Spinal cord syndromes

Central cord syndrome

- Most common incomplete cord syndrome.
- Frequently found in elderly with underlying spondylosis or younger people with severe extension injury (figure).
- Upper extremity deficit is greater than lower extremity deficit, because the lower extremity corticospinal tracts are located lateral in the cord.

Anterior cord syndrome

- Seen in flexion injuries e.g. burst fracture, flexion tear drop fracture and herniated disk.
- Presents with immediate paralysis, because the corticospinal tracts are located in the anterior aspect of the spinal cord.

Brown-Sequard syndrome

- Ipsilateral motor weakness and contralateral sensory deficit due to hemisection of the spinal cord.
- Brown-Sequard syndrome may result from rotational injury such as fracture-dislocation or from penetrating trauma such as stab wound.

Posterior cord syndrome

- Uncommon syndrome due to extension injury.
- Loss of positioning sense due to disruption of dorsal columns.
- Good prognosis.

Complete spinal cord injury

Total absence of sensation and motor function caudal to the level of injury.