ABSTRACT

Return-to-play from injury is a complex process involving many factors including the balancing of tissue healing rates with the development of biomotor abilities. This process requires interprofessional cooperation to ensure success. An often-overlooked aspect of return-to-play is the development and maintenance of sports specific conditioning while monitoring training load to ensure that the athlete’s training stimulus over the rehabilitation period is appropriate to facilitate a successful return to play. The purpose of this clinical commentary is to address the role of energy systems training as part of the return-to-play process. Additionally the aim is to provide practitioners with an overview of practical sports conditioning training methods and monitoring strategies to allow them to direct and quantify the return-to-play process.

Level of Evidence: 5

Key words: Acute/chronic workload, energy system development, return-to-play, sports rehabilitation, strength and conditioning, training load