

The Michigan Emergency Department Improvement Collaborative (MEDIC) endorses use of the **Canadian CT Head Rule** to assess whether a head CT is indicated in **adult (age ≥ 18) patients with minor head injury**.

Canadian CT Head Rule

Head CT is ONLY INDICATED for adult minor head injury¹ patients WITH ANY ONE of the below²:

High Risk (for neurological intervention)

- GCS score < 15 @ 2 hours after injury
- Suspected open or depressed skull fracture
- Any sign of basal skull fracture (hemotympanum, 'raccoon' eyes, cerebrospinal fluid otorrhea/rhinorrhea, Battle's sign)
- Vomiting ≥ 2 episodes
- Age ≥ 65 years

Medium Risk (for brain injury on CT)

- Amnesia before impact ≥ 30 min
- Dangerous mechanism (pedestrian struck by motor vehicle, occupant ejected from motor vehicle, fall from height > 3 ft or 5 stairs)

¹ **minor head injury**: loss of consciousness, definite amnesia, or disorientation in patients with a GCS score of 13-15

² **exclusions**: use of antiplatelets or anticoagulants, pre-existing bleeding disorders, penetrating skull injury, acute focal neurological deficits, unstable vital signs associated with major trauma

Nishijima, DK et al. Immediate and Delayed Traumatic Intracranial Hemorrhage in Patients with Head Trauma and Preinjury Warfarin or Clopidogrel Use. *Annals of Emergency Medicine*. 2012;59(6), pp.460-468

Probst, MA et al. Prevalence of Intracranial Injury in Adult Patients with Blunt Head Trauma with and without Anticoagulant or Antiplatelet Use. *Annals of Emergency Medicine*. 2020;75(3), pp.354-364

Ro, RS et al. Comparison of Clinical Performance of Cranial Computed Tomography Rules in Patients with Minor Head Injury: A Multicenter Prospective Study. *Academic Emergency Medicine*. 2011;18(6), pp.597-604.

Smits, S et al. External Validation of the Canadian CT Head Rule and the New Orleans Criteria for CT Scanning in Patients with Minor Head Injury. *JAMA*. 2005;294(12), pp.1519-1525

Stiell, IG et al. The Canadian CT Head Rule for Patients with Minor Head Injury. *The Lancet*. 2001;357(9266), pp.1391-1396