

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered and rendered in a bold, purple, sans-serif font.

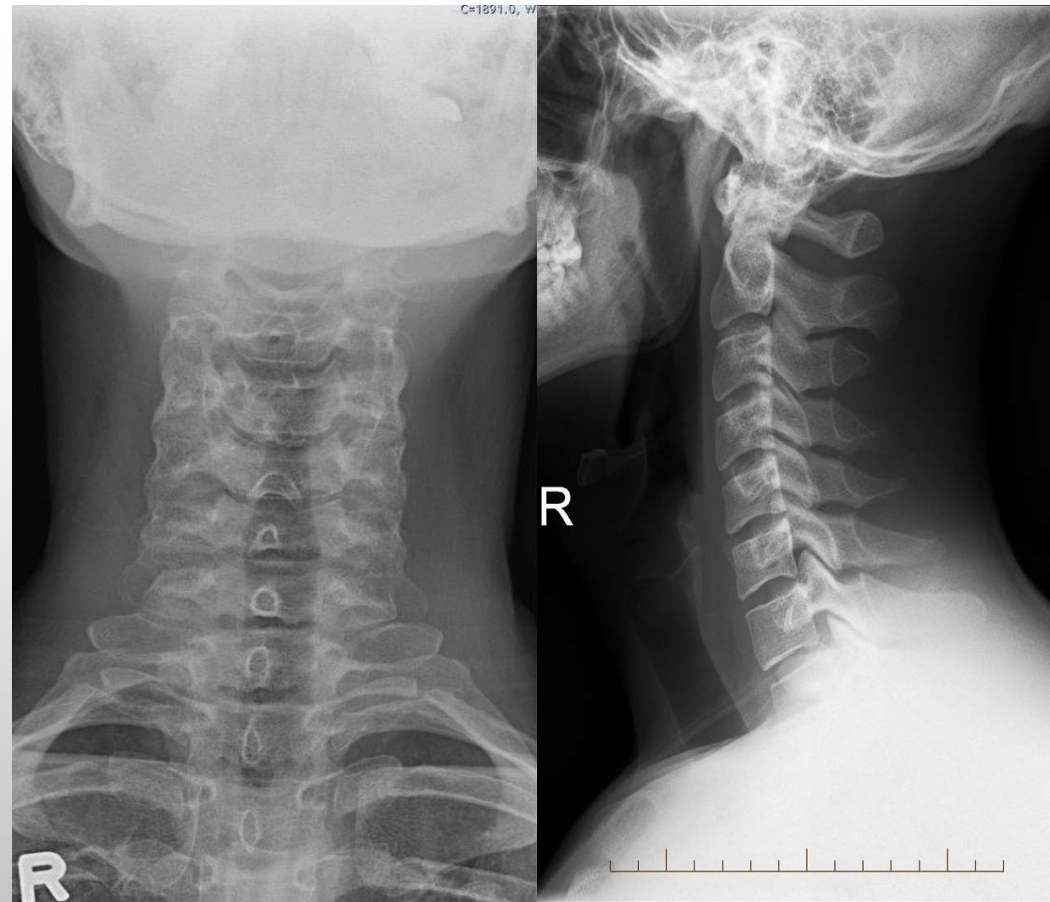
C SPINE X RAY

BY

**MR. S.S.SIVA SAGAR
TEACHING ASSISTANT IN
RADIOLOGY
CENTURIAN UNIVERSITY**

C SPINE VIEWS

1. C SPINE AP
2. C SPINE LATERAL
3. C SPINE LATERAL – FLEXION
4. C SPINE LATERAL - EXTENSION



C SPINE X RAY INDICATIONS

- **NECK, SHOULDER, ARM AND HAND PAIN.(RADIATING PAIN OF UPPER LIMBS) .
CERVICAL SPONDYLOSIS.**
- **TINGLING , NUMBNESS AND WEAKNESS OF UPPER LIMBS.**
- **FRACTURES OF C SPINE. FALLING FROM HEIGHTS LIKE TREES AND BUILDING.**
- **DISLOCATION OF VERTEBRAL JOINTS.**
- **TRAUMA CASES: INJURIES TO HEAD AND NECK. IF PATIENT IS UNCONSCIOUS.**
- **PRE AND POST OP CASES.**
- **INFECTION.**
- **BONY ABNORAMLITIES LIKE OSTEOPOROSIS AND DEGENERATIVE CHANGES.**

• C SPINE AP VIEW : TO DEMONSTRATING THE VERTEBRAL BODIES AND INTERVERTEBRAL SPACES.

• LATERAL VIEW : 1.TO SEE SPINOUS PROCESS

2. TO SEE SOFT TISSUES AROUND THE C SPINE.

3. TO SEE ANTERIOR AND POSTERIOR RELATIONSHIPS OF VERTEBRAL BODIES.

• ODONTOID VIEW: ALSO KNOWN AS PEG'S PROJECTION. IT DEMONSTRATES ATLAS AND AXIS.



CONTRAINDICATIONS

- **PREGNANCY.**



PREPARATION

- **COLLECT HISTORY FROM PATIENT.**
- **PATIENT IS ASKED TO REMOVE ALL RADIOPAQUE MATERIALS.**
- **WEAR HOSPITAL GOWN.**
- **IF FEMALE PATIENT COME TO X RAY , CHAPERONE IS NECESSARY.**
- **SHIELDING IS PROVIDED TO PATIENT.**

C SPINE AP POSITIONING

- **PATIENT IS STANDING IN FRONT OF CHEST STAND .**
- **MID SAGGITAL PLANE OF THE PATIENT AT CENTRE OF THE CASSETTE.**
- **HIS CHIN RAISED UNTIL THE LOWER BORDER OF THE CASSETTE IS 90 DEGREES TO TOP OF THE CASEETTE.**
- **HEAD IS IMMOBILISED.SIDE IS MARKED . BEAM IS COLLIMATED.**



C SPINE LATERAL POSITION.

- PATIENT IS STANDING IN FRONT OF CHEST STAND IN TRUE LATERAL POSITION.
- HIS CHIN IS RAISED UNTIL ANGLE OF MANDIBLE CLEARS OFF CERVICAL VERTEBRAE.
- HOLD SANDBAGS BY HANDS TO AVOID SHOULDER SHADOW.
- HEAD IS IMMOBILISED
- .SIDE IS MARKED. BEAM IS COLLIMATED.
- FLEXION :
- EXTENSION:

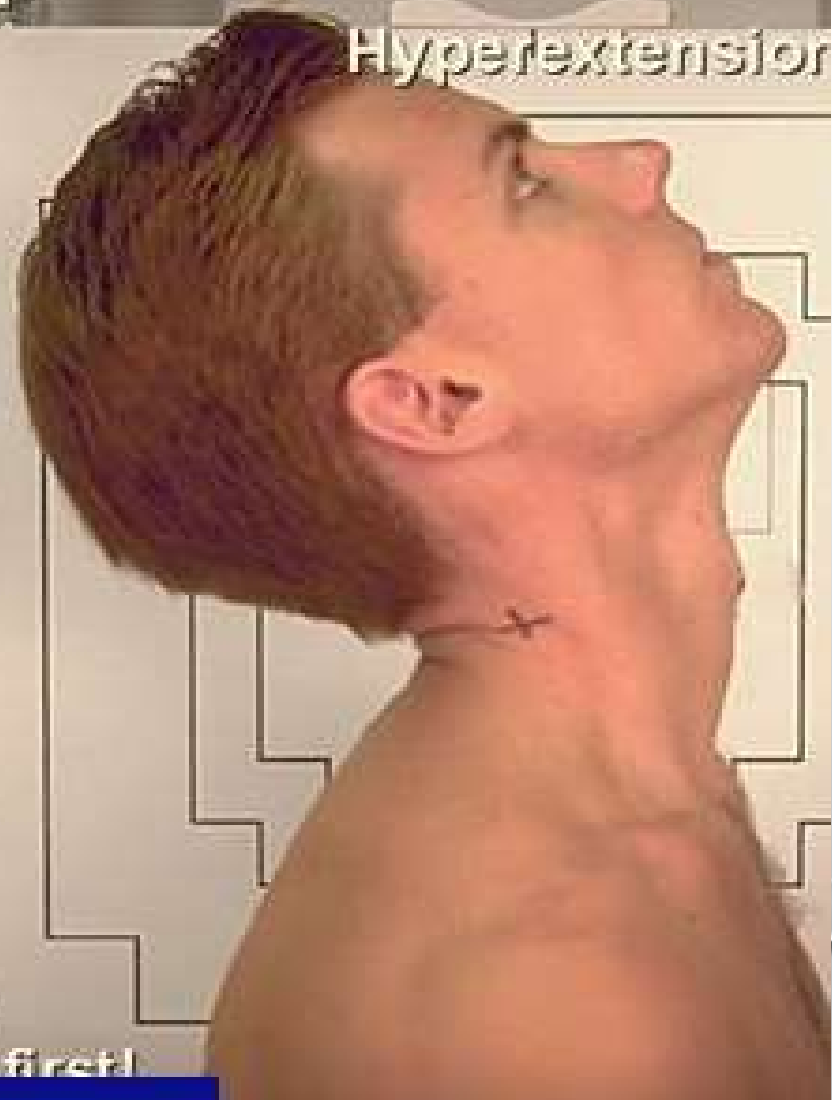


Lateral

Flexion



Hyperextension



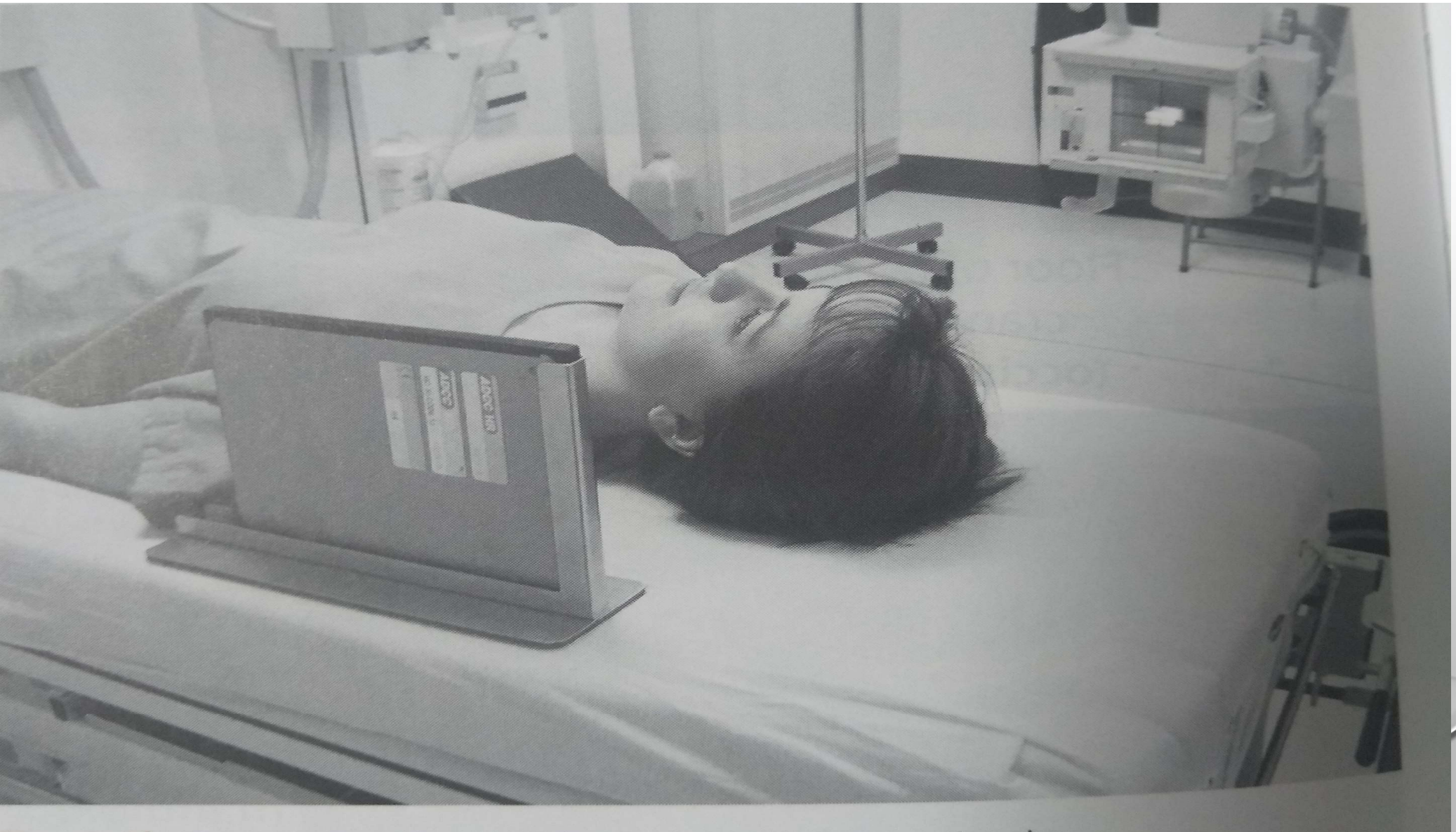
- Functional study
- Rule out fracture first!

CENTERING

- **C SPINE AP : CENTRAL RAY PASSED THROUGH 5 CMS ABOVE THE SUPRASTERNAL NOTCH.**
- **C SPINE LATERAL : CENTRAL RAY PASSED THROUGH 2.5 CMS POSTERIOR TO ANGLE OF MANDIBLE.**

TECHNIQUE

1. **KVP : 70**
2. **MAS : 20**
3. **CASETTE SIZE : 12" * 10"**
4. **WITH OR WITHOUT GRID**
5. **FSS : LARGE (FOCAL SPOT SIZE)**
6. **FFD : 150 CMS. (FILM FOCAL DISTANCE)**
7. **TUBE ANGLE : 90 DEGREES HORIZONTAL BEAM.**





**There is only one
difference between
Dream and Aim.
Dream requires
effortless sleep and
Aim requires
sleepless efforts.
Sleep for Dreams
and wake up for Aims...!**