

Pediatric Imaging

Brain Magnetic Resonance Imaging (MRI) and Brain Computed Tomography (CT) Test Request Tip Sheet



- MRI is almost always preferred over CT scan; if ordering CT, clearly document why MRI is not appropriate.
- Chronic headache (including chronic migraine) is an indication for advanced imaging only if the headaches are increasing in frequency, have changed in severity, or when new neurological deficits are present.
- Choosing Wisely® recommendations are followed for headache and syncope (loss of consciousness) as shown below.

For more information, visit www.RadMD.com or call **1-888-864-7237**. You can also contact your AmeriHealth Caritas Iowa Provider Network Account Executive or Provider Services at **1-844-411-0579**.

Pediatric considerations from Choosing Wisely

As part of Choosing Wisely, each participating specialty society has created lists of “Things Physicians and Patients Should Question” that provide specific, evidence-based recommendations to help physicians and patients make wise decisions about the most appropriate care based on their individual situation. The items below represent the recommendations associated with brain CT and MRI.

- **Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure.**
American Academy of Pediatrics
- **CT scans are not necessary in the immediate evaluation of minor head injuries;** clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine whether imaging is indicated.
American Academy of Pediatrics
- **Avoid CT scans of the head in emergency room patients with minor head injuries who are at low risk based on validated decision rules.**
American College of Emergency Physicians

Other imaging considerations from Choosing Wisely

- **Don't perform neuroimaging studies in patients with stable headaches that meet criteria for migraine.**
American Headache Society

Radiation exposure

Brain MRI: 0 mSv

Brain CT: 4 mSv

Radiation exposure should be limited when possible.

With and without contrast doubles the radiation dose.

- **Don't perform CT imaging for headache when MRI is available, except in emergency settings.**

American Headache Society

- **In the evaluation of simple syncope and a normal neurological examination, don't obtain brain imaging studies (CT or MRI).**

American College of Physicians

- **Don't perform imaging for uncomplicated headache.**

American College of Radiology

- **Don't order CT scan of the head/brain for sudden hearing loss.**

*American Academy of Otolaryngology – Head and Neck
Surgery Foundation*

Choosing Wisely® is an initiative of the American Board of Internal Medicine (ABIM) Foundation to help physicians and patients engage in conversations about the overuse of tests and procedures and support physician efforts to help patients make smart and effective care choices. Recognizing the importance of physicians and patients working together, leading specialty societies, along with Consumer Reports, have joined Choosing Wisely to help improve the quality and safety of health care in America.

