

Comparison of aerobic capacity determined by the lactate minimum test among guard, forward and forward-center positions in basketball players #39

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To aim of this study was to verify the aerobic capacity by lactate minimum test (LM) among different positions in professional basketball players. Twelve high performance basketball players (12 Major National Leagues, 26.7 ± 3.2 years) were evaluated by LM. The method of lactate elevation consisted of 6 maximum sprints of 35 m separated by 10 s of recovery each (Running Anaerobic Sprint Test). The progressive phase in LM consisted of 4 periods of 3 min each at 8, 10, 11 and 12 Km/h. After lactate elevation phase and progressive periods, 25 μ L samples of blood were collected to determine peak lactate (PL) concentration and relative lactate minimum concentration (LACc) respectively. The running speed at the LM was taken when the gradient of the line was zero. Anova one-way statistical was utilized to compare the intensity corresponding LM, LACc and PL ($p \leq 0.05$). The velocity (Km/h) of LM did not differ among positions: Guard LM= 9.46 ± 0.17 Km/h; Forward LM= 9.60 ± 0.68 Km/h and Forward-Center LM= 9.64 ± 0.25 Km/h. The LACc did not differ: Guard LM= 3.55 ± 0.51 mmol/L; Forward LM= 3.48 ± 1.63 mmol/L and Forward-Center LM= 4.00 ± 0.43 mmol/L. No changes occurred in PL: Guard LM= 8.35 ± 1.41 mmol/L; Forward LM= 8.16 ± 1.47 mmol/L and Forward-Center LM= 8.76 ± 1.20 mmol/L. The aerobic capacity determined by LM did not differ among guard, forward and forward center basketball players.

Key words: aerobic capacity; lactate minimum test; basketball.