


Karın Cildi Kırışıklıkları ve Sarkmalarında Fraksiyonel Mikroigne Radyofrekans Uygulamasının Etkinliği: Olgu Sunumu**Efficacy of Fractional Microneedle Radiofrequency Application in Abdominal Wrinkles and Sagging: Case Report**Semih Güder 

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Öz

GİRİŞ VE AMAÇ: Mikroigne radyofrekans, epidermin termal hasar almadığı ve dermiste çevresinde non-koagüle ısıtma zonu ile çevrili koagülasyon alanı oluşturan bir enerji bazlı bir uygulamadır. Bu yazıda karın cildindeki sarkma ve kırışıklıklara uygulanan fraksiyonel mikroigne radyofrekans yönteminin sonuçları bildirilmektedir.

OLGU: 35 yaşında kadın hasta karın cildindeki sarkma ve kırışıklıklar şikâyetiyle başvurdu. Her defasında karın bölgesine anestezi kremi uygulandıktan sonra bir ay aralıklarla toplamda 4 seans fraksiyonel mikroigne radyofrekans uygulaması yapıldı. Her bir uygulamada uygulama alanı 3 defa tarandı. Uygulamalar 49 pin başlıklı yalıtımlı uçlarla yapıldı. Dördüncü uygulamanın sonunda başlangıç ve dördüncü ay fotoğrafları karşılaştırıldı.

BULGULAR: Dördüncü uygulama sonrasında başlangıca göre deri laksitesi ve derin çizgilerde belirgin gerileme izlendi. Tedaviye bağlı geçici eritem dışında herhangi bir yan etki ve komplikasyon görülmedi.

SONUÇ: Fraksiyonel mikroigne radyofrekans yöntemi karın bölgesindeki deri gevşekliği ve deri kırışıklıklarında etkili ve güvenli bir seçenek olabilir. Tedaviden iyi yanıt alabilmek için uygulamaların derin dermis ve subkutan dokuya yapılması önerilir.

Abstract

INTRODUCTION: Microneedle radiofrequency is an energy-based application in which the epidermis does not receive thermal damage and forms a coagulation area surrounded by a non-coagulated heating zone around the dermis. In this article, the results of fractional microneedle radiofrequency method applied to sagging and wrinkles of abdominal skin are reported.

CASE: A 35-year-old female patient presented with abdominal sagging and wrinkles. Each time, after applying anesthetic cream to the abdominal region, a total of 4 sessions of fractional microneedle radiofrequency was applied at intervals of one month. The application area was scanned 3 times in each application. Applications were made with 49-pin insulated inserts. At the end of the fourth application, the first- and fourth-month photographs were compared.

RESULTS: Significant regression was observed in skin laxity and deep lines after the fourth application. No side effects and complications were observed other than temporary erythema.

CONCLUSION: Fractional microneedle radiofrequency method can be an effective and safe option for skin laxity and skin wrinkles in abdominal region. In order to get a good response from the treatment, deep dermis and subcutaneous tissue applications are recommended.

Anahtar Kelimeler: mikroigne radyofrekans, deri laksitesi, stria

Keywords: microneedle radiofrequency, skin laxity, stria

INTRODUCTION

Fractional microneedle radiofrequency method is an energy-based application in which the epidermis does not receive thermal damage and creates a coagulation area surrounded by a non-coagulated heating zone around the dermis (1). Radiofrequency energy causes dermal warming and collagen degeneration, which stimulate

wound healing. Thus, it is effective in the clinical improvement of mild and moderate skin laxity by promoting collagen modification and skin contraction. It has been shown to be safe and effective in the treatment of wrinkles in skin type I - V patients (2). Fractional Microneedle Radiofrequency is also used in the treatment of acne scars and hyperhidrosis (3). Fractional microneedle radiofrequency application is a safe

and with few side effects is planned for our patient. The case was presented because it was thought that a successful result was achieved although the application was monotherapy.

CASE REPORT

A 35-year-old woman presented with sagging and wrinkles on the abdominal skin (Figure 1). There were two pregnancy stories in the patient's history, and it was learned that her complaints occurred within 2 years after the last pregnancy. During the treatment sessions of the patient, there was no history of pregnancy, breastfeeding, drug use, infection at the application site and any previous dermocosmetic application. First, consent form was taken from the patient. After taking photos of the application site, 2.5% lidocaine cream was applied to the application site under occlusion for one hour. Fractional microneedle radiofrequency (MNRF) was applied after wiping the application area with gauze impregnated with 70% alcohol. The device used in the application had adjustable needle tips ranging from 0.5 to 3 mm that transmit 2 MHz bipolar radiofrequency energy to the dermis. Each needle had an uninsulated tip of 0.3mm and an insulated needle body designed to avoid epidermal damage. The treatments were performed 3 times in each session at a depth of 1 mm, 1.5 mm and 2 mm respectively. Applications A total of 4 sessions were performed with 49-pin insulated inserts and one-month intervals. At the end of the fourth application, the first- and fourth-month photographs were compared. Linear lines, point depressions, skin laxity and striae, which were present at the beginning, were scored between 0-3 points (0 = absent, 1 = mild, 2 = moderate, 3 = severe). The initial score of our patient was determined as nine points, 3 for linear lines, 2 for point depressions, 2 for laxity and 2 for striae. After the fourth application total score as 5 points was measured. Linear lines, point depressions and skin laxity were evaluated as 1

point, stria severity as 2 points. (Figure 2). No side effects and complications were observed other than temporary erythema.



Figure 1. Image before treatment



Figure 2. Image after 4 sessions of application

DISCUSSION

Microneedle radiofrequency has been used in the treatment of skin laxity in recent years. It is preferred as a noninvasive treatment for patients because of the short duration of transient side effects after the procedure and the absence of long-term and serious side effects (1). These devices heal the symptoms of sagging by heating the dermis by creating tissue resistance. Unlike laser treatment, it does not require chromophore and can be used safely for any skin type (2). The processing time varies from about 15 to 60 minutes, depending on the device and the application site. Bleeding is rarely observed at the needle entry points and should be wiped with sterile gauze. (3). Microneedle radiofrequency can be used as subcutaneous tissue applications in the treatment of skin laxity that may develop due to weight loss in different parts of the body. Yu et al. Applied 2 sessions of MNRF to their patients and found a reduction of approximately 50% in skin laxity. In their studies, they used Hexseland Dal'Forno Severity Scale of Cellulite and patient observation score to make objective evaluations (4). We also used a scoring method similar to their cellulite scoring, and we found similar rates of reduction in skin laxity, linear lines, point depressions, and stria severity. After 4 sessions of treatment, significant improvement was observed in the loose skin area of the upper and lower umbilicus and static wrinkles on the umbilicus. It has been observed that bipolar RF energy is more effective than monopolar and combined treatments are more effective than single method in the treatment of striae (5).

RESULT

Fractional microneedle radiofrequency method can be an effective and safe option for skin looseness and wrinkles in the abdomen. Although it can be preferred as monotherapy, we recommend combined treatments to increase effectiveness. In order to get a good result from the treatment, it may be recommended to apply

to deep dermis and subcutaneous tissue.

Informed Consent: Written consent was obtained from the participants.

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