Clinician's Commentary on Belot et al.¹

Acute care providers around the world assess and manage patients who have been exposed to, and presumably injured from, trauma involving the cervical spine. Although the primary entry point into the medical system is typically through the emergency medicine department, or emergency department (ED), not all patients enter using this pathway. Other immediate—or urgent—care pathways exist, and they can include general family medicine physicians, physiotherapists, chiropractors, and any number of other professionally licensed practitioners.

An immediate priority for all clinicians acting in an acute-care scope is to obtain historical information relevant to the patient's presentation. Although fracture, spinal cord injury, and ligamentous or vascular injuries are rare in patients who may present initially to physiotherapist practice, patients may at times manifest sufficient features to warrant imaging. These features may be based on the mechanism of injury and patient factors, and findings on exam may necessitate performing diagnostic imaging tests. Such tests could include plain-film radiography, computed tomography, and MRI. As members of a global professional community, physiotherapists can and do act within a primary care scope. Accordingly, it is important that they are able to identify patients with potentially serious injuries and refer them for the appropriate diagnostic imaging test so that an appropriate plan of interdisciplinary care can be established and delivered.

Highly sensitive imaging decision rules, such as the Canadian Cervical Spine Rule (C-Spine Rule)² and the National Emergency X-Radiography Utilization Study criteria,^{3,4} exist and can assist the acute care provider in identifying most patients who do not have a clinically significant injury, thereby circumventing the need to perform unnecessary imaging tests. These rules are easy to remember and apply, and have been validated for use among medical physicians, paramedics, and nurses,^{2,5,6–8} but they have yet to be validated in physiotherapy practice. As primary care practitioners, physiotherapists must possess the knowledge and skills to identify significant pathology that requires immediate medical management.

The article by Belot et al.¹ brings to light how important it is that Canadian physiotherapists (and physiotherapists worldwide) have a clinical understanding of the reliable and sensitive C-Spine Rule to determine the need for medical imaging in patients with acute, traumatic neck pain who have not entered the system through a common medical pathway such as the ED.

The results of this knowledge translation project in British Columbia have provided interesting preliminary details about the facilitators of and barriers to using the rules to guide clinical decision making. It is a call for entry-level educational programmes to improve the knowledge of soon-to-be work-ready graduates. It is a call for professional development providers to disseminate this information to an established workforce that may be unfamiliar with—or lack confidence in using—the rules. It is a call for residency and fellowship training programmes to partner with colleagues in emergency medicine to provide on-the-ground training opportunities in real-world emergent care settings.

As an emergency medical physician with 20 years of experience (DMC) and a physiotherapist with 17 years of research training in cervical head and neck trauma (JME), we support

the value of these expert-derived and consensus-driven guidelines, and we further agree that imaging is appropriately not recommended for the majority of patients presenting to physiotherapy with a primary report of spinal pain. However, we also recognize the proposed benefits of following guidelines while acknowledging that adherence to them appears quite variable.^{9–11} In addition, it seems a reasonable target for future research to determine whether adhering to interdisciplinary guidelines results in improved outcomes for patients.

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