SPINAL CORD ANATOMY AND CLINICAL SYNDROMES

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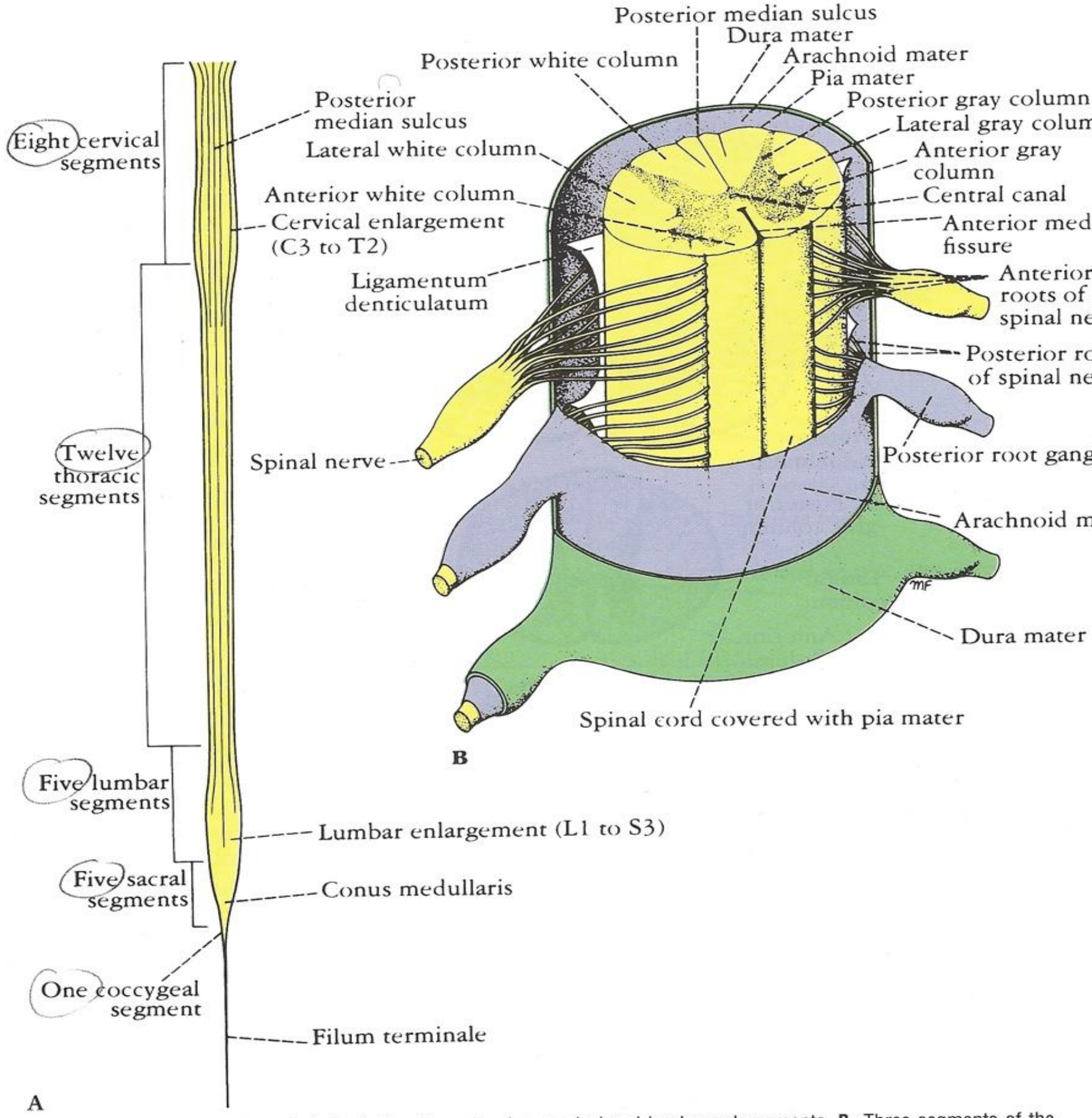


FIGURE 7-1 Spinal cord. **A.** Posterior view, showing cervical and lumbar enlargements. **B.** Three segments of the

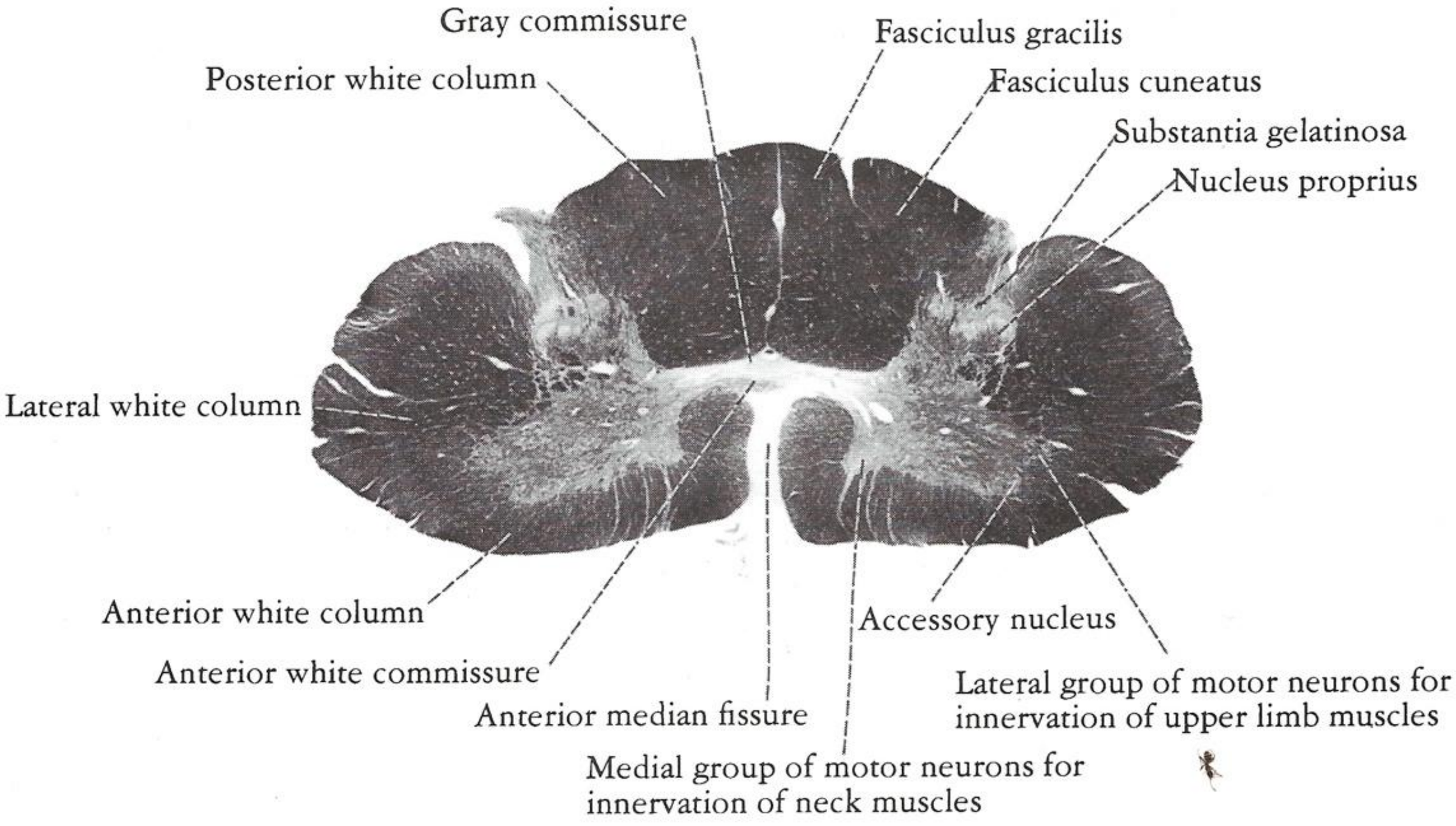


FIGURE 7-3 Transverse section of the spinal cord at the level of the fifth cervical segment. (Weigert stain.)

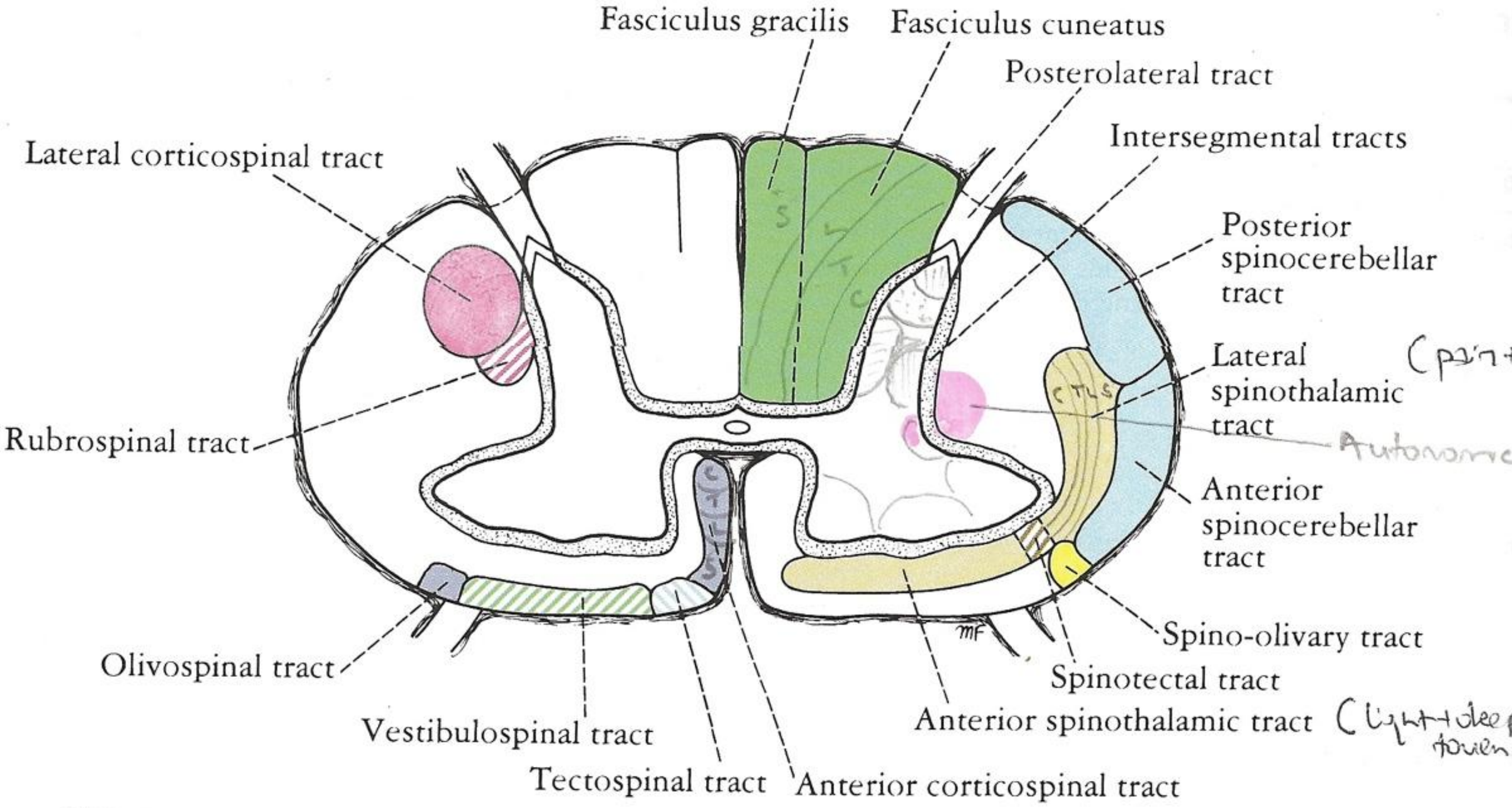
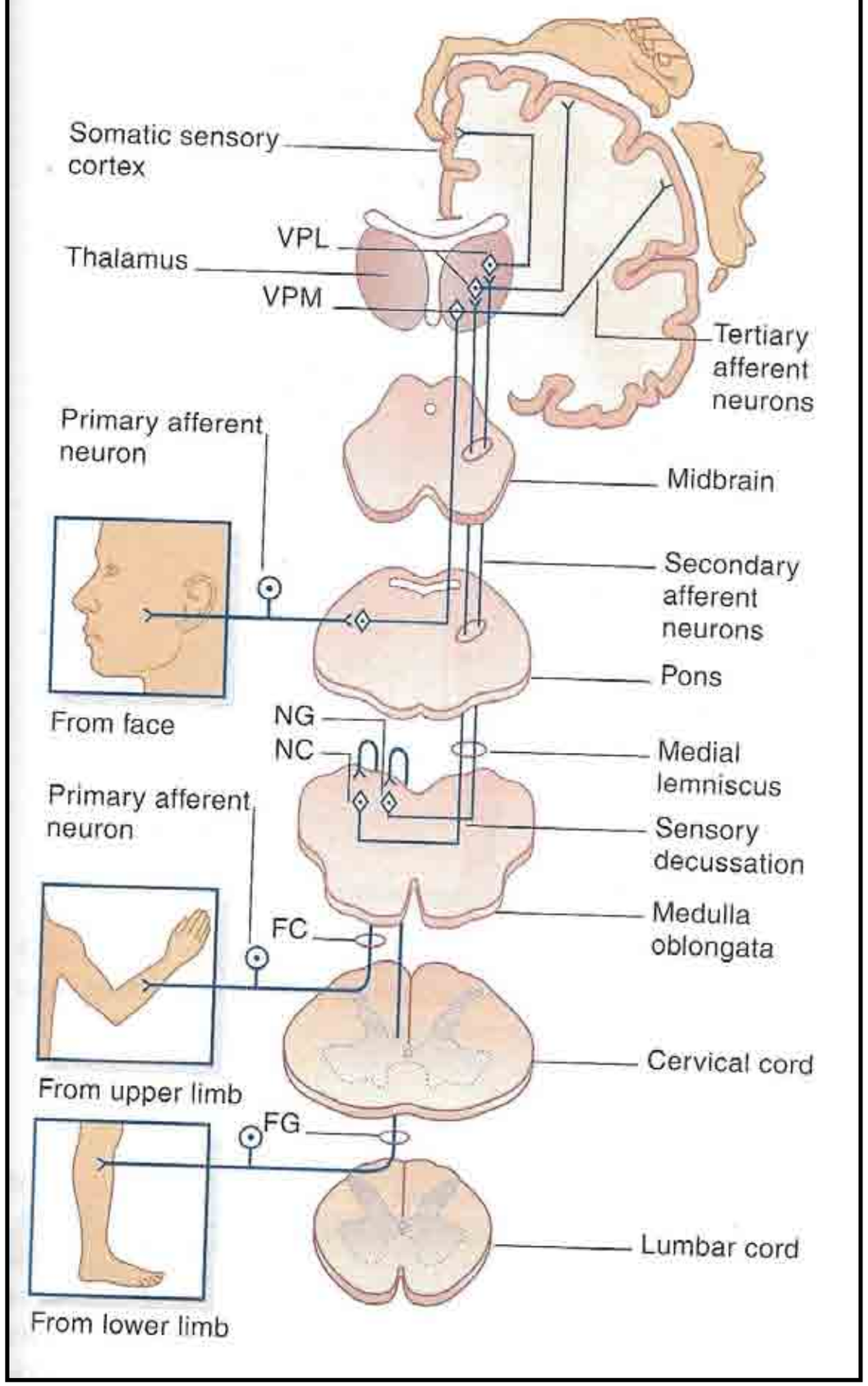
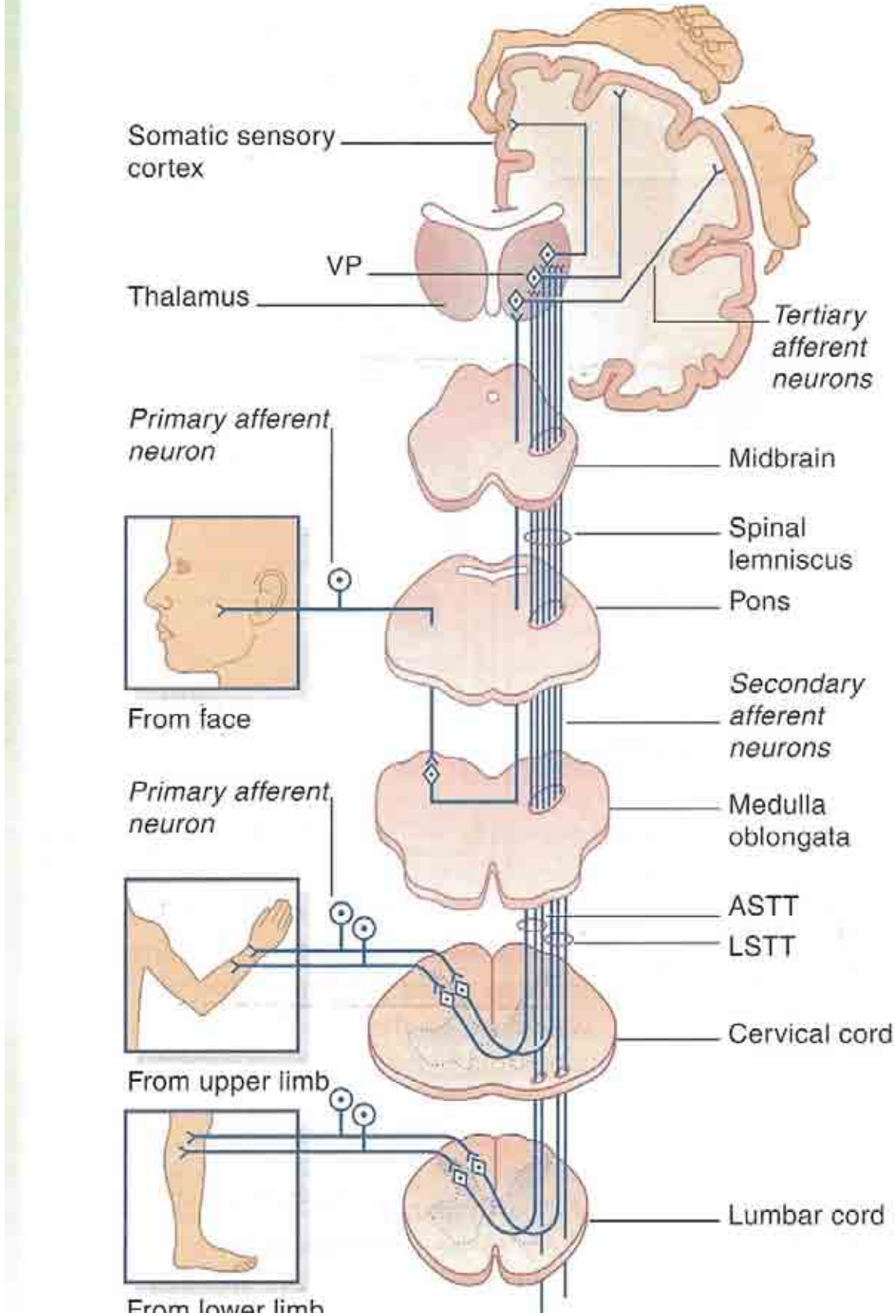


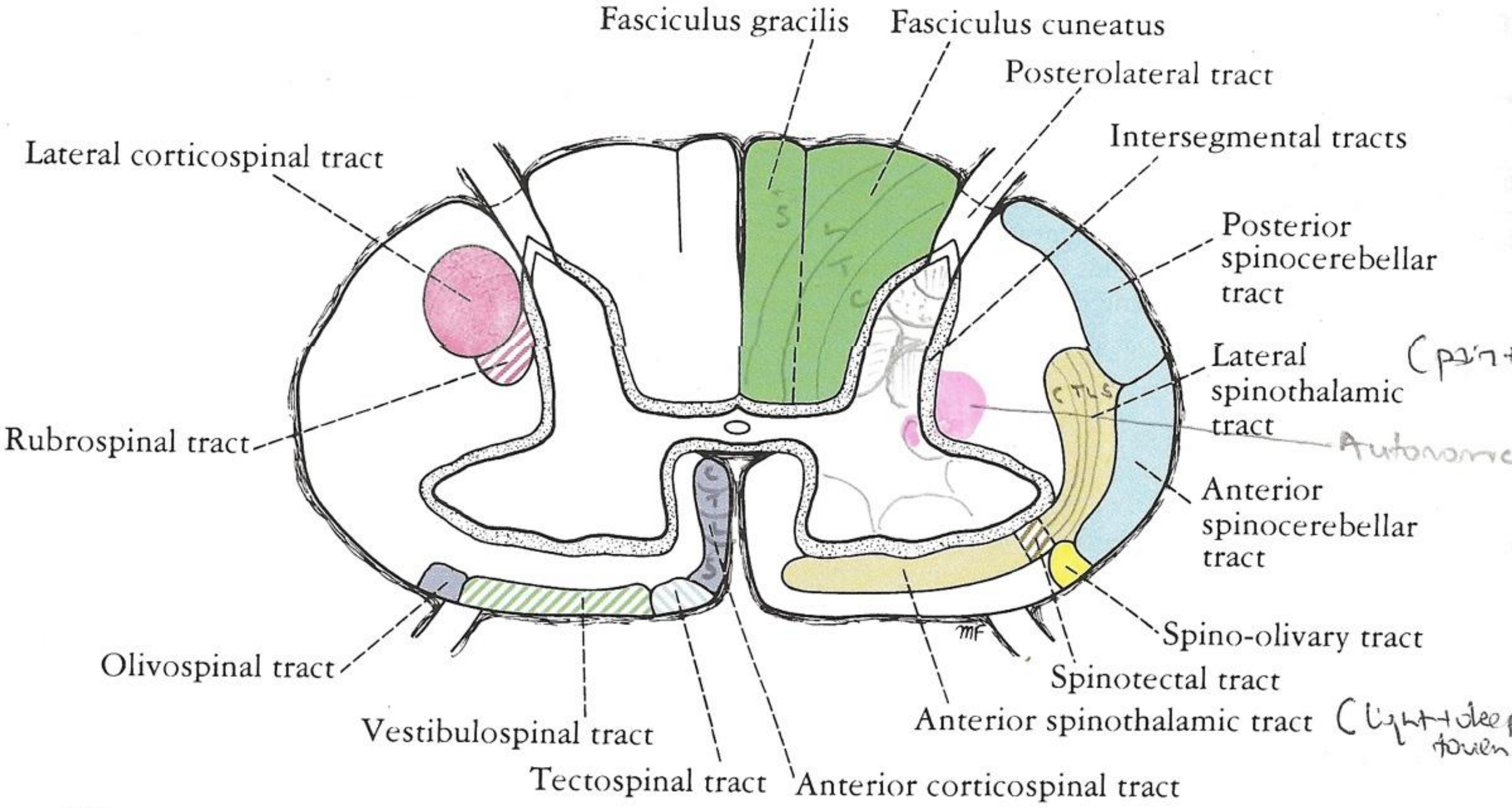
FIGURE 7-7 Transverse section of the spinal cord at the midcervical level, showing the general arrangement of the ascending tracts on the right and the descending tracts on the left.



Posterior column-medial lemniscus tract



Spinothalamic tract



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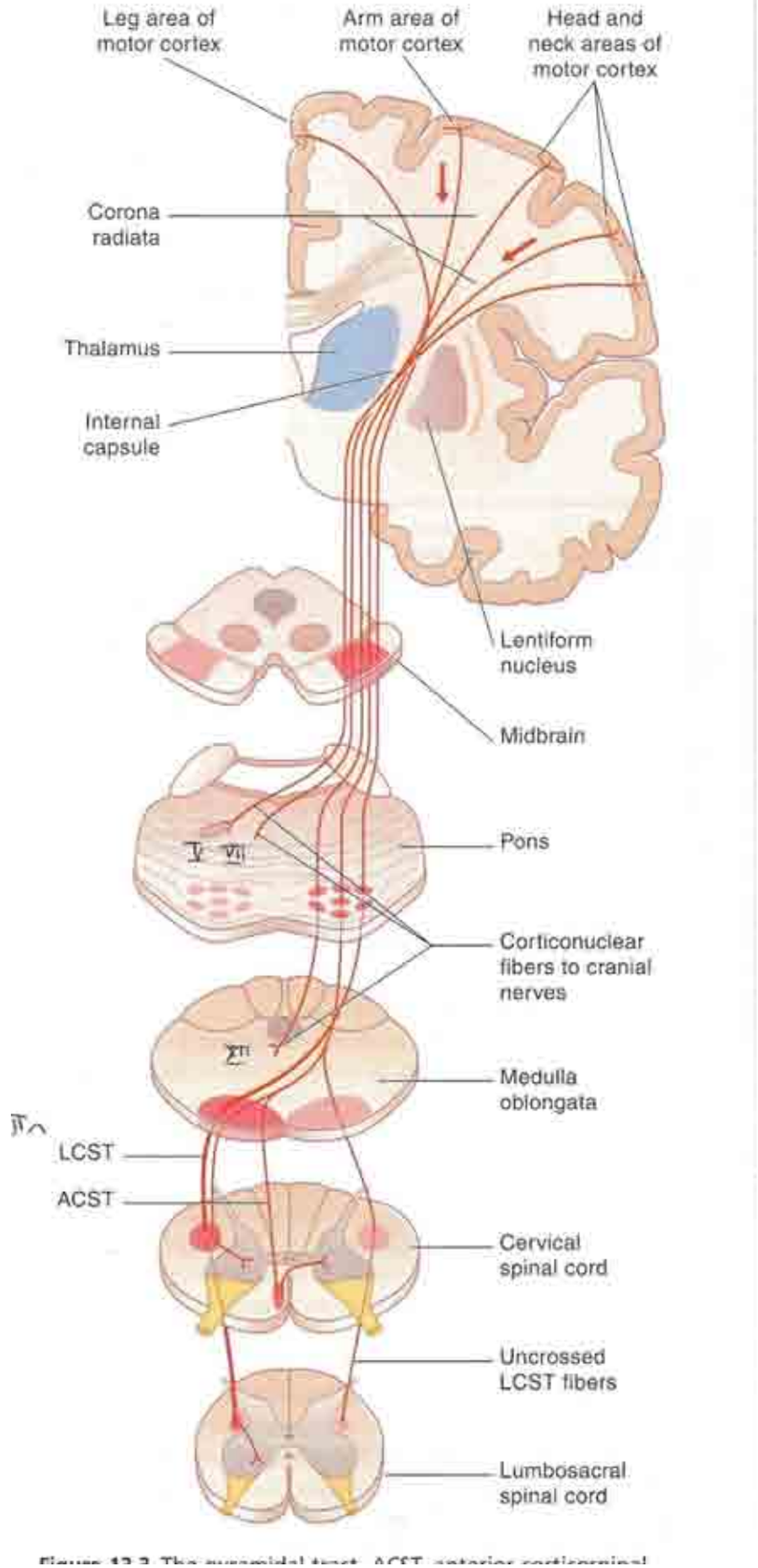

Corticospinal tract

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

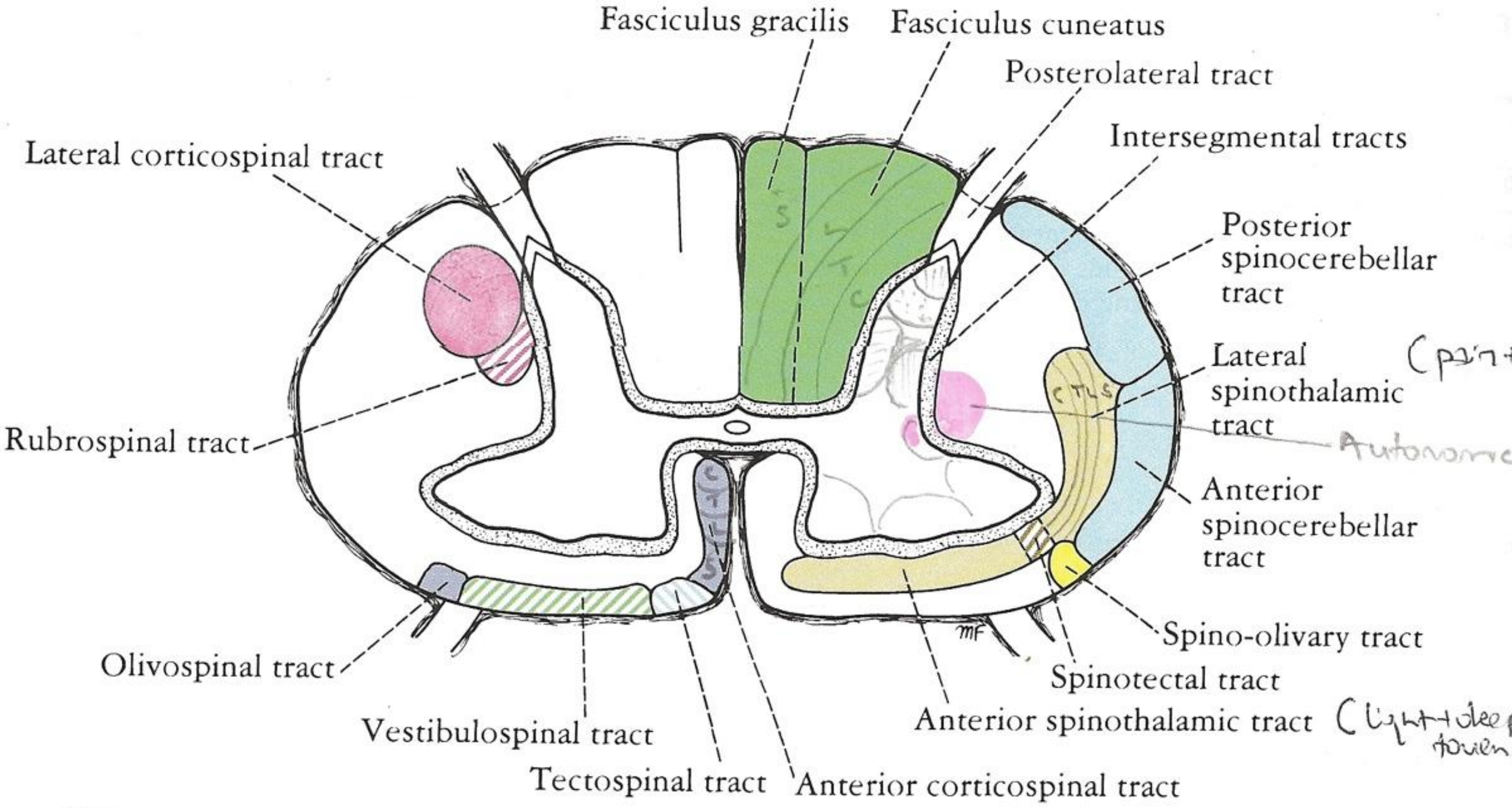

FIGURE 7-7 Transverse section of the spinal cord at the midcervical level, showing the general arrangement of the ascending tracts on the right and the descending tracts on the left.

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