



CLINICAL GUIDELINE

Imaging of a Potential Neck Injury (GRI ED)

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

IMAGING OF A POTENTIAL NECK INJURY

Who should receive imaging of the cervical spine?

Use this guideline to help you decide whether or not to CT/x-ray a **stable and alert** (GCS 15/15) patient **with potential neck injury** following **blunt trauma**. *If in doubt consult a Senior.*

Any **High-risk factors** which mandates imaging?

- Neck pain and Age ≥ 65 years**
- Dangerous mechanism*** and visible injury above clavicle (or thoracic injury with severe pain $\geq 7/10$ even if no neck pain/tenderness)
- Neurological Deficit, Paralysis, Numbness or Tingling** in an **extremity**
- Severe neck pain** ($\geq 7/10$ severity)

None

Any **Low-risk factor** which allows safe assessment of the neck range of motion?

- Simple rear-end MVC****
or
- Sitting position in department**
or
- Ambulatory at any time**
or
- Delayed onset of neck pain**
or
- Absence of midline c-spine**

YES

Patient **voluntarily** able to laterally rotate their neck to 45° bilaterally **without** severe pain ($\geq 7/10$)?

ABLE

Cervical Spine imaging

Rule not applicable if

- Non-trauma case
- GCS < 15
- Chronically impaired cognition
- Abnormal vital signs
- Age < 16
- Acute paralysis
- Known vertebral disease
- Previous c-spine surgery
- Penetrating Injury
- >48hrs from injury
- Re-attends with neck pain

As with any clinical tool this should be applied with care and is not a substitute for clinical judgement in individual patients. You can make exception to the rule if based on justifiable clinical grounds.

Cervical Spine imaging **REQUIRED**

CT Scan if

- ≥ 65 or vertebral disease
- Presence of neurology
- CT scan of other areas being undertaken

* Dangerous Mechanism

- Fall > 1m / 5 stairs
- Axial load to head e.g. diving
- MVA high speed >60mph, rollover, ejection
- Bicycle collision
- Motorised recreational vehicle e.g. Quad Bike

** Simple rear-end MVC excludes

- Pushed into oncoming traffic
- Hit by bus/large truck
- Rollover
- Hit by high speed vehicle >60mph