



Think It's a Migraine? An MRI May Be Able to Tell You

by NEWLIFEOUTLOOK TEAM

MRI for Migraines

Many people have suffered from migraines their entire life. Others find that debilitating headaches suddenly occur. For the latter, it's less clear for them whether it's a migraine or something else. Dental issues, tension headaches, and even brain tumors may be mistaken as migraines. So how do you know? Some things can be ruled out by a doctor based on the location, accompanying symptoms, and frequency of the headaches. However, to confirm a migraine diagnosis, more and more doctors are turning to imaging tests.

Changes in the Brain

In early 2013, a study published in the journal *Radiology* showed that there is an abnormal thickness of the cortex and some of the surface area of the brain in migraine sufferers. The areas of the brain that process pain were shown to have a thinner cortex, or outer lining, which may explain why migraine headaches are so difficult for sufferers to deal with. Auras and areas of intense white matter are another common result for many migraine symptoms. Though these did not correlate to specific migraine symptoms, these areas were often found to be structurally related to the thin cortex regions that also accompanied this result.

Early Results

These studies haven't been repeated enough times to create an accurate assessment to predict migraines in those who don't suffer from them yet, but deeper studies are being done. Correlations are being studied now between specific symptoms, locations where cortical areas are thin, and the brain processes that are found beneath those sections of cortex. Studies looking at different thicknesses of cortex and correlated symptoms are being done as well. It is hoped that these studies can lead to specific migraine biomarkers that can be found when mapping the brain.

Can I Get an MRI Now?

Currently, if you are suddenly suffering from a new spate of headaches, it is likely that you will be given an MRI. Though situations like hormonal life changes, latent allergies, and large stressors may bring dormant migraines to life for you, most people know that they are migraine sufferers by the time that they're adults. Because of this, the MRI is often done to rule out more serious brain issues. It is likely that your neurologist will be up-to-date on the newest studies on MRI results and migraine biomarkers, and can let you know if you have the brain structure that makes this a likely diagnosis.

What to Know Before Your Test

An MRI is one of the most detailed imaging tools available to the medical field today. However, there are a number of people who may need to choose alternate tests or wait until a better time because of certain

conditions. The MRI uses very powerful magnets to show the images inside your body. If you have metal implanted in your body anywhere, however, it's important to discuss this with your physician. Things like metal dental fillings are rarely magnetic, and shouldn't be an issue. However, if you have had pins or plates added to your body as a result of broken bones, particularly in the skull, an MRI may not be possible. Other conditions that make an MRI less likely include pacemakers, aneurysm clips, pregnancy, insulin pumps, TENS back pain devices, metal eye sockets, cochlear implants, spine stabilization rods, severe lung disease, GERD, claustrophobia, and obesity weighing 300 lbs and more. A test will usually take between 40 minutes and three hours, depending on how much of your body needs to be imaged. Because this is done in cross-section one thin layer at a time, you are expected to be able to lie very still for very long periods of time.