

Role of Proprioceptive Training on Anterior Cruciate Ligament Rehabilitation: A Literature Review

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ABSTRACT

Anterior Cruciate Ligament (ACL) ruptures are injuries that affect young adults' neuromuscular systems. Because the ACL in the knee is essential to the joint's static and dynamic stability, it is particularly susceptible during athletic activities, with an incidence of about 69 per 100,000 person years per year. Following ACL restoration (ACLR), one of the most significant issues is proprioceptive impairments. The aim of the review was to identify effect of proprioceptive exercise training for improving ACL rehabilitation. A literature search was conducted from PubMed, Cochrane Library, and Google Scholar database from 2000 to 2024. The search utilised terms such as "proprioceptive exercise training", "ACL rehabilitation", "muscle strength" and "adult" employing Boolean

operators (AND, OR). Articles in which proprioception was treated in this review, non-English articles, were excluded. A total of 78 articles add were found from different database, out of which only five met the inclusion criteria. These studies suggest that proprioceptive exercise training add is effective treatment for knee proprioception, muscle strength, pain and functional outcomes. The results obtained indicate that proprioceptive training exercises, when incorporated into the standard rehabilitation expedited protocol, can increase proprioception efficiency in persons who have undergone ACL repair.

Keywords: Anterior Cruciate Ligament Injuries, Balance, Joint Instability.