# Regional variations

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Upper cervical spine anatomy is designed to facilitate motion ( Figure 30.3 ), and stability here is dependent on ligamentous restraints ( Figure 30.4 ). V ertebral anatomy from C3 to C7 is similar. The cervicothoracic ( Figure 30.5 ) and thoracolumbar ( Figure 30.6 ) junctions are transitional zones where the spine changes from a mobile section (cervical and lumbar) to a more fixed one (thoracic). These two areas are common sites of injury .

The pathophysiology and types of spinal cord injury • The prognosis of spinal cord injury, factors affecting • functional outcome and common associated complications 1 5 3 2 4 Figure 30.2 Ligamentous spinal restraints. (1) Anterior longitudinal ligament, (2) intervertebral disc and posterior longitudinal ligament, (3) facet joint capsule, (4) interspinous ligament, (5) supraspinous ligament. Atlas Axis (inferior view) (posterosuperior view) Dens Posterior tubercle Superior Posterior Posterior articular articular arch facet facet Inferior Spinous articular process Anterior Anterior facet arch tubercle Figure 30.3 Atlantoaxial bony anatomy.

Ascending band Cruciate Transverse ligament band Posterior longitudinal ligament Figure 30.4 Atlantoaxial ligaments. Figure 30.5 Cervicothoracic facet subluxation (arrow) (easily missed with inadequate radiographs).

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