TOOL 2.3: The Canadian Assessment of Tomography for Childhood Head injury 2 (CATCH2) rule

CT of the head is required for children with minor head injury* and any 1 of these findings:

- GCS score < 15 at 2 hours after injury
- Suspected open or depressed skull fracture
- History of worsening headache
- Irritability on examination
- Any sign of basal skull fracture†
- Large, boggy hematoma of the scalp
- Dangerous mechanism of injury‡
- ≥ 4 episodes of vomiting

Note: CT = computed tomography, GCS = Glasgow Coma Scale.

* Minor head injury is defined as injury within the past 24 hours associated with witnessed loss of consciousness, definite amnesia, witnessed disorientation, persistent vomiting (> 1 episode) or persistent irritability (in a child aged < 2 yr) in a patient with a GCS score of 13–15.

† Signs of basal skull fracture include hemotympanum, raccoon eyes, otorrhea or rhinorrhea of the cerebrospinal fluid, and Battle sign.

‡ Dangerous mechanism is a motor vehicle crash, a fall from elevation ≥ 3 ft (≥ 91 cm) or 5 stairs, or a fall from a bicycle with no helmet.

Reprinted from Osmond MH, Klassen TP, Wells GA, et al. Validation and refinement of a clinical decision rule for the use of computed tomography in children with minor head injury in the emergency department. CMAJ. 2018;190(27):E816–E822. http://www.cmaj.ca/content/190/27/E816. © Canadian Medical Association (2018). This work is protected by copyright and the making of this copy was with the permission of the Canadian Medical Association Journal (www.cmaj.ca) and Access Copyright. Any alteration of its content or further copying in any form whatsoever is strictly prohibited unless otherwise permitted by law.