Invasive Buttock Lifting and Toning of Gluteal Muscles: A Multi-Center Efficacy and Safety Study

Carolyn Jacob MD,^a Brian Kinney MD,^b Mariano Busso MD,^c Suneel Chilukuri MD,^a JD McCoy NMD,^c Chris Bailey,^c Radina Denkova MD^a

^aChicago Cosmetic Surgery and Dermatology, Chicago, IL ^aUniversity of Southern California (USC), Beverly Hills, CA ^aAesthetic Dermatology, Coconut Grove, FL ^aRefresh Dermatology, Houston, TX ^aContour Medical, Gilbert, AZ ^aOvation Med Spa, Houston, TX ^aAesthe Clinic Beauty, Sofia, BG

OBJECTIVE: Surgical intervention has been the only method to improve the aesthetic appearance of buttocks apart from physical exercising. This study evaluates the efficacy of high intensity focused electro-magnetic (HIFEM) treatments as a non-invasive solution for improvement of buttocks through toning and lifting of gluteal muscles. MATERIALS AND METHODS: A total of 75 patients (aged 22-59) were treated using a device with HIFEM technology which stimulates gluteal muscles (EMSCULPT, BTL Industries, Boston, MA). The protocol included four 30-minute treatments. Patients' weight was monitored throughout the study. Standard photographs were taken at the baseline, after the 4th treatment, and at the 1-month follow-up. Two 7-point Likert scale guestionnaires were used to evaluate patients' buttock and treatment satisfaction. Total score of buttock satisfaction was calculated as a sum of all individual questions to reflect the overall perception of patients' buttocks. The level of comfort during procedures was assessed on a visual analog scale (VAS). RESULTS: The overall buttock satisfaction score (range, 4-28) of all subjects improved from 13.1±5.7 at baseline to 18.4±5.2 after the treatment and 18.9±5.1 at follow-up. For subjects with initial buttock dissatisfaction the scores improved from 8.7±1.6 to 16.3±3.1 after the treatment and to 17.3±3.1 at follow-up. The average score of all treatment satisfaction guestions (range, 1-7) was 5.2±1.2 immediately after the treatments and 5.1±1.3 at followup. In total, patients initially dissatisfied with the appearance of their buttocks reported a significant 85% improvement after the fourth treatment. Immediately after the fourth treatment, all the subjects reported that their buttocks felt more lifted and toned. Results were maintained at one-month follow-up. Weight of the patients didn't change significantly. Digital photographs showed aesthetic improvements of the buttocks for most of the patients. No adverse events were reported. CONCLUSION: The results show that the investigated device safely and effectively improves the aesthetic appearance of buttocks non-invasively. The treatments not only resulted in a significant visual improvement but also increased patient confidence and satisfaction. The procedure is suitable for patients seeking improvement in tone, shape, lift, and tightness of the buttocks. J Drugs Dermatol. 2018;17(11):1229-1232.