VALUES OF SPEED AND AEROBIC CAPACITY PARAMETERS AS INDICATORS OF PHYSICAL FITNESS IN U18 AND U19 SOCCER TEAMS AT THE BEGINNING OF THE PRE-SEASON PERIOD

Abstract
The aim of this study was to evaluate and to compare the current situation in terms of intermittent training by two elite Czech U18 and U19 team categories before the start of the pre-season period. The U18 category consisted of 17 players (age: 17.6 ± 0.3 years, body weight: 71.1 ± 5.7 kg, body height: 178.2 ± 6.9 and body fat: 10.3 ± 1, 4%) and the U19 category consisted of 14 players (age: 18.3 ± 0.2 years, body weight: 74.9 ± 6.5 kg, body height: 181.5 ± 6.3 and body fat: 10.6 ± 1.6%). Speed parameters were assessed using 5 and 10 m acceleration tests and maximum speed test at 20 m (flying start). For monitoring and evaluating aerobic parameters, the Yo-Yo intermittent recovery test 1 (Yo-Yo IRT1) was used. In the 5 and 10 m tests, no significant differences were found. However, a significant difference was detected in maximum speed at 20 m (p = 0.04). The difference in the maximum covered distance between the teams was not significant (t29 = 0.60, p = 0.56). Furthermore, no significant differences were observed at the maximum heart rate (p = 0.66), decrease in heart rate during 1 minute after the test (p = 0.78) and maximum oxygen consumption (t29 = 0.59, p = 0.56). Insignificant differences could be caused by long-term inactivity of players in the transitional period. For objectification of the results of our investigative conclusions, it would be appropriate to follow both teams throughout the duration of the competitive period.

Key words: soccer, field test, youth, aerobic parameters, Yo-Yo IRT1