ABSTRACT

There is a need to improve patient outcomes after anterior cruciate ligament reconstruction (ACLR). To do this likely involves a strong focus on optimizing rehabilitation processes and practices. Movement re-training is considered an important element of rehabilitation after ACLR, but there is a lack of knowledge on the ‘how’ and ‘what’ movement re-training should occur after ACLR. In its basic form, movement re-training after ACLR is about progressing a patient through gradually more demanding tasks from the point of being able to walk to being able to perform highly complex sports movements. However, there is a lack of guidance on when to implement certain tasks (e.g. when to begin running) and how to transition between tasks. This paper presents a 10 task progressions system which can form an important aspect of the movement-based re-training process, providing structure and patient autonomy. Monitoring knee function and movement and neuromuscular status to safely transition between these tasks is important. Although this task-based progression is designed for patients following a rehabilitation program after ACLR, it may have generalizability for all major lower limb injuries. The task-based progression was formed by combining theory, the best available evidence, and significant practice experience applied to movement re-training after ACLR. This approach supports patient autonomy, medical team communication and collaboration and can provide structure to the movement re-training process.

Keywords: Biomechanics, criterion-based progressions, movement system, performance rehabilitation, screening