

18.8. Assessing and Imaging the Thoracolumbar Spine

2. Outcomes

Complaining of a thoracolumbar pain AND

- i) Age ≥ 65
- ii) Dangerous mechanism
 - Fall $>3m$
 - Axial load to head or spine
 - RTC - $>60mph$, rollover, ejection
 - Lap belt restraint only
 - Horse riding
 - Campervan/mobile home collision
 - Bicycle collision
- iii) Vertebral disease*
 - Ankylosing spondylitis
 - Rheumatoid arthritis
 - Spinal stenosis
 - Previous spinal injury
- iv) Known or at risk of osteoporosis

OR a history of any of the following

- i) Spinal fracture in another region of the spine
- ii) Paresthesia weakness or numbness
- iii) Midline/spinal pain when coughing

OR any of the following on examination

- i) Motor deficit
- ii) Sensory deficit
- iii) Deformity
- iv) Midline bony tenderness (percussion or palpation)

YES

NO

1. Assessment

Radiography

CT IF ANY OF THE FOLLOWING

- i) GCS $<13/15$ or intubated
- ii) Vertebral disease*
- iii) Parasthaesia, weakness or numbness
- iv) Motor deficit
- v) Sensory deficit
- vi) X-ray is abnormal or inadequate ***

(***low energy (e.g. fall from standing) osteoporotic 'vertebral compression #' may only require CT if body collapse or greater than 50% loss of height. Discuss with radiology)

IF NOT ON ABOVE LIST REQUEST PLAIN FILMS

YES

Is there pain, paresthesia, weakness or numbness when mobilising?

RESULT

NO

3. Features

CT Abnormal

Discuss with Neurosurgeons

Imaging Normal

Consultant radiologist final CT report is normal (if out of hours, see list below***)

Or

CT not indicated and plain films assessed as adequate and normal by ST3+

YES

Radiologically***

TL SPINE
CLEARED

Clinically

Thoracolumbar spine cleared radiologically***

1. Patients fit for general ward/discharge with a provisional, typed 'normal' CT report, may have TL spine cleared clinically by ST3 or equivalent. (This **must** be documented)

2. Normal CT with motor or sensory deficit, paresthesia, weakness or numbness at rest or when mobilising should remain immobilised and be considered for MRI after discussion with radiologist/neurosurgeon.

3. Obtunded patients should be assessed clinically when alert, but this should not delay thoracolumbar spine clearance.