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INFLUENCE OF AN EXERCISE PROTOCOL ON THE REDUCTION OF VENOUS ULCER AREA: CASE STUDY

Luana Guedes de Melo¹, Amanda Kelly da Silva Batista¹,
Gabriele de Aquino Dantas¹, Leila Rafaela Alves Braga¹,
Mariama Ribeiro de Carvalho¹, Rafaela Pedrosa¹

¹ Universidade Federal da Paraíba (UFPB), João Pessoa, Paraíba, Brasil

Background: Venous ulcers (VU) are open wounds that attack the integumentary system and are caused by venous dysfunction. They are a serious public health problem, affecting approximately 14% to 22.8% of the world's population and generating social impacts such as isolation, absence from work, early retirement, low self-esteem and depression. In addition, there is the economic impact that is related to the difficulty of healing and frequent recurrence of the wound, which generates costs for the health system and for the person with VU. Physical therapy interventions can be used to assist in the healing process. Among the therapies, physical exercises stand out.

Objective: To evaluate the area of chronic venous ulcers in patients submitted to an exercise protocol.

Methods: Case study, with two volunteers and three UV, composed of a physical exercise protocol for lower limbs during sixteen sessions, two per week. Eligibility criteria were: >18 years; having chronic venous insufficiency CEAP 6, without associated arterial disease; and ulcers >1 cm². Study with blinding of the evaluator and the researcher who performed the analyses.

Results: UV 01 started with an area of 40.7 cm² after treatment the area became 17.8 cm²; the UV 02 before the treatment was 42 cm², after, the area became 27 cm². UV 03 had an area of 73.9 cm² before treatment and ended with 35.5 cm².

Conclusion: The physiotherapeutic treatment with physical exercises for the lower limbs, consisting of stretching, strengthening, aerobic, proprioception and relaxation exercises, provided a reduction in the area of the venous wound.

Implications: Physical exercise can help in the conventional treatment of wounds, thus helping in healing time, delaying ulcer recurrence, in addition to all the already known benefits of exercise. In this way, this case study can be the basis for work with a larger sample number so that an adequate treatment protocol can be defined that enhances healing and improves the patient's vascular condition, preventing or reducing cases of recurrence.

Keywords: Venous ulcer, Healing, Physical exercise

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COGNITIVE FUNCTION AND CARDIOVASCULAR RISK FACTORS IN AGED WITH AND WITHOUT DIABETES

Luana Guimarães Santos¹, Gabriel Oliveira dos Santos Pinto¹,
Layce Bianca Pereira da Silva¹, Cristovam Wanderley Picanço Diniz¹,
Natáli Valim Oliver Bento-Torres¹

¹ Neurodegeneration and Infection Research Laboratory (LNI), João de Barros Barreto University Hospital (HUJBB), Federal University of Pará (UFPA), Belém, Pará, Brazil

Background: Chronic subclinical inflammation (inflammaging) and changes in the predominance of type, destruction and endocrine function of adipose tissue are related in aging. Both contribute to the pathogenesis of chronic noncommunicable diseases, such as diabetes and cognitive decline. Considering that age-related cognitive decline is characteristic of physiological aging, and that Type 2 Diabetes Mellitus (DM2) can accentuate the decline in cognitive function and is a risk factor for the development of dementia, it is of interest to study the relationships of cognitive function and anthropometric markers and analyze its difference in older adults with and without diabetes.

Objectives: To investigate differences in cognitive function and anthropometric indices of older adults with and without DM2.

Methods: Sixty-four older adults participated (women = 62), including 20 participants with diabetes (69.32 ± 4.48 years old, 8.3 ± 4.0 years of schooling) and 44 participants without diabetes (67.91 ± 5.40 years of age, 9.0 ± 4.5 years of schooling). The groups were matched by age, education, and physical activity. All participants underwent cognitive (Mini-Mental State Examination - MMSE) and anthropometric assessment, including Body Mass Index (BMI), Waist Circumference (WC), Hip Circumference (HC), Waist-Height Ratio (WHR), Waist-Hip Ratio (WHR), Body Adiposity Index (IAC) and Conicity Index (C Index). Based on the analysis of normality (Shapiro-Wilk) the Student's t test and the Mann-Whitney U test were performed for non-parametric variables. The significance level was set at p < 0.05.

Results: All participants had normal cognitive performance, considering the cut-off point adjusted for education. Despite the cognitive performance within the normal range, the older adults with DM2 showed lower cognitive performance (26.92 ± 2.26 points) in the MMSE assessment when compared to participants without diabetes (28.09 ± 1.56 points; p < 0.03). No significant differences were found between participants with and without diabetes, respectively, in: BMI (30.09 ± 5.41; 28.46 ± 4.97; p < 0.722); WC (99.62 ± 12.43 cm; 94.56 ± 11.54 cm; p < 0.560); HC (103.83 ± 11.56; 100.16 ± 13.03; p < 0.252); WHR (0.66 ± 0.10; 0.63 ± 0.07; p < 0.078); WHR (0.96 ± 0.05; 0.95 ± 0.72; p < 0.412); IAC (37.51 ± 8.68; 36.52 ± 7.48; p < 0.426); C index (1.35 ± 0.09; 1.33 ± 0.11; p < 0.663).

Conclusion: Cognitively healthy older adults with DM2 showed lower cognitive performance compared to participants without DM2, even without differences in anthropometric markers.

Implications: To recognize the influence of DM2 in accelerating age-related cognitive decline is important for the inclusion of preventive cognitive stimulation strategies for the healthier aging of older adults with diabetes

Keywords: Diabetes mellitus, Cognition, Aging

Conflict of interest: The authors declare no conflict of interest.

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PRELIMINARY RESULTS OF THE EVALUATION OLFACTION, TASTE, ORAL STEREOGNOSE AND SWALLOWING IN COVID-19 AFFECTED INDIVIDUALS AFTER CLINICAL RECOVERY

Luana Marsicano Alves¹, Tiago Teles Menezes¹,
Laura Davison Mangilli¹

¹ Universidade de Brasília (UnB), Faculdade de Ceilândia, Programa de Pós-Graduação em Ciências da Reabilitação, Ceilândia, Distrito Federal, Brasil