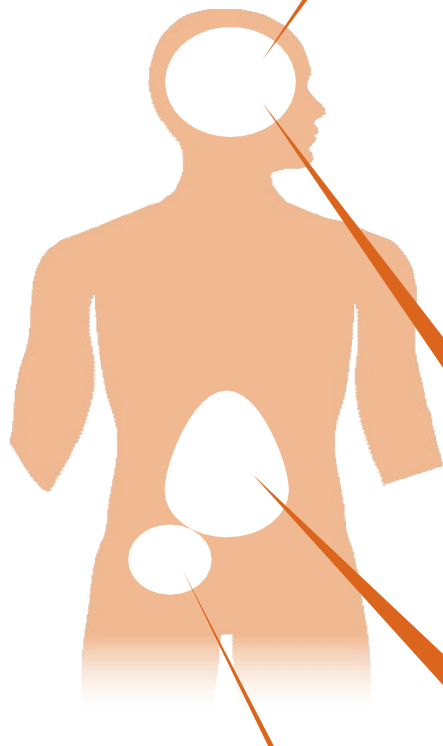


Headaches Choosing Wisely Canada



Minor Head Trauma

It is recommended to follow the **Canadian CT Head Rule**:

CT head is only required for minor head injury patients with any one of these findings:

High Risk (for Neurological Intervention)

- GCS score of less than 15 at 2 hours after injury
- Suspected open or depressed skull fracture
- Any sign of basal skull fracture (hemotympanum, 'raccoon eyes', CST otorrhea/rhinorrhea, Battle's sign)
- Vomiting: 2 or more episodes
- Age 65 years or older

Medium Risk (for Brain Injury on CT)

- Amnesia before impact of 30 minutes or more
- Dangerous mechanism (pedestrian struck by vehicle, occupant ejected from motor vehicle, fall from elevation of 3 feet/5 stairs or more)

Rule not applicable if:

- Non-trauma cases
- GCS less than 13
- Age less than 16 years
- Coumadin or bleeding disorder
- Obvious open skull fracture

Uncomplicated Headache

The Canadian Association of Radiologists' headache guideline released in 2012 states that in the absence of the following features, imaging is not often helpful. These features significantly increase the likelihood of finding a major abnormality and justify requesting diagnostic imaging:

- Recent onset and rapidly increasing frequency and severity of headache
- Headache causing the patient to wake from sleep
- Associated dizziness, lack of coordination, tingling or numbness, new neurologic deficit
- New onset of a headache in a patient with a history of cancer or immunodeficiency

Low Back Pain

The Canadian Association of Radiologists' lower back pain guideline released in 2012 states that imaging is only indicated if there are the following "red flag" indications:

- Suspected epidural abscess or hematoma which may present with acute pain but no neurological symptoms, urgent imaging is required
- Suspected cancer
- Suspected infection
- Cauda equina syndrome
- Severe/progressive neurologic deficit
- Suspected compression fracture

In patients with suspected uncomplicated herniated disc or spinal stenosis imaging is only indicated after at least a six week trial of conservative management and if symptoms are severe enough that surgery is being considered.

Suspected Appendicitis in Children

Don't do CT for the evaluation of suspected appendicitis in children until after ultrasound has been considered as an option. Although CT is accurate in the evaluation, ultrasound is nearly as good in experienced hands. Since ultrasound will reduce radiation exposure, it is the preferred initial consideration for imaging examination in children. If the results of the ultrasound exam are equivocal, it may be followed by CT. This approach is cost-effective, reduces potential radiation risks and has excellent accuracy, with reported sensitivity and specificity of 94 percent.

Ankle Injuries

Do not do an ankle x-ray series in adults unless there is pain in the malleolar zone and any of these findings:

- bone tenderness at the posterior edge or tip of the lateral malleolus, **or**
- bone tenderness at the posterior edge or tip of the medial malleolus, **or**
- inability to bear weight both immediately and in ED

Based on the Ottawa Ankle Rules for Ankle Injury Radiography - http://www.ohri.ca/emerg/cdr/ankle_formats.html

Lateral View

