

# NR 3 Thoracolumbar spine trauma

# **REMARKS**

## 1 General

**1.1** Radiological workup is indicated for cases with high energy mechanism of injury including:

History of significant mechanism of injury such as high impact motor vehicle accident or fall from a height >1 metre, concomitant cervical spine fracture, back pain or tenderness on palpation, local signs of thoracolumbar injury, neurological deficits, altered mental status, major distracting injuries, evidence of intoxication with ethanol or drugs.<sup>1,3-6</sup>

1.2 Approximately 20% of patients with a spinal column fracture will have a noncontiguous fracture. Non-contiguous fractures are associated with other severe injuries and should be suspected and investigated in injuries involving high-velocity mechanisms.<sup>2,8</sup>

## 2 Plain radiograph

2.1 Plain films are considered adequate for the evaluation of thoracolumbar spine if the patient does not require CT scan for any other reason.<sup>1, 3-4, 6</sup>

### 3 CT

3.1 CT is excellent in imaging bony fractures. In patients who undergo torso CT (thorax, abdomen and pelvis), the images will be adequate to evaluate the spine with sagittal and coronal reformats.<sup>2-3, 7</sup>

#### 4 MRI

4.1 MRI should be performed if there is clinical concern for cord compression or ligamentous instability, as well as when clinical suspicion is high for an unstable injury despite normal radiographic evaluation.

#### **REFERENCES**

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