SPINAL CORD ANATOMY AND CLINICAL SYNDROMES

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FIGURE 7-1 Spinal cord. A. Posterior view, showing cervical and lumbar enlargements. B. Three segments of the spinal cord.
FIGURE 7-3  Transverse section of the spinal cord at the level of the fifth cervical segment. (Weigert stain.)
FIGURE 7-7  Transverse section of the spinal cord at the midcervical level, showing the general arrangement of the ascending tracts on the right and the descending tracts on the left.
Posterior column-medial lemniscus tract
Spinothalamic tract
FIGURE 7-7  Transverse section of the spinal cord at the midcervical level, showing the general arrangement of the ascending tracts on the right and the descending tracts on the left.
Corticospinal tract
CORD SYNDROMES

• Central cord syndrome
• Complete cord syndrome
• Brown sequard syndrome
• Anterior cord syndrome
• Posterior cord syndrome
Central cord syndrome

- Weakness in the arms>legs
- Usually lower motor neuron weakness in the arms
- Upper neuron weakness in the legs.
- Rarely affects bladder and rectal sphincter
- Variable sensory loss
FIGURE 7-7 Transverse section of the spinal cord at the midcervical level, showing the general arrangement of the ascending tracts on the right and the descending tracts on the left.
Complete cord syndrome

- Quadriplegia/ Paraplegia
- Loss of all modalities of sensation below the level of the lesion
- Loss of sphincter control
Brown sequard syndrome

- Ipsilateral weakness
- Ipsilateral loss of proprioception
- Contralateral loss of pain and temperature
Anterior cord syndrome

• Quadriplegia/ Paraplegia
• Loss of sensation to pain and temperature below the level of the lesion
• Loss of sphincter control
• Preserved proprioception
Posterior cord syndrome

- Loss of proprioception below the level of the lesion (sensory ataxia)
- Preserved motor function and pain sensation
- Normal sphincter function