LONGITUDINAL ANALYSIS OF KINEMATIC PARAMETERS IN SPANISH WEIGHTLIFTERS
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Introduction: There isn't longitudinals researches in weightlifting, only Garhammer (Garhammer, 1985) compare the same weightlifter in two consecutives Olimpic Games. The aim of the study was to check if a seven weeks macrocycle is enough for finding adaptations.

Method: The Snatch and the Clean & Yerk technique of four weightlifters, from the Vallecas Weightlifting Club, were measured in four macrocycle moments (each two weeks), with Muscle Lab' Linear Encoder of 100 Hz frequency. The encoder was placed in roof for measuring the Snatch and Clean & Yerk technique. All Snatch and Clean & Yerk technique sets were registered with Muscle Lab. We compare the same load kinematic parameters. This parameters were: Snatch and Clean Pull Maximal Speed, bar maximal high, time to bar maximal high, Snatch and Clean Pull average power, Yerk maximal speed, Yerk maximal High, Yerk average power.

The load were divided in low (<70%1RM), medium (70-85% 1RM) and high (>85% 1RM). A MANOVA was performed for statistical analysis, considering four moments and three loads as independent variable.

Results: Significative differences (p<0,05) were not found in four moments almost in every variables, only were found in Pull maximal high between third and first moment, in Snatch time to bar maximal high between third and fourth moment.

Discussion: Considering that last macrocycle performance is almost the same in all weightlifters than present macrocycle performance, changes in kinematic parameters could not be hoped.

Conclusions: Seven weeks macrocycle isn't enough for finding differences in performance and kinematics parameters in weightlifting.

References:

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