

Evaluation of strength training effects on neuromuscular system in soccer players in pre-competitive period #50

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The evaluation of training programs in soccer modality in various moments of periodization is important in the sports preparation control process. So in this way, this study aimed to investigate neuromuscular adaptations during strength training in professional soccer game in pre-competitive period. 15 professional soccer players, aged between 18 and 28 years participated of this study. Initially they were submitted to explosive strength test (Squat Jump), speed resistance (RAST) and displacement velocity (10 and 30m). Two evaluations were performed: one in the beginning of the study (M1), and the other (M2) after 12 weeks. In the first 6 weeks speed strength training, in the first 2 with 60% of Maximum Load (ML) and the other 4 weeks with 75% of ML was conducted. In the 6^a to 12^a weeks, the development turned to maximum strength (85% of ML). After collecting the data were kept in computational bank and then produced information in the descriptive way, by means of centrality and dispersion, and in the inferential, Student t test for paired data ($p < 0.005$). The main results point to improvement in all capacities with emphasis on explosive strength 41.49 ± 0.04 cm in M1 to 44.05 ± 3.19 cm in M2, as well as the velocity of 10 meters, 5.22 ± 0.33 m/s in M1 to 5.54 ± 0.33 m/s in M2. There were positive neuromuscular adaptations after the proposed training, indicating that during the studied period, strength work improved athletic performance capacities.

Key words: sports training; soccer; evaluation.