1. Alignment of cervical spine assessment

Anterior
Vertebral
Line

Posterior
Vertebral
Line

Spino-
Laminar
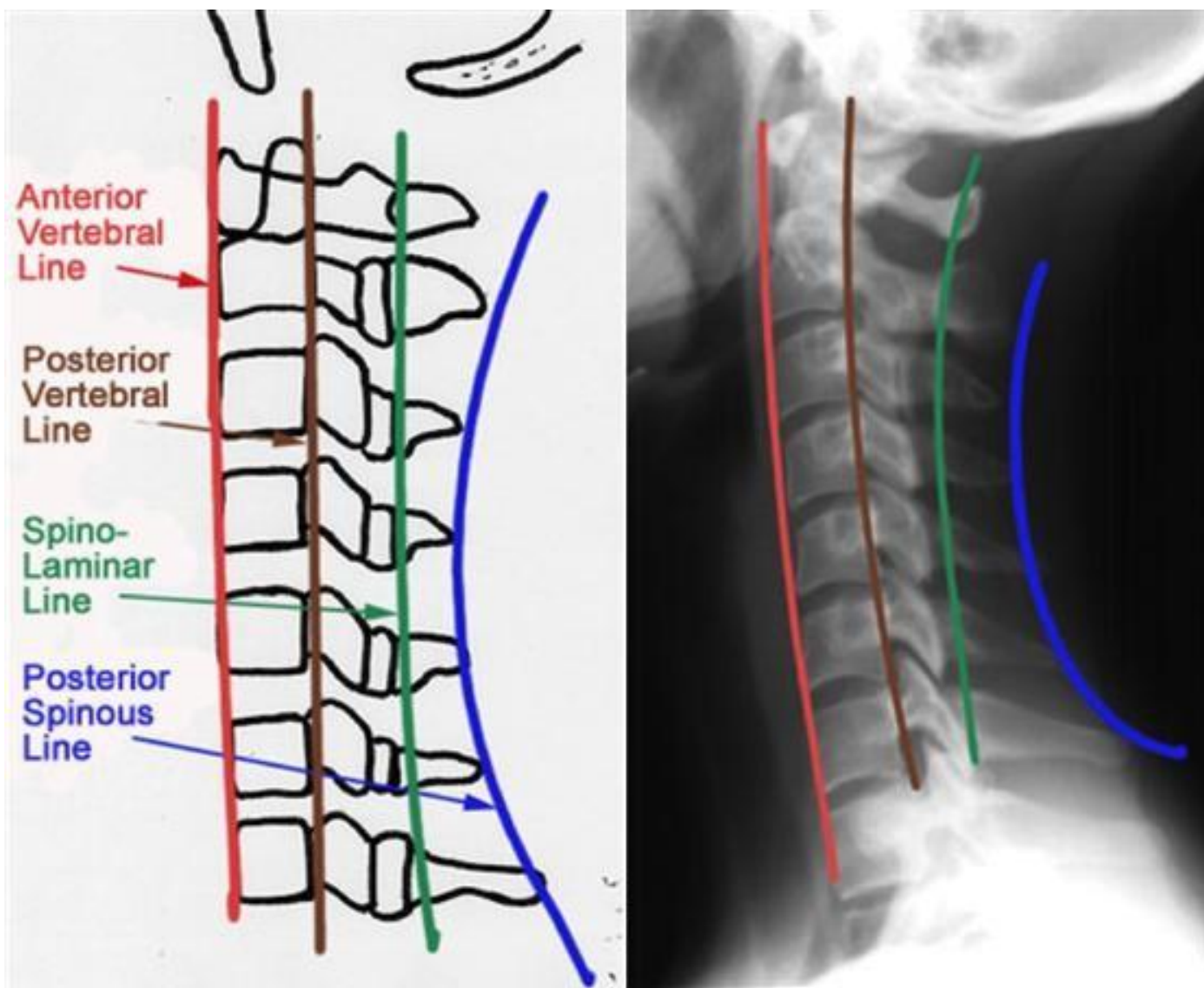Line

Posterior
Spinous
Line

2. **Plain XR and CT demonstrating XR appears 'normal' but the CT of same patient demonstrates oblique nondisplaced fracture of L C6 superior and inferior facets** (https://www.saem.org/cdem/education/online-education/m3-curriculum/group-traumatic-and-orthopedic-injuries/cervical-spine-imaging-in-trauma)

Normal XR examples:

3. **Normal AP: anteroposterior projection of the cervical spine demonstrating the vertebral bodies and intervertebral spaces**

4. Normal lateral X-ray: often used to identify

- zygapophyseal joints
- soft tissue structures around the c spine
- spinous processes
- anterior-posterior relationship of the vertebral bodies

Case courtesy of Dr Andrew Dixon, Radiopaedia.org, rID: XXXXX

5. PEG view: Normal

Also known as an odontoid projection it demonstrates the C1 (atlas) and C2 (axis)

6. Oblique X-ray: Normal

Demonstrates the intervertebral foramina of the side positioned further (or closer) from the image receptor

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Demonstrates the intervertebral foramina of the side positioned further (or closer) from the image receptor
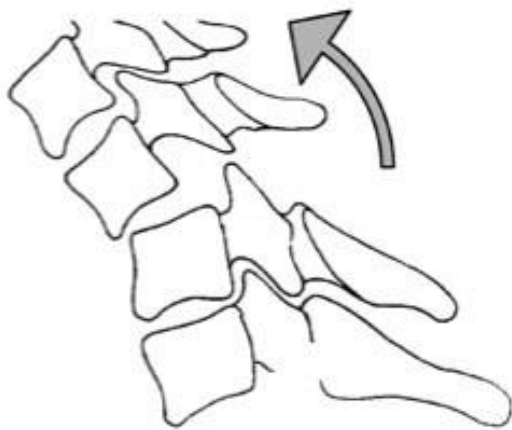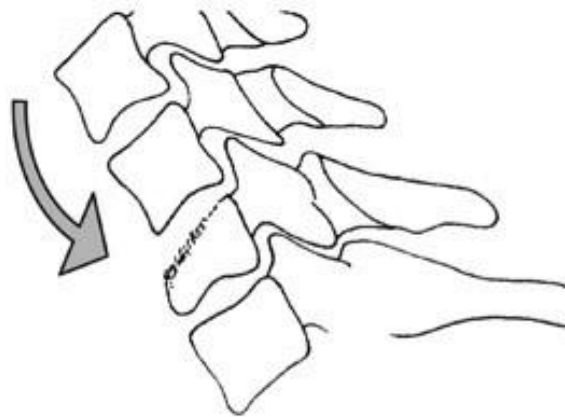
7. Swimmers: Normal

Modified lateral projection of the cervical spine to visualise the C7/T1 junction
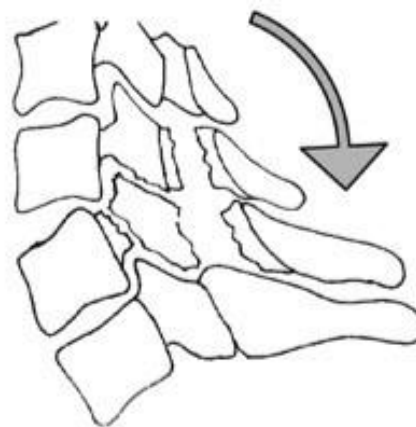
8. **Mechanism of injury in the cervical spine**

Distractive Flexion

Compressive Flexion

Distractive Extension

Compressive Extension

9. Injuries:

9a. Dens fracture

9b. Hangman's fracture

9c. Bilateral facet dislocation

9d. Jefferson fracture