

17489

Effects of semiablative fractional radiofrequency associated with growth factors in striae alba treatment: A randomized clinical trial



Patricia Meyer, PT, PhD, Centro Universitário do Rio Grande do Norte; Rodrigo Marcel Valentim da Silva¹, Faculdade Estácio Fatern; Ciro Dantas Soares, Eneida Carreiro, Louhanne Christine Berto Bezerra, Maria Paula Marques Oliveira

Introduction: Fractionated radiofrequency (FR) is a widely used treatment in clinical practice for stretch marks, but its semi-ablative form is not yet wellknown. Growth factors increase proliferation and differentiation of cell types, mainly fibroblasts, which improves collagen and elastin levels in the skin.

Objective: To investigate the effects of the association of RFF with growth factors in stretch marks.

Methods: This was a randomized controlled trial. The study sample consisted of 28 female patients with complaints of gluteus or abdomen striae divided into 2 equitable groups: G1 (semiablative RFF without growth factor) and G2 (semiablative RF with growth factor—drug delivery system). A photographic and histologic analysis were performed with questionnaires about inflammation, stretch mark recovery, adverse effects and satisfaction of the volunteers.

Results: The photographic analysis showed a reduction in the amount of alba striae in all groups. Histologic analysis showed an increase in fibroblast activity and the amount of collagen type I as well as the amount of blood vessels in the group that associated FR with drug delivery (G2). In the analysis of the inflammatory process, it was observed that the group that performed intervention with growth factors presented lower inflammatory signs. Both groups reported a good level of satisfaction after the interventions, however the G2 (growth factors associated) reported a superior result.

Conclusions: The association of semi-ablative RF with growth factors showed a reduction in inflammatory signs, as well as a higher collagen production after 30 days and better clinical results.

Commercial disclosure: None identified.

17516

Clinical and histologic evaluation of the phenol-croton oil peel versus phenol-oleic acid peel for neck rejuvenation in a split-neck study



Felipe Ribeiro, MD, Mogi das Cruzes University; Denise Steiner

Introduction: Neck rejuvenation is one of the most challenging cosmetic subjects for dermatologists. Phenol-croton oil peel is considered the standard for deep facial resurfacing due to the ability of the combination of phenol, soap, croton oil and water to reach the reticular dermis. Pain, scarring, persistent erythema, hyperchromia, and postinflammatory hypochromia are some of the complications that may occur. Croton oil is an irritant used to increase the penetration of phenol. Oleic acid is a fatty acid with high penetration through the hydrophobic layer like skin. It has been used as a penetration enhancer for various enzymes, drugs or other macromolecules.

Objective: The purpose of the study was to compare clinical and histologic alterations of the neck skin with phenol-croton oil peel versus phenol-oleic acid peel.

Methods: Five female patients varying from 40 to 50 years old with dyschromia, wrinkles and sagging were enrolled. In a single session, right side of the neck was treated with traditional Hetter's formula with 0.8% of croton oil and on the left side croton oil was replaced by oleic acid. Biopsy specimens were taken before and 72 hours and 90 days after treatment.

Results: Inflammation was more expressive with croton and the acantholysis was suprabasal in both sides after 72 h. All five patients showed clinical improvement of wrinkles and dyschromia in both sides after 90 days and there was no difference regarding sagging.

Conclusions: oleic acid can replace croton oil as a peeling agent with good results.

Commercial disclosure: None identified.

17491

Utilization of an online cash-pay prescription program for topical 5-fluorouracil prescriptions in older patients



Rima I. Ghamrawi, BS, Jessica Payne, BS, Wake Forest School of Medicine; I-Chun J. Lin, MD, Department of Epidemiology, Fielding School of Public Health, University of California, Los Angeles; Steven Feldman, MD, PhD, Wake Forest School of Medicine

Background: High cost of prescription medications presents a challenging issue in dermatology, particularly for older adults. Such costs are associated with decreased adherence, particularly in older patients with multimorbidities. The topical antineoplastic agent, 5-fluorouracil (5-FU) is an effective treatment for actinic keratosis (AK), a highly prevalent condition in elderly, fair-skinned populations, but it is often associated with high out-of-pocket costs and insurance hurdles. One online pharmacy provides patients with direct access to branded dermatology medications at lower, predictable prices, however, the online platform may be less accessible to older adults.

Methods: Representative US data on topical 5-FU prescriptions were obtained from the National Ambulatory Medical Care Survey (NAMCS). Data on the use of online pharmacy were provided by Dermatology.com.

Results: In the 10-year study period, there were ~75 million ambulatory care visits associated with AK and ~1 million prescriptions for topical 5-FU. The most prevalent source of payment among patients was Medicare (54%) followed by private insurance (40%). On the online pharmacy, the majority of patients filling topical 5-FU prescriptions had commercial insurance (71%) followed by Medicaid (12%).

Conclusions: The online pharmacy offers an innovative way to provide lower-cost prescriptions to older populations and thus improve medication adherence and patient outcomes. Older adults do not take advantage of it as frequently as younger patients.

Commercial disclosure: None identified.

17544

Cicatricial alopecia in women: A case-control study



Colleen Reisz, MD, University of Missouri, Kansas City; Sarah Pourakbar, MD, University of Missouri, Kansas City, School of Medicine

The pilosebaceous unit utilizes key physiological processes used in whole organism homeostasis. Central centrifugal cicatricial alopecia (CCCA) and Frontal fibrosing alopecia (FFA) appear to be increasing and have epidemiologic features, such as gender, race and biologic targets, that support database study. We combined demographic, body mass index (BMI) and blood pressure readings on 43 women with cicatricial alopecia (n = 22 CCCA, n = 21 FFA) and compared them with an age, race and weight matched control group. Patients with cicatricial alopecia have significantly higher systolic and diastolic blood pressures. The study group had a mean systolic pressure of 134 mm Hg, compared with the control group, with a mean systolic pressure of 118 mm Hg ($P = .002$). Cicatricial patients also had higher mean diastolic pressures, with a mean of 85 mm Hg, compared with the control group mean of 73 mm Hg ($P = .092$). Eleven CCCA patients were taking antihypertensive medication, with a total of seventeen patients with hypertension treated or untreated. Five FFA patients were taking antihypertensive medication, with a total of thirteen patients with hypertension treated or untreated. In comparison, the control group only had eight patients with hypertension, six treated. Women with cicatricial alopecia should undergo assessment of their cardiovascular and metabolic health. Both types of cicatricial alopecia studied were associated with hypertension, and may share similar biologic origins that could be an area of future studies. Further studies on alopecia should also include pregnancy history, as preeclampsia in pregnancy predisposes women towards the development of hypertension later on in life.

Commercial disclosure: None identified.