EFFECT OF PHOTOBIOMODULATION AS A PREVENTIVE

TREATMENT OF DIABETIC FOOT: A RANDOMIZED, DOUBLE BLIND,

CONTROLLED CLINICAL STUDY PROTOCOL

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Participants will be randomized into two groups called G1 (self-care guidance + photobiomodulation) and G2 (self-care guidance + sham). The treatment will be performed using a boot-shaped LED device (robofoot) with light emission at wavelength 660 and 850 nm, durante 13 min, 5 days a week for 12 weeks. The following outcomes will be evaluated: W6MT, TBI, thermography and mmii doppler before and after 90 days application of FBM, initial inflammatory and metabolic profile, 30 days and 60 days. Data collected during the research will be stored and organized in the Harvard Dataverse repository (<https://dataverse.harvard.edu>). And data analysis will be used Kruskal-Wallis test, followed by Student test. Comparison by Wilcoxon test, significance level of 0.05

Diabetic foot syndrome is one of the most serious complications of diabetes mellitus and the main cause of non-traumatic lower limb amputations. Preventive measures through multidisciplinary treatment collaborate in the preservation of limbs. Diabetic foot ulcer (DFU) is associated with loss of mobility, worse quality of life (QoL) and decreased overall productivity. The objective of this research is to evaluate the effect of photobiomodulation, as a preventive treatment of complications in patients with diabetic foot without ulcer, when compared to the control group. Therefore, 54 patients with type 2 DM between 18 and 75 years old, with signs and symptoms of PN or claudication in the absence of UPD, will participate in this study.

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Biography

Roselene Lourenço has a medical degree in Clinical Medicine and Endocrinology, with extensive experience in clinical care, with a focus on the well-being and quality of life of her patients. She develops her activities in a General Hospital where she coordinates a Medical Clinic team and works in an outpatient clinic focused on the treatment of Diabetic Foot in a multidisciplinary group. In addition, she develops academic activities with undergraduate medical students and doctors in specialty training.

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