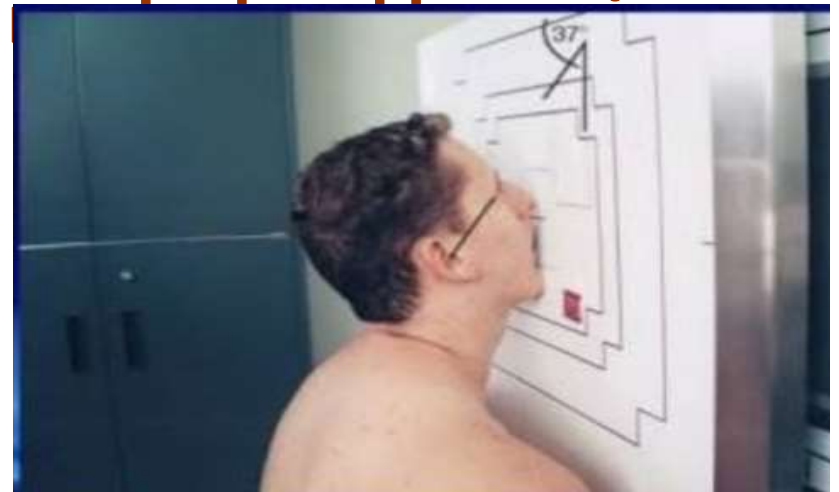
■ Also known as Water's view.(open mouth

v



Positioning

- Patient lies in prone position , in midline of x ray table.
- His hands and arms are rested by side of the body.
- The nose and chin are placed in contact with table top. Mouth is open throughout exposure.
- Head is positioned so that , MSP is 90° to table top and RBL is at 45° to table top.
- Head is immobilised side is collimated.



Centering

- It is done in the middle through vertex to the level of lower orbital margin.
- Central beam is directed vertically at 90° to table top.

Technique

KVP : 80

mAs : 100

Fss : small.

FFD : 100 CMS.

WITH GRID

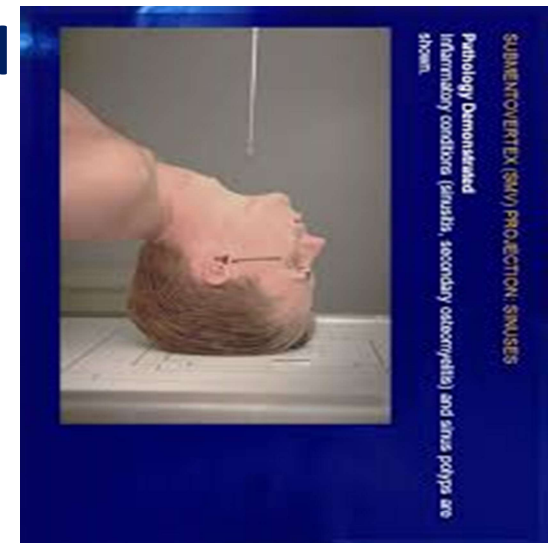
CASSETTE SIZE : 12" X 10"

Submentovertical view(Base of skull view)

- view used to evaluate fractures and displacement of a fractured zygomatic arch.
- contraindicated with patients who have a suspected spinal injury.
- reveals the position and orientation of the occipital condyles, the sphenoid sinus, the curvature of the mandible, the lateral wall of the maxillary sinuses.
- good visualization of the base of the skull with foramina and the medial and lateral pterygoid plates.

Positioning

- Patient lies supine on midline of x ray table. His neck is fully extended and vertex in contact with midline of x ray table.
- For this purpose , shoulders are to be raised with help of pillows.
- Head is adjusted so that MSP is right angle and RBL is parallel to table top .
- Head is immobilised side is marked and collimated.



Centering

- It is done in midline between angles of mandible.
- Central beam is directed at 5° cephalad (cranial) to vertical.
- This enters a point midway between angles of mandible and exists through vertex, which is at the center of cassette.

Technique

KVP : 80

mAs : 100

Fss : small.

FFD : 100 CMS.

WITH GRID

CASSETTE SIZE : 12" X 10"

BEAST DESIRE



**RISE UP!
FOCUS,
CHASE
YOUR
DREAMS,
TURN
YOUR
DREAMS
INTO
REALITY.**

@beastdesire





Impossible is just an opinion; but if we
change our opinion, everything is possible.

@MCERS

GOOD MORNING

**Coming together
is a beginning;
keeping together
is progress;
working together
is success**

Lateral oblique view of mastoids (schuller view)

Indications

- Ear pain(otalgia) and tenderness.
- swelling in the mastoid region.
- the ear or mastoid region may be red (erythematous).
- Fever or headaches may also be present.
- Drainage from the ear occurs in more serious cases, often manifest as brown

Positioning

- Patient lies in prone position in midline of x ray table , with head in lateral position.
- The side under study contact with table top midline.
- The pinna of ear folded forwards.
- Head is adjusted so that MSP is parallel and IOML is perpendicular to table top.



Centering

- **It is done 5 cm above and 2.5 CMS behind the external auditory meatus.**
- **The central beam is directed at 25° caudad to vertical.**

Technique

KVP : 70

mAs : 60

Fss : small.

FFD : 100 CMS.

WITH GRID

CASSETTE SIZE : 12" X 10"