

Headache

Identifying the type and cause of most headaches can be done with a medical history and a physical examination, without the need for imaging tests. Unnecessary imaging tests can lead to incidental findings—things that are not associated with the reason for the test. This can lead to patients' getting unnecessary treatments and exposure to radiation.

If someone has a new headache with the following complications, he or she might benefit from imaging studies:

- Recent head or neck injury
- A sudden or suddenly worsening headache
- "Thunderclap" headache—a headache that takes seconds or minutes to go from nothing to maximum pain intensity
- Headache due to the trigeminal nerve (which runs from the face to the brain)—often cluster headaches
- Positional headache—severe headache on one side of the head that gets worse with certain head positions
- Headache located on one side, especially in young patients
- Headache that starts, or gets worse, with coughing, exercise, or sexual activity
- Headache that may be due to sinus or dental complications
- Suspected meningitis (infection of the brain lining) or encephalitis (inflammation of the brain)
- New headache with pain in the temples in older patients
- Pregnancy
- Compromised immune systems (e.g., HIV positive)
- Treatment for cancer
- Conditions affecting blood clotting
- Chronic headaches with new symptoms

In most cases, the recommended initial imaging test is MRI with and without intravenous contrast. For some conditions, CT or CT with angiography (<http://www.radiologyinfo.org/en/info.cfm?pg=angiocr>), either with or without contrast, is recommended. *For more information, see the Headache (<https://www.radiologyinfo.org/en/info/headache>) page.*

— By Casey Quinlan. This information originally appeared in the *Journal of the American College of Radiology*.

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