Comparative clinical study of the blue, red and combined led in inflammatory acne. Mara Lúcia Gonçalves Diogo. PPG in Biophotonics applied to Health Sciences, Nove de Julho University, São Paulo - SP.

Light therapies have been used in dermatoses, including acne. Some studies indicate that the blue LED inhibits the proliferation of C. bacterium acnes and that the red light acts to decrease the inflammatory condition. Several studies have been analyzed, some in vitro, others in vivo, however, few studies have compared and analyzed the in vivo use of LED in acne. Therefore, the objective of this study is to compare the effect of the blue LED, the red LED and the combined red and blue LEDs in patients with mild and moderate inflammatory acne (grades II and III). 108 participants with inflammatory acne will be selected, according to the classification of the Brazilian Society of Dermatology and IGA (Investigator’s Global Severity Assessment) and also the degree of skin color according to the Fitzpatrick scale (I to IV). Participants will be treated with an LED mask, applied over the entire face, for 10 minutes, 3 times a week, in the UNINOVE laboratory, divided into 3 groups, where the first group will use a mask with blue LED, the second with LED red and the third with combined blue and red LED. The evaluations will be made through photos and counts of papules and pustules, in the baseline, on the 15th and 30th day of treatment by a blind evaluator. Participants will also assess their perception of improved appearance after the end of treatment, using the CADI questionnaire (CARDIFF ACNE DISABILITY INDEX).

Key words :

Acne, low level light therapy, LED.