

Comparison Between Two Frequencies of Application of Photobiomodulation in Facial Rejuvenation

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Abstract:

Skin aging is an irreversible, slow and progressive process, being mainly influenced by age, but also by external factors, such as ultraviolet radiation, smoking, alcohol, among others. Studies have shown benefits of photobiomodulation (PBM) for facial rejuvenation, especially with the use of the red LED. However, there is still a high level of variability in the treatment parameters and the frequency of application of FBM. The purpose of this study is to compare the effects of PBM with LED mask (660nm, 6.4 mW/cm², 2.67 J/cm²) on facial rejuvenation using 2 application frequencies: one group will receive 2 applications a week for 4 weeks and the other group will receive 3 applications a week for the same period. After 30 and 90 days, the depth and length of the wrinkles (evaluation of facial impressions by optical coherence tomography); the viscoelasticity of the skin; the evaluations of photographic images by experts (Wrinkle Assessment Scale) and the level of satisfaction of the participants (FACE-Q) will be compared with the data collected before the beginning of the study. All data will be analyzed statistically according to their distribution, seeking a level of statistical significance of 5%.

Biography:

Erick Frank Bragato is PhD student of Postgraduation Program in Biophotonics Applied to Health Sciences, Nove de Julho University – UNINOVE, São Paulo, Brazil. Graduated in medicine in 2014 from the State University of Londrina, Brazil, has a medical residency in General Surgery and is completing his residency in Plastic Surgery in São Paulo, Brazil. **Raquel Agnelli Mesquita-Ferrari, Sandra Kalil Bussadori, Christiane Pavani and Kristianne Porta Santos Fernandes** are professors of the Postgraduation Program in Biophotonics Applied to Health Sciences, Nove de Julho University – UNINOVE, São Paulo, Brazil. **Marcos Momolli and Jefferson André Pires** are PhD student of Postgraduation Program in Biophotonics Applied to Health Sciences, Nove de Julho University – UNINOVE, São Paulo, Brazil.