

FOR PEOPLE AGED 16 AND OVER

CERVICAL SPINE INJURY

Any following high-risk factors present:

- GCS ≤12 on initial assessment
- Intubation
- Definitive diagnosis of cervical spine injury is needed urgently (i.e. pre-surgery)
- The patient is having other body areas scanned for head injury or multi-region trauma.
- The **patient is alert and stable**, there is clinical suspicion of cervical spine injury and any of the following apply:
 - Age 65 years or older
 - Dangerous mechanism of injury (distracting or compression neck injury, fall from a height of greater than 1 metre or 5 stairs)
 - Focal peripheral neurological deficit
 - Paraesthesia in the upper or lower limbs.
 - Unable to safely assess neck range of movement.
 - Patient has condition that predisposes them to higher risk:
 - Collagen vascular disease / Osteogenesis imperfecta / Axial spondyloarthritis

YES

Immobilise Cervical Spine*

CT Cervical Spine within 1 hour

Call Senior

NO

Neck pain / tenderness

YES

Any following low-risk factors present:

- Is comfortable in a sitting position
- Been ambulatory at any time since injury
- Has no midline cervical spine tenderness
- Presents with delayed onset of neck pain
- Involved in simple rear-end motor vehicle collision

NO

YES

Patient can actively rotate neck to 45° left and right

NO

YES

Immobilise Cervical Spine*

No Cervical Spine imaging required

Cervical Spine Immobilisation*

- Cervical collar
- Lateral blocks / sandbags
- Head & Chin straps
- Flat bed rest

Further Imaging

- MRI if there are neurological signs and symptoms suggesting injury to the cervical spine.

- CT or MRI angiography of the neck vessels if there is a suspicion of vascular injury, such as:
 - Vertebral malalignment
 - High-grade fracture (high-grade or complex facial fracture or skull base fracture likely to involve the internal carotid artery / vertebral artery)
 - Posterior circulation syndrome.

- Consider whole spine imaging (AP and Lateral) if:
 - Cervical spine fracture found (20% chance of further spinal fracture)
 - Thoracic or Lumbar bony tenderness