Ajustes posturais precoces em jogadores de futebol com paralisia cerebral [

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text (article)

Analítica

Introduction: The functional limitations associated with Cerebral Palsy (CP) and inactivity are directly related to the deficit in postural control, namely the Early Postural Adjustments (EPAs). On the other hand, same studies showed that the practice of physical exercise can improve stability. Objectives: Thus, the goal of the present study was to evaluate the influence of physical exercise, in this case in a football player, on the EPAs of athletes with CP. Methods: The study included 5 young male adults with CP, aged between 18 and 36 years old, all football players, class 7 and 8. The electromyographic activity was recorded using Delsys Trigno and the ratio of the postural musculature [soleus (SO) and tibialis anterior (TA)] prior to a step motion, as well as the center of pressure displacement amplitude were calculated through the force platforms (Bertec), before and after a 4 month interval of training. The two moments of evaluation were compared using the Wilcoxon test and the Spearman correlation between the CoP amplitude and the muscular activity ratio was calculated. Participants were recruited in a first period in which they had no physical activity at all and in the following 4 months they started training regularly, with a frequency of three times a week for 1h30min, always with the same trainer and in the same physical training space. Results: There was a statistically significant decrease in the anterior CoP amplitude (-4.47cm; p=0.043) after 4 months, with a negative correlation between this amplitude and the ratio of TA / SO (r=-0.90; p=0.037). In the lateral direction, a diminution of amplitude of minimum CoP (-1.49; p=0.893) without statistically significant correlation (r=0.10; p=0.873) was found. Conclusions: Practicing sport, even in pathology, has a significant effect on the improvement of postural oscillation, with an increase in the relationship between muscular activity and postural control
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