

Evidence Discussion (SP 6)

- Acute low back pain is usually a self-limited condition and improves with conservative treatment in 6 weeks. The American College of Radiology Appropriateness Criteria for low back pain (revised 2021) states that imaging may be considered in those patients who have had up to 6 weeks of medical management and physical therapy that resulted in little or no improvement in their back pain.¹ A meta-analysis by Chou et al found no clinically significant difference in patient outcomes between those who had immediate lumbar imaging versus usual care.² It should also be noted that there are risks associated with imaging including but not limited to radiation exposure and contrast complications.³ Studies have also linked the increase rate of imaging with the increase rate of surgery and also found early magnetic resonance imaging (MRI) had an eightfold increased risk of surgery.^{3,4} In typical patients with low back pain or radiculopathy, MR imaging does not appear to have measurable value in terms of planning conservative care, that patient knowledge of imaging findings does not alter outcome, and that patient knowledge of imaging findings is associated with a lesser sense of well-being.⁵

References:

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2. Chou R, Fu R, Carrino JA, et al. Imaging strategies for low-back pain: systematic review and meta-analysis. *Lancet*. 2009;373:463-472.
3. Shubha SV, Deyo RA, Berger ZD. Application of “Less is More” to Low Back Pain. *Arch Intern Med* 2012;172(13):1016-1020.
4. Webster BS, Cifuentes M. Relationship of early magnetic resonance imaging for work-related acute low back pain with disability and medical utilization outcomes. *J Occup Environ Med*. 2010;52:900-907.
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