

Core Surgical Anatomy – Learning outcomes

Back – Vertebrae, discs, ligaments, meninges, spinal cord, nerve roots, extensor muscles

1. Describe the main anatomical features of typical and atypical vertebrae.
Identify the atlas, axis, other cervical, thoracic, lumbar, sacral, and coccygeal vertebrae and recognise their characteristic features.
2. Describe the anatomy of intervertebral joints. Explain the role of intervertebral discs in weight-bearing, give examples of common disc lesions and how they may compress adjacent neurological structures.
3. Describe the main anatomical features of typical and atypical vertebrae.
Identify the atlas, axis, other cervical, thoracic, lumbar, sacral, and coccygeal vertebrae and recognise their characteristic features.
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- 5.
6. Describe the regions and functions of the vertebral column. Describe the range of movement of the entire vertebral column and its individual regions.
Explain the anatomical bases of common spinal injuries.
7. Identify the principal muscles, ligaments and surface features of the vertebral column in order to be able to perform an examination of the back.
Discuss their functional roles in stability and movement of the vertebral column.
8. Describe the anatomical relationships of the meninges to the spinal cord and dorsal and ventral nerve roots, particularly in relation to root

compression and the placement of epidural and spinal injections. Describe the anatomy relevant to performing a lumbar puncture.

9. Describe the anatomy of a typical spinal nerve, including its origin from dorsal and ventral spinal roots, its main motor and cutaneous branches and any autonomic component.
10. Interpret standard diagnostic images, e.g. CT, MRI, X-ray and ultrasound of the vertebral column.