

Surface electromyography for assessing triceps brachii muscle activities: A literature review

Abstract

The goal of this review was to summarise the scientific findings of research conducted on the triceps brachii muscle using surface electromyography. To achieve this goal, we searched through several articles available from the online databases ScienceDirect and SpringerLink published in the English language between January 2008 and June 2012. We specifically searched for the phrases "EMG" and "triceps brachii" in the title, abstract, keywords or methods sections. From a total of 569 articles we identified 77 potentially relevant studies where 42 studies have been examined triceps brachii muscle activity using surface electromyography that applied in the field of rehabilitation, physiological exercise, sports, and prosthesis control. Among the 42 articles found, 16 studies have been examined triceps brachii muscle activity in rehabilitation, 13 for physiological exercise, 9 for sports, and 4 for prosthesis control in this literature review. We therefore believe that the information contained in this review will greatly assist and guide the progress of studies that use surface electromyography to measure triceps brachii muscle activity in the context of rehabilitation, physiological exercise, sports, and prosthesis control.

Keywords

Physiological exercise; Prosthesis control; Rehabilitation; Sport; Surface electromyography; Triceps brachii muscle activity