Comparison of different methods to determine the threshold anaerobiose in transfemoral amputatess usinga prosthesis

Bruna da Silva Sousa, Thanyze Alice Vicentini Zoccoli, Fernanda Dutra Macêdo, Tiago Ávila Palhares, Vera Regina Fernandes da Silva Marães
University of Brasília, Brazil

Introduction: The anaerobic threshold is a leading indicator of cardiopulmonary exercise testing (CPET), because it is the determining point of balance between production and removal of lactate witch is, the maximum intensity exercise, determining the physical performance and ventilation performance . This study aims to analyze the anaerobiose threshold on transfemoral amputees under different methods of analysis.

Methodology: This was CPET in seven amputees unilateral tranfemorais prosthesis use (30 years ± 4.89). The tests were performed on a cycle ergometer with ramp protocol with measurement effort by Subjective Perception Scale of Borg effort using ergospirometer Vmax (CareFusion). The descriptive analysis of data was performed using SPSS software.

Results: Methods of graphic visual analysis and automatic linaer ventilatory method presented similar values regarding the ventilatory variables, and the mathematical model and the graphic visual obtained similar measurements in the respiratory and cardiovascular aspects determining the LA about the same time.

Conclusion: Therefore, it is confirmed that the methods of graphical visual analysis and heteroscedastic mathematical model are presented as the gold standard for the determination of LA by their sensitivity and reliability. So that needs to be more studies on the determination of anaerobiose threshold in transfemoral amputees in order to compare with the findings in this study.

Speaker Biography

Bruna da Silva Sousa completed her Master's Degree in Biomedical Engineering from the University of Brasília - Gama's College, Graduate in Physiotherapy from the University of Brasília (UnB), Pilates Instructor, Auriculoacupunturista, former student of the Military College of Brasília (CMB). Presents experience with cardiovascular area, through research projects since 2013, and acting in the area in the curricular stages.

e: sousabrunadasilva@gmail.com

Notes: