

EFFECT OF VASCULAR PHOTOBIMODULATION (ILIB) ON SLEEP QUALITY, RELAXATION AND STRESS CONTROL: RANDOMIZED CONTROLLED CLINICAL TRIAL

Name: Lucas Sousa

Uninove University

Abstract:

The quality of sleep is directly linked to the quality of human life. Laser irradiation of blood in the transcutaneous vascular technique (ILIB) is believed to decrease blood viscosity and platelet aggregation; activates superoxide dismutase; promotes increased oxygen content and stimulates microcirculation, it also stimulates increased serotonin production and cortisol reduction. Serotonin functions include sleep initiation, mood improvement, anxiety and depression. Therefore, the objective of the present project is to evaluate the effect of ILIB on salivary biomarkers related to stress and sleep through a randomized, double-blind clinical trial, in which adults between 18 and 65 years old who complain of poor sleep quality will participate. Selected participants will be divided into 2 groups, group 1 undergoing ILIB Therapy twice a week for 30 minutes and group 2 the same frequency and time of application, but with placebo equipment. Upon patient admission, both groups will fill out questionnaires on sleep quality (PSQI and Epworth) and initial saliva will be collected for analysis of Chromogranin A (CgA) and Cortisol markers. Experimental group will receive the standard treatment procedures with active equipment and the second group will receive the technique through a placebo device. At the end of 10 sessions the variables will be collected again. After the 30-day interval, a new saliva collection and application of the questionnaires will be performed for analysis of treatment response.