

Nerves

I. Typical spinal nerve

A. Ventral root

function – carries axons from lower motor neurons (skeletal muscle innervation), preganglionic sympathetic motor neurons (ventral roots T1–L2) and preganglionic parasympathetic motor neurons (ventral roots S2–4)

B. Dorsal root

function – carries axons from primary sensory neurons innervating skin, fascia, joints, muscles, bones, blood vessels and/or viscera

1. Dorsal root ganglion

function – houses cell bodies of primary sensory neurons

C. Ventral ramus

function – carries axons from primary sensory neurons, lower motor neurons and postganglionic sympathetic neurons (ventral rami S2–4 also carry axons from preganglionic parasympathetic neurons) innervating anterior neck, thoracic wall, abdominal wall, pelvic wall, upper extremity and lower extremity

D. Dorsal ramus

function – carries axons from primary sensory neurons, lower motor neurons and postganglionic sympathetic neurons innervating posterior neck and back structures (skin, fascia, muscles, ligaments, bones, joints & vessels)

II. Spinal Cord

A. Surface features

1. Cervical enlargement
2. Lumbar enlargement
3. Conus [L. cone] medularis

B. Meninges

1. Dura [L. hard] mater
2. Arachnoid [G. spider like] mater
3. Pia [L. tender] mater