

ORIGINAL ARTICLE

Non-invasive therapy of wrinkles and lax skin using a novel multisource phase-controlled radio frequency system

MONICA ELMAN ¹, ITZHAK VIDER ², YORAM HARTH ^{2,3}, VARDA GOTTFRIED ³ & AVNER SHEMER ⁴

1 Beit Harofim Medical Center, Holon, Israel, 2 Medica OR, Medical Center Herzlyia, Herzlyia, Israel, 3 EndyMed Ltd, Cesarea, Israel, and 4 Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

Abstract

The last few years have shown an increased demand for non-invasive skin tightening to improve body contour. Since light (lasers or intense pulsed light sources) has a limited ability to penetrate deep into the tissue, radio frequency (RF) modalities were introduced for the reduction of lax skin to achieve skin tightening and body circumference reduction. This study presents the use of the novel 3DEEP™ technology for body contouring. 3DEEP is a next generation RF technology that provides targeted heating to deeper skin layers without pain or other local or systemic side effects associated with the use of the earlier generation RF systems available today. The study included 30 treatment areas on 23 healthy volunteers at two sites. The treatment protocol included four weekly and two bi-weekly ($n = 6$) treatments on different body areas. Results were evaluated by standardized photography and by circumference measurements at the treatment area, and were compared to changes in body weight. Significant improvement could be observed in wrinkles and skin laxity, and in the appearance of stretch marks and cellulite. Some changes appeared as early as after a single treatment. Circumference changes of up to 4.3 cm were measured.

Key words: *Lasers and light sources, radio frequency*