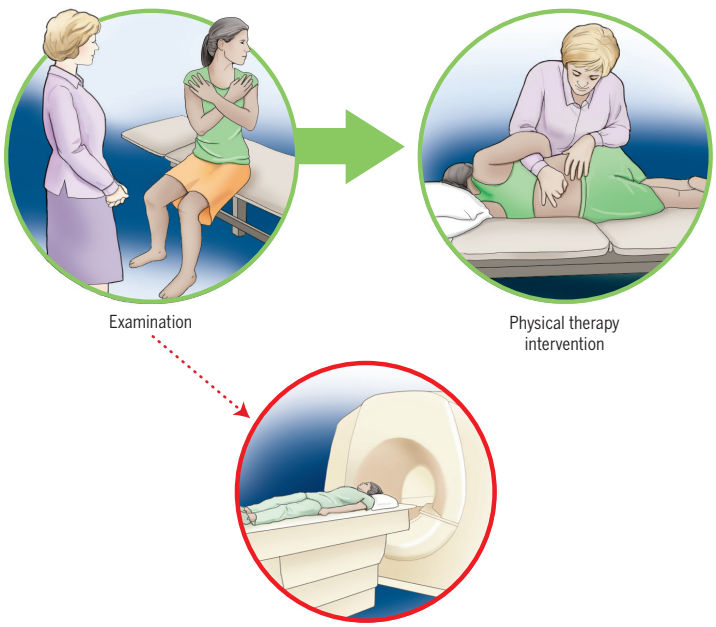
Low Back Pain

MRIs Should Be Used Sparingly in Patients With Low Back Pain

J Orthop Sports Phys Ther 2011;41(11):847. doi:10.2519/jospt.2011.0507

Low back pain is very common, with 80% of people experiencing back pain at least once in their lifetimes. The good news is that a thorough physical examination can often determine the best course of management and whether you require imaging (X ray, MRI, CT scans, etc) to rule out a serious problem. Often low back pain can be severe enough to make a patient think that an MRI is necessary. While MRI provides excellent pictures of your anatomy, it may not be able to pinpoint the specific source of your pain. A clinical commentary published in the November 2011 issue of *JOSPT* summarizes research that describes how the increased use of unnecessary imaging may lead to less than favorable results. Specifically, the research shows that overuse of MRI for patients with low back pain is related to an increased rate of surgical procedures that have not consistently been shown to significantly reduce painful symptoms and improve daily function.



DIAGNOSING AND TREATING LOW BACK PAIN. A person who experiences low back pain first visits his or her physical therapist who begins a conservative, evidence-based treatment program. If the case suggests an underlying condition or more complex source of the back pain, the patient may be sent to a physician specialist for further evaluation.

This *JOSPT* Perspectives for Patients is based on an article by Flynn TW et al, titled "Appropriate Use of Diagnostic Imaging in Low Back Pain: A Reminder that Unnecessary Imaging May Do as Much Harm as Good" (*J Orthop Sports Phys Ther 2011;41(11):838-846. doi:10.2519/jospt.2011.3618*)
This Perspectives article was written by a team of *JOSPT*'s editorial board and staff, with Deydre S. Teyhen, PT, PhD, Editor, and Jeanne Robertson, Illustrator.

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NEW INSIGHTS

The authors summarized current clinical guidelines and available research on low back pain and diagnostic imaging (X rays, CT Scans, and MRIs). MRI findings of herniated lumbar disks are commonly seen in individuals with and without low back pain. Some studies show that up to 90% of healthy individuals over the age of 60 have findings of bulging discs on MRI. Further, the rapid decision to perform imaging following an acute episode of low back pain may not be justified or warranted, considering the fact that many patients show signs of recovery shortly after the onset of low back pain. While a referral for imaging is indicated to rule out serious problems, it should not be used as a method to guide routine decision making about how best to treat low back pain. It is estimated that half of all performed CT scans and one third of MRIs of the low back are not necessary. In fact, some individuals should not undergo an MRI scan. These patients include individuals who have older pacemakers, metal implants, shrapnel, or are in the first 12 weeks of pregnancy.

PRACTICAL ADVICE

- MRI for a new episode of low back pain should only be used when a serious underlying condition is suspected, if symptoms of numbness and weakness in the leg are progressing, and/or the results of the imaging scan are likely to change your immediate treatment options.
- Your medical provider, such as your physical therapist, can and will perform a thorough examination to determine if a referral for imaging is warranted. However, you should feel comfortable asking your healthcare provider why he or she is recommending an imaging study and how the results of this test will change your medical care.
- Physical therapy is safe and recommended for the treatment of low back pain. In most cases of low back pain, it is not necessary to have an MRI before starting treatment. Beginning physical therapy in a timely fashion can potentially speed up your healing as well as your return to full activity.

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