

Evidence Discussion (SP-1)

Spine Imaging General Guidelines

Prior to advanced imaging, it is critical to perform a detailed history and physical examination in the evaluation of a patient for spinal pathology.²⁻⁴ Features of the clinical history and physical examination not only help in the formulation of a differential diagnosis but also influence decisions about diagnostic imaging.¹ Also, as the more common findings on imaging studies are often nonspecific and nondiagnostic, clinical history and exam findings play a crucial role.¹⁵ These incidental findings may lead to unnecessary further diagnostic workup and additional negative downstream outcomes.

Multiple studies have shown most patients with acute neck or back pain will improve with 6 weeks of conservative care,⁵⁻⁷ however, conservative care would not be necessary for patients with red flag indications.¹⁰

Risks associated with imaging include but are not limited to radiation exposure and contrast complications.^{8,11} 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.^{8,9} It should also be of note that routine repeat advanced imaging for many spinal conditions has been shown to have limited value.¹²⁻¹⁴

References

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