7 tips for getting through an MRI



Ready to lie stock-still in a loud machine for 45 minutes with no bathroom breaks? Relax. We've got you covered.

by Aviva Patz

Meredith O'Brien won't soon forget the magnetic resonance imaging (MRI) scan she had in 2014. "I didn't know my head would be locked down in a hard plastic 'face cage,'" she says. When she told the technician she was claustrophobic, he directed her to a mirror she could use to see around the room. "I know he was trying to be kind, but I had a panic attack," says O'Brien, 51, a Boston-based writer with relapsing-remitting multiple sclerosis (RRMS). She ended up removing the blankets given to her and getting out of the machine to calm down before trying again.



Meredith O'Brien takes a sedative and closes her eyes to help relax during MRI scans.

For people like O'Brien, MRIs might never be pleasant, but they play a crucial role in diagnosing and monitoring MS. "MRI has long been the gold standard for imaging in MS because it shows subtle changes in disease activity that you can't see with other tests, like conventional X-rays and computed tomography (CT) scans," says Derrek Tew, an MRI technologist with the Cleveland Clinic. "With MRIs, we can see if a lesion is actively demyelinating — it's the best way to see disease activity."

Read on to learn what an MRI is, what to expect when you get one and advice on managing the experience.

What is MRI?

MRI is a non-invasive imaging technology that produces detailed three-dimensional images — especially of the soft tissues of the body, according to the National Institutes of Health. "It's the same radio frequencies used in radio transmissions," Tew explains. "You're becoming slightly magnetized, and we're pinging you with a radio frequency and listening for an echo back, like radar. Depending on where the signals are coming from in the body and other various factors — that's how the machine makes images."

MRIs can detect when MS has damaged the fatty myelin layer that protects nerve cells because normally, that layer repels water. Where MS has stripped the myelin away, there's more water, and that shows up on an MRI.

What's it like to get an MRI?

After you fill out a health screening form, you'll remove any jewelry and change into a

hospital gown to avoid any metal that could blur the MRI image. There's also a safety issue. The scanner has a powerful magnet and will pull any metal toward it, which can cause an injury.

If you're getting gadolinium — a contrast agent made of metallic salt that shows up extra bright on the MRI — you might get an IV beforehand or a shot halfway through the MRI. "About 95% of the time MS patients will get contrast," Tew says. Up to 7% of people will get a metallic taste in the mouth; about 1 to 1.5% might feel nauseated.

Next, you'll lie down on the MRI bed and be moved backward into a magnetic tube. If you're having a brain scan, you'll be fitted with a receiver. You won't need a receiver with an MRI of the spine because the receivers are built into the table.

During the scans, which can take 15 to 45 minutes per body part, you'll need to remain very still so as not to blur the images. The scans can make loud clanging sounds, but you can wear ear plugs or a headset to dull the noise. Relaxing music or mindfulness meditation can help calm nerves and facilitate stillness.

Making it through your MRI

MRIs are technically painless, but these tips can make them feel more manageable.

1. Know what to expect. A 2019 analysis in the journal Neurologica found that MRIs caused anxiety in people with MS, in part because they fear the unknown. To help quell any fears you may have, talk with your healthcare team about exactly what to expect. What areas will be scanned? How long will that take? Will you be using contrast?

Jessie Ace, who was diagnosed with MS in 2013 at age 22, didn't even know what an MRI was until she "had to go into this huge white box" and "freaked out a lot." It was scary the first time, she adds, "particularly as nothing was explained to me beforehand."



Catherine Weston prepares for MRIs by wearing comfortable clothing, removing jewelry and skipping makeup.

2. Prepare physically. Remove all your jewelry. "I had a team of nurses pulling my piercings out on that first one," says Catherine Weston, 26, of Richmond, Virginia. She now avoids all hair products and makeup, which could contain tiny metallic particles. Because she prefers her own clothes to the hospital gown, Weston wears pants with an elastic waist and a sports bra under her top. She skips her morning coffee to minimize bathroom breaks.

3. Prepare mentally. Some people use pep talks. Ace tells herself: "It's for a very short time, and all you have to do is lie still. That's all. It'll be OK. It's no big deal. It's totally safe, and it'll be over before you know it." She also imagines the treat she'll pick up on the way home or what she'll eat for dinner that evening.

O'Brien, who has claustrophobia, takes a mild sedative that her doctor prescribed for situational anxiety. She also keeps her eyes closed the whole time. It may help to know that there is a panic button you can press if you need to.

"Don't stay in there to the point of terror or tears," Tew says. "If it's really bothering you, we'll let your doctor know and talk about other options. While you may bail at this moment, being able to come back on your own terms lets you know you're in control of the situation," he adds.

4. Choose your soundtrack. Weston has enjoyed listening to Metallica on Sirius XM radio, but O'Brien prefers to focus on something calming, like going to a specific Cape Cod beach. "Or I tell myself a story or challenge myself to remember a movie from beginning to end," she says.

5. Get comfortable in your space. "I actually feel safer in small spaces," says Weston, who snuggles in with blankets during her MRIs. O'Brien tends to feel constricted, so she skips the blankets.

6. Decide: To look or not to look. "The MRI helmet has a mirror that allows you to see outside the machines, so I look around the room or watch my care team at work," Weston says. O'Brien keeps her eyes shut for the duration.

7. Pass time on your terms. Weston allows herself to nap, but others prefer to mark the time. "Some patients believe that if they know how long each scan is, they can get through it," Tew says.

Don't sweat the results

Don't try to interpret the MRI yourself. "Processing the results is one of the biggest

challenges of MS," Weston says. "It's going to be either a celebration because the MRI showed no new progression or lesions, or it's going to be disappointing because it did." She likes to stay optimistic: "We are living in an incredible time when there are so many different treatment options for RRMS — and new ones for progressive MS as well — that there will be something that works for you."

Aviva Patz is a writer in Montclair, New Jersey.

Learn more about MRIs.