CLASSIFICATION OF STRENGTHENING EXERCISES OF THE LOWER MEMBER POSTERIOR CHAIN, BASED ON THE AMPLITUDE OF MUSCULAR ACTIVATION IN AMATEUR SOCCER PLAYERS BETWEEN 18-25 YEARS

ABSTRACT

The hamstring injuries are recurrent in the sports disciplines of teams such as football, with rehabilitation being a key point to prevent future alterations. Within this process, the strengthening paradigms are rather empirical, therefore, criteria based on the exercises used are required. In this context, the objective of the present investigation is to classify the strengthening exercises of the posterior lower limb chain, based on the amplitude of muscular activation, in amateur soccer players of the Andrés Bello University (UNAB), for which a non-experimental, descriptive, cross-sectional design. The study population was 30 university students, who were studying from first to fifth year, during the academic period 2017. The participants were summoned to the Laboratory of Rehabilitation Sciences, where after signing the informed consent they had to perform a phase of heating on a cycle ergometer, then the MCIV (maximum voluntary isometric contraction) of the semimembranous, semitendinous, biceps femoral and gluteus maximus muscles was calculated, finally applying a battery of strengthening exercises, which were classified according to the intensity of muscle activation. In relation to this, it was obtained that 8 of the 13 exercises implemented were classified as low intensity (p <0.05), 3 of medium intensity (p <0.05) and 2 of high intensity (p <0.05), while the peak of amplitude of the semimembranous, semitendinous and biceps femoral muscles moved to the right in temporal terms, to the extent that the exercises classified as low, medium and high intensity are compared.
KEY WORDS

Hamstrings muscles, electromyography, classification, football