

# Chapter 141

## The Normal Spine



Rose Miller

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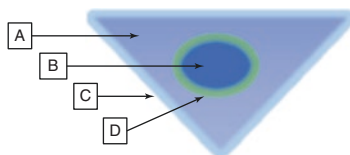
What is the radiologic study of choice for assessing most diseases of the spine?

Magnetic resonance imaging (MRI)

Name the four primary osseous contours that should be checked on every lateral cervical spine radiograph.

- (a) Anterior vertebral line
- (b) Posterior vertebral line
- (c) Spinolaminar line
  - (i) Junctions between the laminae and the spinous process
- (d) Spinous process line [1]

Name the areas of the spinal column on this axial schematic.



A, subarachnoid space; B, spinal cord; C, dura/arachnoid; D, pia

(continued)

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A. E. M. Eltorai et al. (eds.), *Essential Radiology Review*,  
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What are the relative heights of the disk spaces in each part of the normal spine?	(a) Cervical: equal disk spaces (b) Thoracic: slightly decreased from the cervical but equal to each other (c) Lumbar: disk spaces progressively increase except for L5–S1 [2]
What do the ear, the leg, the nose, the eye, and the neck correlate to on the normal “Scottie Dog” sign?	(a) Ear: superior articular facet (b) Leg: inferior articular facet (c) Nose: transverse process (d) Eye: pedicle (e) Neck: pars interarticularis [2]
What is the level of the spinal cord of the conus medullaris?	L1–L2
Which spinal levels have nerve roots exiting above their respective vertebrae?	C1–C7
Which spinal have nerve roots exiting below their respective vertebrae?	Thoracic and lumbar
What are the expected appearances of the vertebral bodies and CSF in a T1-weighted image?	(a) Vertebral bodies: high signal intensity (bright) (b) CSF: low signal intensity (dark)
What are the expected appearances of the vertebral bodies and CSF in a T2-weighted image?	(a) Vertebral bodies: low signal intensity (dark) (b) CSF: high signal intensity (bright)
Name the five ligaments of the spine.	(a) Anterior longitudinal ligament (b) Posterior longitudinal ligament (c) Ligamentum flavum (d) Interspinous ligament (e) Supraspinous ligament [2]

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## References

1. Mandell J. Core radiology: a visual approach to diagnostic imaging. Cambridge: University Printing House; 2013.
2. Herring W. Learning radiology: recognizing the basics. 3rd ed. Philadelphia: Elsevier Mosby; 2012.