

Abstract

Title: Muscle activity when surpassing the sticking region in the concentric phase of a bench-press

Objectives: The aim of this work is to compare muscle activity of prime movers and stabilizing muscles in each region of the concentric phase in a bench-press (pre-sticking, sticking and post-sticking phase).

Methods: To get all the necessary data a method of randomized experimental research was used in preset laboratory conditions. Afterward a method of analysis was used for data evaluation.

Results: Neuromuscular fatigue had occurred at submaximal (4 RM) loads in the primary movers during the sticking and post-sticking phase. In case of maximal (1 RM) loads the hypothesis was rejected due to that fatigue had occurred later, during post-sticking phase. Furthermore a neuromuscular fatigue of stabilizing muscles during maximal (1 RM) and submaximal (4 RM) loads was found.

Keywords: bench-press, sticking region, sticking point, electromyography, EMG, muscle activity, resistance training