

Dangerous Mechanism of Injury

- Fall > 1 meter/5 stairs
- Axial cranial force (such as diving)
- Road accident > 100 km/hr, ejected from vehicle or rollover
- Motorized recreational vehicle (ATT, snowmobile, etc)

Must do 3 views: AP lower cervical, AP open mouth upper cervical, neutral lateral cervical. DO NOT DO FLEXION/EXTENSION



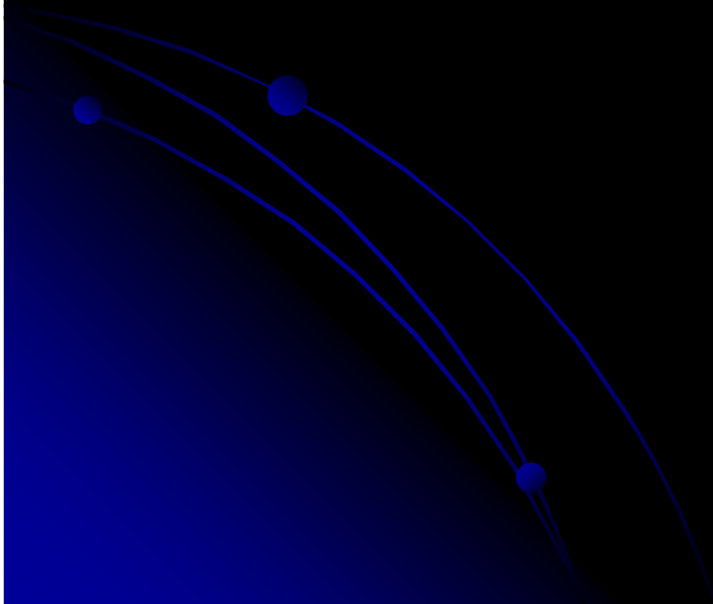
Young adult male presented to Dutch DC after a fall from the roof. These hospital films were read as normal.






After 3 view series analyzed..

- CT is best for evaluating fractures.
- MRI is best for neurological deficits.
- CT is primary investigation for high risk patients on an emergency basis.



“Non-significant injuries may rarely be missed when the CCSR is properly applied”

- Spinous process fracture
 - Transverse process fracture
 - However, these are significant for manual therapy.
 - Thus apply Clinical Decision making.
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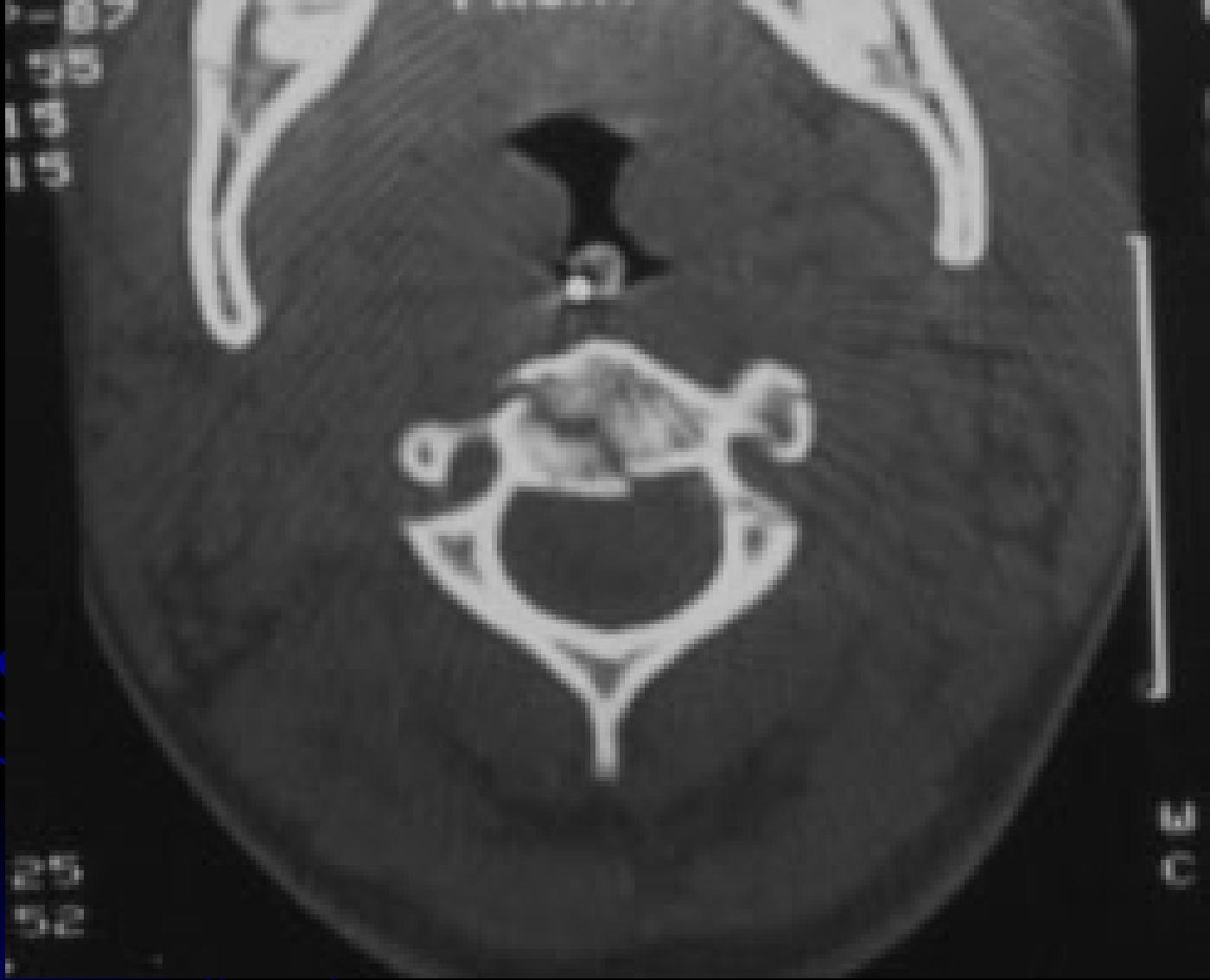
Adult male with acute onset of neck pain after MVA



Immediate post-trauma



Immediate post-adjustment



Adult Patient with Acute Uncomplicated Neck Pain (< 4 wks duration)

- Uncomplicated = non-traumatic neck pain without underlying neurologic deficits or red flags
- Radiographs not routinely indicated
- Special Investigations not indicated

Adult pt. with non-traumatic neck pain *and* radicular symptoms

- Suspected acute cervical disc herniation
- Suspected acute cervical spondylotic radicular syndrome/lateral canal stenosis
- (Rare tumours causing neuro compression)
- Radiographs indicated
 - AP lower cervical
 - AP open mouth
 - Lateral
 - (rarely obliques)

Adult pt. with uncomplicated subacute neck pain (4-12 wks' duration) with or without arm pain as well as pts with persistent neck pain (>12 wks) with or without arm pain

- Radiographs *not initially* indicated (Bone and Joint Decade 2000-2010 task force on neck pain and its associated disorders)
- If done:
 - AP lower cervical
 - AP open mouth
 - Lateral

Adult pt. re-evaluation in the absence of expected treatment response or worsening after 4 wks

- Radiographs indicated
 - AP lower cervical
 - AP open mouth
 - Lateral
- Co-management or specialist referral or MRI recommended even if conventional radiographs are unremarkable.

Adult patient with 'Red Flags'

- Pt < age 20 or > age 50 (65), particularly with S/S suggesting systemic disease
- No response to care after 4 weeks
- Significant activity restriction > 4 wks
- Non-mechanical pain (unrelenting pain at rest, constant or progressive S&S.
- Neck rigidity in the sagittal plane in the absence of trauma
- Dysphasia
- Impaired consciousness
- Radiographs indicated
 - 3 view minimal series
- May need referral for MRI or CT

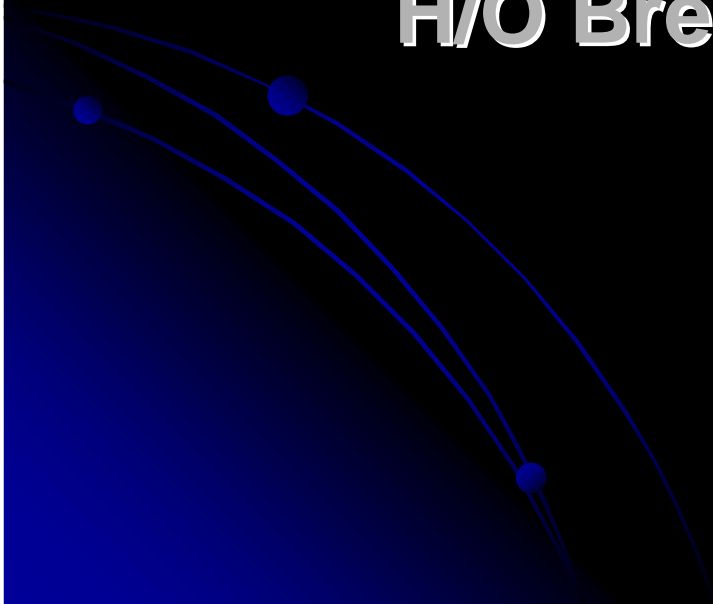
Red Flags continued

- CNS S&S (cranial nerves, path reflexes, long tract signs)
- High risk ligamentous laxity populations
- Arm or leg pain with neck movement
- Suspected cervical myelopathy and radiculomyelopathy
- Suspected neoplasia
- Suspected infection
- Positive laboratory examination and + S&S
- *Sudden onset of acute and unusual neck pain and/or headache with or without neurological symptoms*
- **Radiographs indicated**
 - 3 view minimal series
- Flexion lateral view added
 - Check ADI
- **Radiographs indicated**
 - 3 view minimal series
- **Immediate referral without plain films for advanced imaging.**

**56 year old female presented to her
English chiropractor in 1999 with
insidious onset of neck pain.**

**It has not been relieved by
Physiotherapy.**

**There are no associated Symptoms
H/O Breast cancer in 1984.**



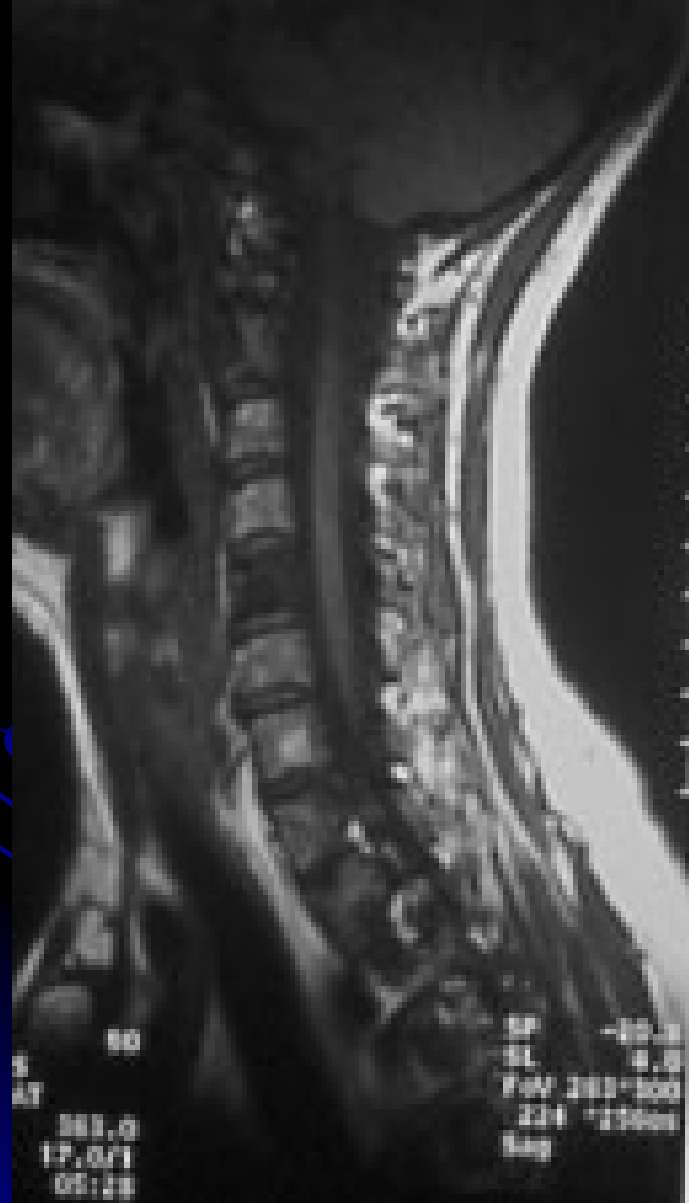


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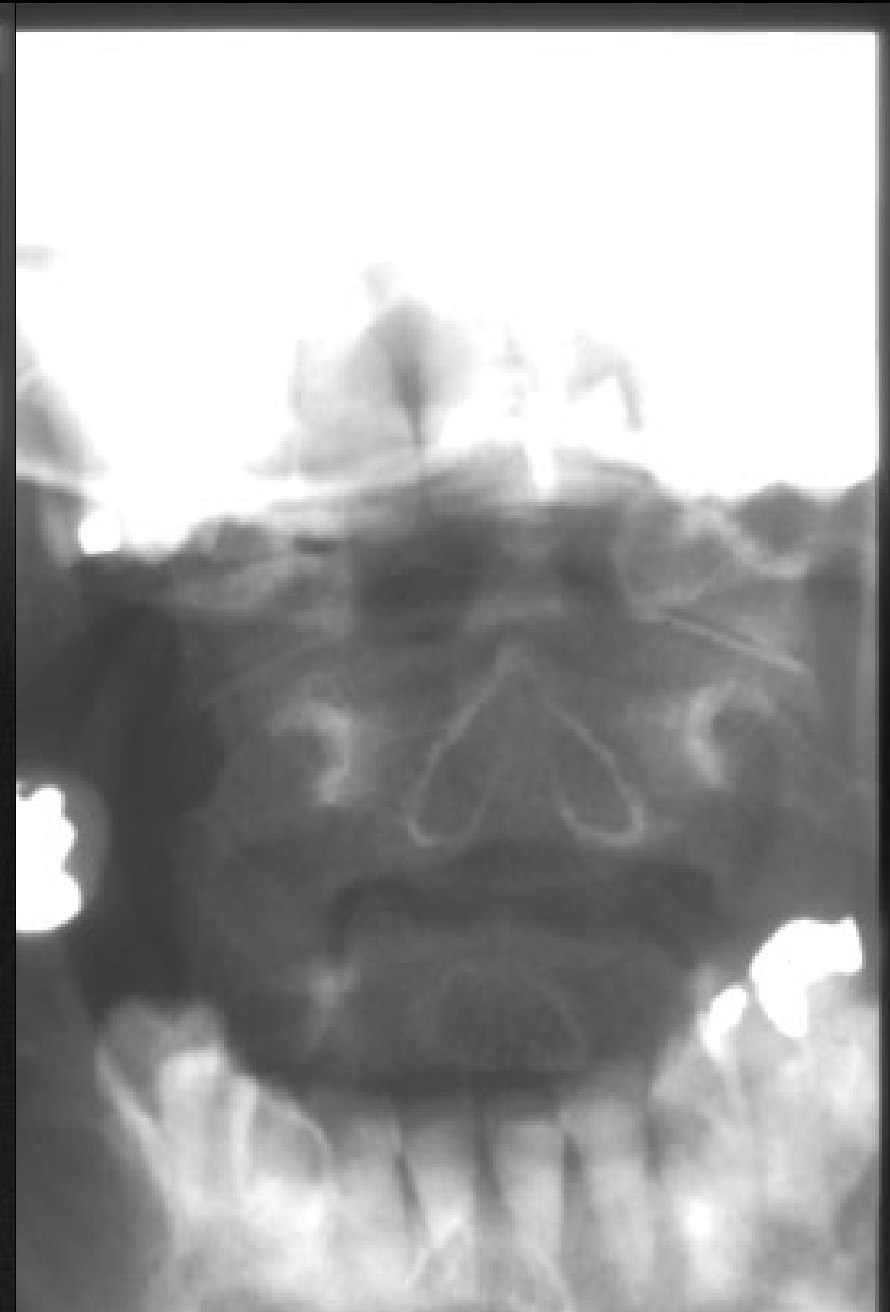




**Negative Radiographs do not
necessarily 'clear' the patient
when certain Red Flags are
present**

**History of Malignancy is one of
these situations**





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:3/3
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21/08/96

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