

Current issue

Archival Issues

Volume 27, 2010
Volume 26, 2009
Volume 25, 2008
Volume 24, 2007
Volume 23, 2006
Volume 22, 2005
Volume 21, 2004
Volume 20, 2003

Search

Newsletter

Authors Pathway

Information for Authors



» Journal Abstract

Effect of extremely weak pulsed magnetic field type Bemer 3000 on ratings of perceived exertion

D Gazurek, K Spodaryk

Biol Sport 2008; 25 (2):

ICID: 890329

Article type: Original article

IC™ Value: 9.57

Abstract provided by Publisher



The aim of this study was to examine whether is an influence of the exposition on different inductions of magnetic fields on rating of perceived exertion during 10 min long standardised physical cycloergometer exercise. The investigation was performed in 40 healthy, non-smoking, fit men, mean age 20 ± 2 . The participants were randomly attributed to 4 groups, each including 10 subjects. The first one (group E18) consisted of subjects exposed to the magnetic field with the intensity of $18 \mu\text{T}$, the second one (group E64) exposed to the magnetic field with the intensity of $64 \mu\text{T}$. Two control groups were formed to accompany these exposed to the magnetic field. In these placebo groups (S-T) subjects were not exposed to the magnetic field (so called false therapy, „sham treatment“). The study consisted of 4 steps: pilot study, the first endurance test, exposure to the magnetic field, the second endurance test. The aim of the pilot study was to define subjective feelings of the participant during the effort, his reaction to the effort and also practical familiarization with the character and rules of the endurance test and Borg scale interpretation during 10 min of endurance cycloergometer test. The first endurance test was performed two days after the pilot study with the same rules and its goal was to measure the level of tiredness according to the Borg scale during 10 min long standardised physical effort. The second endurance test was performed according to the same rules as the first one and its goal was to analyse the effect of 20 exposures to the magnetic field with the intensity of 18 and $64 \mu\text{T}$ repeated daily on the perception of tiredness increase as expressed in the Borg scale when performing 10 min long standardised physical effort. In subjects exposed to $18 \mu\text{T}$ magnetic field neither changes in the perception of fatigue nor changes in the heart rate at particular levels of the Borg scale have been observed. When compared with both control and placebo group subjects exposed to $64 \mu\text{T}$ strong magnetic field exhibited statistically significant increase in the period of attaining consecutive levels of fatigue as measured in the Borg scale. Results of the present study demonstrated beneficial influence of the magnetic field with $64 \mu\text{T}$ intensity on changes in the perception of fatigue during physical workload.

ICID 890329

FULL TEXT 385 KB

Related articles

- in IndexCopernicus™
 - € rating of perceived exertion [0 related records]
 - € Exercise [953 related records]
 - € magnetic field [8 related records]

Search

Back

