LOW BACK PAIN: SHOULD I HAVE AN MRI?

Decision Point

You may want to have a say in this decision, or you may simply want to follow your doctor’s recommendation. Either way, this information will help you understand what your choices are so that you can talk to your doctor about them.

Low Back Pain: Should I Have an MRI?

You can use it to talk to your doctor or loved ones about your decision.

1. Get the facts
2. Compare your options
3. What matters most to you?
4. Where are you leaning now?
5. What else do you need to make your decision?

1. Get the facts

Your options: 

- [ ] Have an MRI
- [ ] Don’t Have an MRI

Key points to remember:

a. An MRI is not a standard test for finding the cause of low back pain. A physical exam that includes questions about your medical history is enough to diagnose and treat most cases.

b. Since most low back pain gets better on its own, it’s often best to wait and see if you get better with time.

c. An MRI is helpful if your doctor suspects that disease or nerve damage is causing your pain.

d. MRIs are expensive. Health insurance may cover only part of the cost.

e. An MRI may find other problems that have nothing to do with your low back pain. This can lead to more tests.

FAQs:

What causes low back pain?

Strained muscles and ligaments are the most common cause of low back pain and stiffness. This type of low back trouble generally goes away after 4 to 6 weeks of nonsurgical treatment. An MRI usually isn’t helpful in these cases.

Pressure on a spinal nerve can cause sciatica symptoms, which usually include a shooting pain down the back or side of the leg. Your leg may also feel weak, tingly, or numb. This pressure on the nerve can be caused by:

- A bulging or ruptured disk in your spine. This is also called a herniated disk or protrusion. It usually gets better within a month or two.
- Arthritis
- Spinal stenosis

Other serious causes of back pain, such as infection, a tumor, or cancer, are rare.

Very few cases of low back pain are caused by serious disease or nerve-related problems. Imaging, including MRI, is helpful for diagnosing and planning treatment only for these types of conditions.
**What is an MRI?**

An MRI is a test that uses a magnetic field and pulses of radio wave energy to make pictures of the spine. MRI stands for “magnetic resonance imaging”.

For this test, your body is placed inside a special machine that contains a strong magnet.

In some cases, a contrast material is used during the MRI scan. This means that you have a chemical injected into your bloodstream, through an IV. The chemical makes certain areas show up better on the MRI pictures.

The MRI can find problems such as infection or a tumor. It may also find things that aren’t normal but that aren’t causing any problems.

**MRI Issues**

An MRI isn’t painful, but there are certain details about having an MRI that you should know about:

- **Loud noises**
  The machine makes loud tapping or snapping noises. Earplugs or headphones with music are usually offered to help block the noise.

- **Being confined**
  Some people feel nervous (claustrophobic) about being confined in that small space. If this worries you, you may be given medicine (a sedative) to help you relax. Some MRI machines, called “open MRI” are now made so that the machine doesn’t enclose your entire body. Open MRI machines may be helpful if you are claustrophobic, but they aren’t available everywhere. The images from an open MRI may not be as good as those from a standard MRI machine.

- **Lying very still**
  You must lie very still for quite a while so that the machine can get clear pictures. For people with back pain, this can be hard. Talk to your doctor if you’re worried about having to lie on your back.

- **Time**
  An MRI usually takes 30 to 60 minutes but can take as long as 2 hours.

- **Cost**
  MRIs are expensive. Costs range from several hundred to several thousand dollars. Health insurance may cover only part of the cost.

- **False-positive results**
  A false-positive test result is one that appears to find a problem when in fact there isn’t one. This can lead to more tests that really aren’t needed. And it may cause needless worry that something is wrong.

**When is an MRI scan helpful?**

An MRI is not a standard test for finding the cause of low back pain. A complete exam that includes questions about your medical history is enough to diagnose and treat most low back pain.

An MRI is best used when your doctor suspects a specific problem – something other than the muscle strain that causes most low back pain.

An MRI usually isn’t done when simple muscle strain is suspected, because:

- An MRI will not show muscle strains or other problems with soft tissues.
- The pain usually will go away on its own, although it may take several months.
- An MRI won’t change your treatment plan.
- An MRI is expensive.
What are the risks of MRI?

An MRI can be loud, but the test itself isn't painful.

There are no known harmful effects from the magnet used in MRI machines, but it is very strong:

- It can affect pacemakers, artificial limbs, and other medical devices that contain iron. MRIs are not done on people who have implanted electronic devices such as pacemakers.

- Any loose metal object in the body - for example, a surgical clip or a bullet fragment - could cause damage or injury if it gets pulled toward the strong magnet.

- Metal parts in the eyes can damage the retina. If you may have metal fragments in your eye, you may need an X-ray of your eyes before you can have an MRI. If metal is found, then you won't be able to have an MRI.

- Iron pigments in tattoos or tattooed eyeliner can cause skin or eye irritation.

- There's not enough research yet to say for sure that an MRI is safe for a fetus. So although MRIs are sometimes done on pregnant women, it's usually not until the second or third trimester.

- There is a slight risk of an allergic reaction if contrast material is used during the MRI. But most reactions are mild and can be treated with medicine. There also is a slight risk of an infection at the IV site.

- Some contrast materials can cause a serious skin problem (called nephrogenic fibrosing dermopathy) in people who have kidney failure. Before you have an MRI scan, tell your doctor if you have any kidney disease.

Why might your doctor recommend an MRI?

Your doctor might recommend an MRI if he or she suspects that your low back pain is caused by something more serious than muscle strain. This may be the case if:

- Your history and physical exam show signs of a serious problem, such as fracture, tumors, infection, or nerve damage.

- You are older than 70. Your doctor may also recommend testing if you are older than 50 and also have osteoporosis or a history of compression fracture.

- You have had osteoporosis for a long time or you have diabetes.

- Your body's defense system (immune system) is not able to fight infection.

- You have a history of long-term steroid use or a history of drug abuse.

- You have a history of a previous spine injury or back surgery.

- You have symptoms related to compression or a certain nerve root or roots.

- Back pain has not improved after at least 6 weeks of home treatment that may include pain relievers, heat or ice, and exercises.
2. Compare your options

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<tr>
<th></th>
<th>Have an MRI</th>
<th>Don’t have an MRI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is usually involved?</strong></td>
<td>You lie on a table that slides into the MRI scanner.</td>
<td>Your doctor will plan your treatment after doing a physical exam and asking you questions about your medical history.</td>
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<tr>
<td></td>
<td>You may wear a cloth harness that can be pulled during the test to see how your spine moves.</td>
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<td></td>
<td>Your head, chest, and arms may be held with straps to help you stay still.</td>
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<td></td>
<td>The MRI may not bother you at all. Some people even fall asleep.</td>
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<td></td>
<td>If being enclosed in the machine makes you very nervous, you may get medicine to help you relax.</td>
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<tr>
<td><strong>What are the benefits?</strong></td>
<td>An MRI can find serious problems that may be causing your low back pain</td>
<td>A physical exam that includes questions about your medical history is all that is needed to diagnose most cases of low back pain.</td>
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<td></td>
<td>A physical exam that includes questions about your medical history is all that is needed to diagnose most cases of low back pain.</td>
<td>An MRI can be done later if treatment is not working.</td>
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<tr>
<td><strong>What are the risks and side effects?</strong></td>
<td>There are no known harmful effects from an MRI. But the magnet is very strong and can cause a problem if there are any loose metal objects in or around your body.</td>
<td>If a serious problem is causing your low back pain and is not diagnosed, it may not get treated. Without the right treatment, you could have more pain and other health problems in the future.</td>
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<td>There is a slight risk of an allergic reaction to contrast material that may be used during an MRI. Some contrast material can cause a serious skin problem in people with kidney failure.</td>
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<td></td>
<td>An MRI may find other problems that have nothing to do with your low back pain. This can lead to more tests or treatment.</td>
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Personal Stories

Are you interested in what other decided to do? Many people have faced this decision. These personal stories may help you decide.

**Personal stories about deciding whether to have an MRI for low back pain**

These stories are based on information gathered from health professionals and consumers. They may be helpful as you make important health decisions.

“
I injured my back about a month ago lifting my daughter out of her car seat. I’ve been doing all the home treatment that my doctor recommended: ice, walking, anti-inflammatory, and rest from activities that bother it. I went to a physical therapy class that taught me how to lift properly and protect my back. My leg pain and other symptoms are a little better every week, but they are definitely still there. My doctor says that based on my symptoms, she doesn’t think there is anything really serious going on but that it would be reasonable to have an MRI scan now if I am willing to have surgery. Even though I’m tired of the pain, it is getting better (slowly), and I think I will just hold off for a few more weeks.

- Greg, age 38

“
My back and leg pain has been constant and severe since I twisted my back about 3 months ago. Most of the pain is in my leg, which makes my doctor and me think that I have a pinched nerve. I also have severe weakness in my leg. I’m usually the type of person who tries to wait things out, but this is disabling. I’m going to have the MRI, and if it shows a problem that can be fixed, I’ll talk to my doctor about what I can do next.

- Michelle, age 35

“
If I was in my 30s again and still working as a roofer, I would be having an MRI and surgery as soon as I could treat my herniated disk. But my work now doesn’t depend as much on my ability to lift and carry heavy loads, so I can wait for my symptoms to go away on their own. I’m going to try exercise and anti-inflammatories to see if I can speed up the process and relieve the pain without surgery.

- Bob, age 55

“
I injured my back about 6 weeks ago. I was ready to have surgery right then, but my doctor encouraged me to wait awhile. The pain is still as bad as it ever was, and now it is more in my leg than in my back. I want surgery more than ever. I’m going to have an MRI, and then my doctor and I can see if it shows anything that can be helped with surgery.

- Franco, age 54
### 3. What matters most to you?

Your personal feelings are just as important as the medical facts. Think about what matters most to you in this decision, and show how you feel about the following statements.

<table>
<thead>
<tr>
<th>Reasons to have an MRI</th>
<th>Reasons not to have an MRI</th>
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<tbody>
<tr>
<td>I've had low back pain for several months, and I want to find out if something serious is wrong.</td>
<td>I'm willing to give my low back pain more time to go away on its own, even if it takes a year</td>
</tr>
</tbody>
</table>

More important | Equally important | More important

| If the MRI shows a problem that can be fixed with surgery, I'm ready to have surgery. | Even if an MRI showed a problem that surgery could fix, I wouldn't want to have surgery. |

More important | Equally important | More important

| I'm not worried about the cost of an MRI. | I don't want to pay lots of money for a test that might not help me. |

More important | Equally important | More important

| I'm not worried that an MRI could lead to more testing or treatment that might not help me. | I worry that the results could lead to more testing or treatment that might not help me. |

More important | Equally important | More important

My other important reasons:

| My other important reasons: | |

More important | Equally important | More important
4. Where are you leaning now?

Now that you’ve thought about the facts and your feelings, you may have a general idea of where you stand on this decision. Show which way you are leaning now.

<table>
<thead>
<tr>
<th>Having an MRI</th>
<th>NOT having an MRI</th>
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</thead>
<tbody>
<tr>
<td>Leaning toward</td>
<td>Undecided</td>
</tr>
<tr>
<td>Undecided</td>
<td>Leaning toward</td>
</tr>
</tbody>
</table>

5. What else do you need to make your decision?

Check the facts

1. Do most doctors order an MRI in cases of low back pain?
   - Yes
   - No
   - I’m not sure
   
   You’re right. An MRI is not a standard test for finding the cause of low back pain. It’s only helpful in certain cases.

2. Should you ask your doctor for an MRI when you first get low back pain?
   - Yes
   - No
   - I’m not sure
   
   That’s correct. Since most low back pain gets better on its own, it’s often best to wait and see if you get better with time.

3. Is an MRI ever helpful in cases of low back pain?
   - Yes
   - No
   - I’m not sure
   
   That’s right. An MRI is helpful if your doctor suspects that disease or nerve damage is causing your pain.

Decide what’s next

1. Do you understand the options available to you?
   - Yes
   - No

2. Are you clear about which benefits and side effects matter most to you?
   - Yes
   - No

3. Do you have enough support and advice from others to make a choice?
   - Yes
   - No
Certainty

1. How sure do you feel right now about your decision?

- Not sure at all
- Somewhat sure
- Very sure

2. Check what you need to do before you make this decision.

☐ I’m ready to take action.
☐ I want to discuss the options with others.
☐ I want to learn more about my options.

3. Use the following space to list questions, concerns, and next steps.
This is a shared decision making between the patient and the doctor. It talks about the pros and the cons of having MRI. Ideally, this should be given to the pt ahead of time if we are aware at the time of the appointment. We need to capture who is filling out the form and it will be scanned in the patient’s chart.