

Evidence Discussion (SP 16)

Other Imaging Studies and Procedures Related to the Spine Imaging Guidelines

- Advanced imaging needed for surgical planning (e.g., MRI and/or CT) should be performed for preoperative planning prior to spine surgery^{1, 2}. MRA and CTA are generally not indicated for preoperative planning of initial anterior spinal surgery unless abnormal vasculature is known or reasonably anticipated.
- Advanced diagnostic imaging studies of the spine are not required prior to facet joint injections, medial branch blocks or radiofrequency ablations unless the criteria for advanced imaging studies of the spine are met as otherwise stated in the Spine Imaging Guidelines^{3, 4}.
- MRI Thoracic Spine without contrast is generally the study of choice prior to SCS placement, however, CT Thoracic Spine without contrast or CT/ Myelography Thoracic Spine are acceptable alternatives. Imaging of the lumbar spine is not indicated for placement nor removal of spinal cord stimulators⁵.
- CT without contrast of the affected spinal region(s) within 24 hours post-procedure to evaluate neurologic sequelae resulting from cement extravasation⁶.

References:

1. Curtis, S, MRI Scan of the Spine. Spine-health. Oct 2022.
2. ACR Appropriateness Criteria Low Back Pain, revised 2021.
3. Ghaly RF, Lissounov A, Candido KD, Knezevic NN. Should routine MRI of the lumbar spine be required prior to lumbar epidural steroid injection for sciatica pain? Surg Neuro Int. 2015;6:48.
4. Cohen SP, Maus T. Point/Counterpoint-The need for magnetic resonance imaging before epidural corticosteroid injection. American Academy of Physical Medicine and Rehabilitation. 2013;5:230-237.
5. Benjamin J Best, Mokshal H Porwal, Peter A Pahapill. Preoperative Thoracic Spine Magnetic Resonance Imaging for Spinal Cord Stimulation: Should Such a Recommendation Be an Absolute Requirement? Neuromodulation 2022 Jul;25(5):758-762.
6. In-Hwa Baek, Hyung-Youl Park. Paraplegia due to intradural cement leakage after vertebroplasty: a case report and literature review. BMC Musculoskeletal Disorders, 22: 741 (2021)