CT for Adult Minor Head Trauma

A closed head injury results from hitting your head on something. Even a small minor blow to the head can be dangerous and should be evaluated by a doctor for a possible concussion, bleeding on the brain, or skull fracture. Most minor head injuries do not require imaging tests.

A test called the Glasgow Coma Scale helps assess a person's level of consciousness after a minor or mild closed head injury. If the test result is equal to or more than 13, additional guidelines are used to see if an imaging test is recommended. A CT scan (https://www.radiologyinfo.org/en/info/headct) without contrast is used if the guidelines say a test is needed to find out the seriousness of the head injury. People with moderate or severe closed head injuries are also recommended to have a CT scan without contrast.

The results of a noncontrast head CT may read as normal despite an existing brain injury. Follow-up imaging tests are recommended for people whose brain injury symptoms are not getting better or are getting worse. CT without contrast is usually the best test for follow-up. MRI (https://www.radiologyinfo.org/en/info/headmr) is used in cases of chronic (ongoing) suspected traumatic brain injury. If blood vessel injury is suspected then CT angiography (https://www.radiologyinfo.org/en/info/angioct) or MR angiography (https://www.radiologyinfo.org/en/info/angiomr) is used for arterial injury and CTV or MRV for vein injuries.

CT scans expose people to radiation. MRI tests do not.

For more information, see the Head Injury (https://www.radiologyinfo.org/en/info/headinjury) page.

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