ABSTRACT

A growing body of recent research evidence supports the existence of relationships of neurocognitive function in both concussed and non-concussed states with neuromuscular control and susceptibility to sports-related musculoskeletal injury. Sufficiently rapid and appropriate neurocognitive processing in response to environmental cues appear to be critical for selecting and implementing neuromuscular responses for both impact avoidance and dynamic joint stabilization. Such processes may be enhanced by specific training methods enhanced with neurocognitive principles. The emerging evidence and clinical practice in this area have the potential to transform current injury rehabilitation, risk screening, and prevention protocols.

ABOUT DR. HERMAN

Dan Herman, M.D., Ph.D., CAQSM, is an assistant professor at the University of Florida. He is housed in the Department of Orthopaedics and Rehabilitation, in the College of Medicine. His focuses are physical medicine & rehabilitation, ORTHOcare, and musculoskeletal sports medicine.