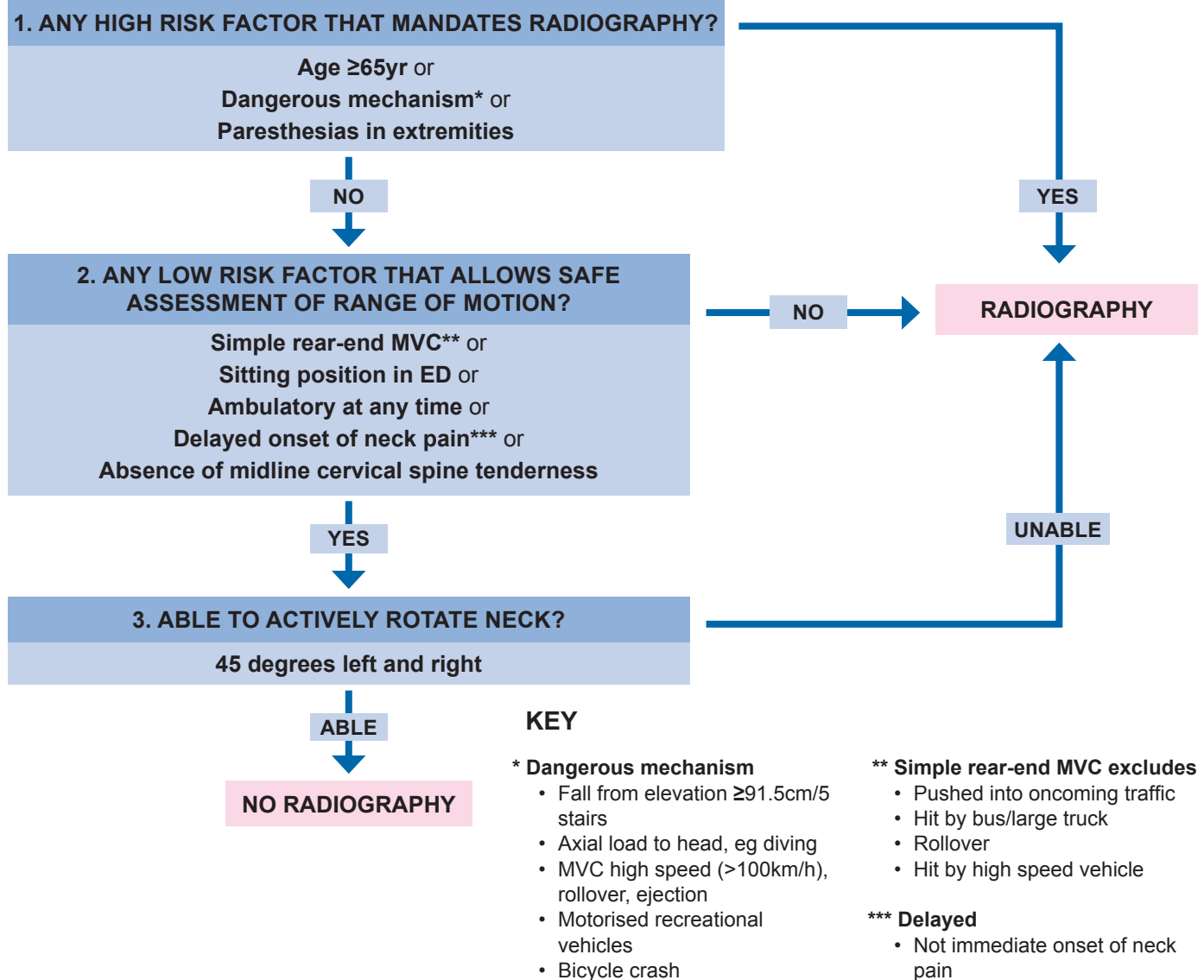


The Canadian C-Spine Rule



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



Instructions for using the Canadian C-Spine Rule

1. Define whether any high risk factors are present such as age (≥ 65 years) or dangerous mechanism (includes high speed or roll over or ejection, motorised recreation vehicle or bicycle crash). If this is the case, an X-ray of the cervical spine should be performed.
2. Define low risk factors that allow safe assessment of neck ROM. If the low risk factors shown in the flow chart are not present, an X-ray of the neck should be performed.
3. Assess rotation of the neck to 45 degrees in people who have low risk factors shown in the QTF Classification of Grades of WAD. If people are able to rotate their neck to 45 degrees, they do not require an X-ray of the neck.

This rule has been validated across several different populations and has been shown to have a sensitivity of 99.4 per cent and a specificity of 42.5 per cent. Essentially, physicians who follow this rule can be assured that a fracture will not be missed (95% CI 98–100%).¹ Further a systematic review investigated the diagnostic accuracy of the Canadian C-Spine Rule and the National Emergency, X-Radiography Utilization Study (NEXUS) criteria and found that the Canadian C-Spine Rule had better accuracy.²

1 Stiell, I. G., C.M. Clement, R.D. McKnight, R. Brison, M.J. Schull, and B.H. Rowe, *The Canadian C-spine rule versus the NEXUS low-risk criteria in patients with trauma*. New England Journal of Medicine, 2003. 349(26): p 2510-2518.

2 Michaleff, Z.A., C.G. Maher, A.P. Verhagen, and T. Rebbeck, *Accuracy of the Canadian C-spine rule and NEXUS to screen for clinically important cervical spine injury in patients following blunt trauma: a systematic review*. Canadian Medical Association Journal. 2012. 184(16): p. E867-E876.