

## Why won't my doctor scan my brain?

An estimated 16 million people each year go to their doctor because of a headache. Many are concerned that they may have cancer, a stroke or an aneurysm, and request a brain scan. However, most headaches do not require any imaging at all.

The most common headaches include tension headaches and migraine headaches, combined they make up 90% of all headaches. Both of these headaches do not show up on brain scans. Your doctor can diagnose these by asking you detailed questions about the headache, your medical history and testing the nerves in your body through a physical exam.

There are many medical conditions that cause headaches. High blood pressure can cause a headache. Grinding your teeth can cause a headache. Too much caffeine or cutting back on your caffeine too quickly can cause a headache. Exposure to certain smells and chemicals can cause a headache. Taking over the counter pain killers (such as Tylenol, acetaminophen, ibuprofen, Advil, Aleve, etc.) too much or too frequently can also cause headaches. By asking you a lot of questions about your medical history and daily routines, a doctor can help determine the cause of your headache.

There are many risks of a brain scan, including cost, unexpected findings and radiation exposure. An estimated \$211 million is spent each year in the US on brain scans for headaches, and many of these scans are not needed. Many times when we do scans of the body, we often find abnormalities that we were not looking for. Often these abnormalities are not significant, but sometimes they require more brain scans, blood tests and sometimes, invasive procedures. CT scans deliver a high amount of radiation, which is a risk factor for cancer. Most MRI machines are very small and take 30 minutes to scan the brain, this is very difficult for people who have claustrophobia.

Sometimes a brain scan is needed. There are some "red flags" that may indicate that a brain scan is needed. These include:

- Age 50 or older

- Different than your usual headache

- Risk factors for cancer

  - A personal history of cancer

  - A strong family history of cancer

  - If you are not up to date with your age-appropriate cancer screenings (pap smear for cervical cancer, mammogram for breast cancer, colonoscopy for colon cancer or skin check for skin cancer)

  - Unexpected weight loss

  - Tobacco use

- Split-second onset of severe headache – "the worst headache of my life"

- Fevers, chills, night sweats

Daily, worsening headache

Nerve problems: weakness, numbness, confusion, memory problems

These “red flags” don’t automatically mean that you need a brain scan. For example, if you are 60 years old and have a new onset headache and a fever, you would have three of the “red flags” listed above. However, this could be consistent with having the flu, and would not require a brain scan.

It is always a good idea to see a doctor if you have new headaches or if your headaches have changed. Most of the time, through asking a lot of questions and testing the nerves in the body through a physical exam, you can safely treat your headache without extra testing such as a brain scan.

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## **Publication**

[The Cost-Effective Evaluation of Uncomplicated Headache.](#)

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