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Editorial

Is resistance training effective in improving strength and functionality in post-stroke adults?

Treinamento resistido é eficaz na melhora de força e funcionalidade em adultos pós-acidente vascular cerebral?

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Stroke was considered in 2018 by the World Health Organization (WHO) as the second leading cause of death in the world [1]. In Brazil, it is the leading cause of death or disability, causing sequelae in more than 2 million people according to an epidemiological study carried out in 2013 [2]. This information is alarming, as about 80% of people who suffer a stroke present impaired motor functionality and reduction of work capacity and quality of life [3].

Interventions with physical exercise are intended to promote better recovery of the patient's mobility and functionality, and among the various techniques offered, resistance training has been widely used to increase strength, endurance, flexibility and improve the ability to acceleration [4].

The current edition of the Revista Brasileira de Fisiologia do Exercício brings a study [5] with the aim of analyzing whether only the use of resistance training (RT) is effective in increasing the patient's strength and function, compared to other neuromuscular interventions, conventional therapy or control with placebo interventions. The authors carried out searches in several databases in order to find systematic reviews that verified the effects of the application of the RT, also evaluating the quality of this evidence.

After the application of the RT, the patients showed a significant increase of muscle strength in the upper and lower limbs, gains of 1 repetition maximum and a better performance in the six-minute walk test, but no significant progress in the variables: activity of daily living, maximum walking speed and preferred walking speed. A critical reading of this document will allow us to understand the most used prescription aspects, while leading us to think about the ways to achieve the best results in neurofunctional rehabilitation.

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References

1. PAHO/WHO. Pan American Health Organization [Internet]. Organização Pan-Americana da Saúde; [cited 2021 Aug 28]. Available from: https://www.paho.org/bra/index.php?option=com_content&view=article&id=5638:10-principais-causas-de-morte-no-mundo&Itemid=0

2. Baptista SC, Juliani CM, Olbrich SR, Braga GP, Bazan R, Spiri WC. Avaliação dos indicadores de óbito e incapacidade dos pacientes atendidos em uma unidade de acidente vascular cerebral. Texto Contexto Enferm 2018;27(2). https://doi.org/10.1590/0104-070720180001930016

3. Pollock A, Baer G, Campbell P, Choo PL, Forster A, Morris J, Pomeroy VM, Langhorne P. Abordagens de reabilitação física para a recuperação da função e mobilidade após acidente vascular cerebral. Cochrane Database Syst Rev 2014;(4):CD001920. https://doi.org/10.1002/14651858.CD001920

4. Magalhães JA. O treinamento resistido em indivíduos acometidos por acidente vascular encefálico. Rev Bras Fisio Exerc 2017;16(3):194-9 https://doi.org/10.33233/rbfe.v16i3.1143

5. Barbosa RM, Barbosa LGS, Queiroz HS, Oliveira LS, Silva-Júnior MN, Silva BS, et al. Efficacy of resisted training in muscle strength and functionality in adult individuals after brain vascular accident: a systematic review of revisions. Rev Bras Fisiol Exerc 2021;20(4). https://doi.org/10.33233/rbfex. v20i4.4799