Noninvasive ventilation in physical exercise: what to expect from this therapy?

Emilia Raposo¹, Paloma Parazzi², carla Gomez³, Maria Angela Ribeiro³, and José Dirceu Ribeiro³

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Abstract

Noninvasive ventilation, in addition to reducing respiratory work, is a tool to aid physical exercise in individuals with chronic lung diseases. The systematic review aims to demonstrate the benefits and protocols used with NIV associated with physical exercise, its results and the study designs in several lung diseases. A systematic review was carried out using the following databases: Physiotherapy Evidence Database (PEDro), MedLine and Scielo, between January 2015 and April 2020. 64 articles were found in MedLine, of which six were duplicated with the database Peter. Of these 64, eight articles were in accordance with the proposed inclusion criteria, 18 articles were excluded because there was no aerobic exercise during the research; 10 were excluded due to access to the abstract only; one study did not make use of NIV during the proposed exercise. 11 articles were listed for analysis. The studies analyzed in the present review demonstrate that the immediate and concomitant use of NIV before or during exercise, improved lung function in patients with chronic lung disease, heart failure and neurological patients, in addition to improving the distance covered by the walking test. six minutes in children and adolescents.

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¹Affiliation not available

²State University of Campinas

³UNICAMP