Canadian C-Spine Rule

For alert (GCS=15) and stable trauma patients where cervical spine injury is a concern.

1. Any High-Risk Factor Which Mandates Radiography?
   - Age ≥ 65 years
   - Dangerous mechanism*
   - Paresthesias in extremities
   - Non-trauma cases
   - GCS < 15
   - Unstable vital signs
   - Age < 16 years
   - Acute paralysis
   - Known vertebral disease
   - Previous C-spine surgery

   Rule Not Applicable If:
   - Age < 16 years
   - Acute paralysis
   - Known vertebral disease
   - Previous C-spine surgery

2. Any Low-Risk Factor Which Allows Safe Assessment of Range of Motion?
   - Simple rearend MVC**
   - Sitting position in ED
   - Ambulatory at any time
   - Delayed onset of neck pain***
   - Absence of midline c-spine tenderness

   Rule Not Applicable If:
   - Non-trauma cases
   - GCS < 15
   - Unstable vital signs
   - Age < 16 years
   - Acute paralysis
   - Known vertebral disease
   - Previous C-spine surgery

3. Able to Actively Rotate Neck?
   - 45° left and right

   Performing Range of Motion

   Rule Not Applicable If:
   - Non-trauma cases
   - GCS < 15
   - Unstable vital signs
   - Age < 16 years
   - Acute paralysis
   - Known vertebral disease
   - Previous C-spine surgery

   * Dangerous Mechanism:
   - fall from elevation ≥ 3 feet / 5 stairs
   - axial load to head, e.g. diving
   - MVC high speed (>100km/hr), rollover, ejection
   - motorized recreational vehicles
   - bicycle struck or collision

   ** Simple Rearend MVC Excludes:
   - pushed into oncoming traffic
   - hit by bus / large truck
   - rollover
   - hit by high speed vehicle

   *** Delayed:
   - i.e. not immediate onset of neck pain