conclusion than cognitive measures. Likewise, tests of complex motor performance may better approximate the demands placed on a subject during sports participation and activities of daily living than cognitive assessments alone.

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Authors’ affiliations
Tonya M Parker, Louis R Osternig, Paul van Donkelaar, Li-Shan Chou, Motion Analysis Laboratory, Department of Human Physiology, University of Oregon, Eugene, OR, USA

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REFERENCES

I believe this paper provides support for the notion that concussion identification and management is complex and requires a multifaceted approach. While a significant majority of the recent literature has been focused on neuropsychological testing, it is important to remember that concussions can result in a motor decrement, and that the recovery of neuropsychological and functional motor variables may not correlate. Thus, the prudent clinician should strive to assess and monitor multiple domains of function during the management of concussion.

Jonathan T Finnoff
Mayo Clinic, Rochester, MN, USA; finnoff.jonathan@mayo.edu

The authors have provided important observations regarding the independence of results from the ImPACT test and laboratory measures of locomotor ability. We have recently found[1] that certain tests of visuospatial attention and executive function can correlate to locomotor behaviour following moderate to severe traumatic brain injury. Whether this is an issue of injury severity, types of tests used or both needs to be considered further. As noted by the authors, both cognitive and motor tasks should be assessed in order to make better judgements about residual abilities and reintegrate into activities for persons with brain injury of any severity.

Bradford J McFadyen
CIRIS, Laval University, Quebec, Canada; brad.mcfadyen@rea.ulaval.ca

REFERENCE