# Facial Rejuvenation Treatment with Simultaneous Emission of Synchronized Radiofrequency and Neuromuscular Emissions with the WonderFace Device.

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# **Abstract**

WonderFace is a device designed for non-invasive facial lifting and wrinkle reduction, targeting all layers of the face: skin, connective tissue structure, and facial muscles. This device simultaneously employs Synchronized Radiofrequency and Neuromuscular Emission technologies. It consists of electrodes that attach to the patient's face, covering the frontal, zygomatic, and submaxillary regions.

By heating facial tissue to effective temperatures and specifically stimulating certain facial muscles with Neuromuscular Emissions, a combined effect is achieved that induces textural changes in the skin, smoothing, wrinkle reduction, facial repositioning, and an overall lifting effect. The simultaneous and targeted application of both technologies provides multiple benefits by inducing a synergistic effect.

### Introduction

Facial aging is a continuous process resulting from age-related changes in all structures present in the face: skin, fat, muscle, fascia, and bone. Age-related changes in all facial soft tissues begin at different decades and progress at varying speeds, which differ among individuals of different genders.

Among non-invasive aesthetic procedures, radiofrequency (RF) is considered one of the primary techniques for facial skin treatment. The effect of RF on cutaneous tissue is based on dermal heating, which leads to structural changes within the skin and an overall improvement in skin quality. However, these skin heating procedures focus solely on improving skin quality and texture, but not the overall facial appearance.

Overall facial appearance is not only influenced by skin quality but also by facial volume and the density of underlying structures, including the fascial system, facial ligaments, and facial muscles. Therefore, the degree of facial laxity is a composite effect of all implicated structures, among which facial muscles and their interconnection with the skin play a fundamental role.

The most frequently performed non-surgical treatment to date is the administration of soft tissue fillers, which help restore facial volume. However, soft tissue fillers only attempt to cover the symptoms of aging and do not affect facial muscles, which play a crucial role in natural skin mobility.

Recently, Neuromuscular Emission technology has been introduced to the market to target facial muscles and their connective tissue structures for lifting and tightening of facial contours. This novel technology induces electric fields to selectively contract facial muscles. These delicate facial muscles are crucial for supporting facial soft tissues and play a structural role in a more youthful appearance.

WonderFace is the first device on the market to utilize the simultaneous application of Synchronized RF and Neuromuscular Emissions for non-invasive facial lifting and wrinkle reduction. During each treatment, energy is applied to the facial soft tissues, inducing muscular contractions. The Neuromuscular Emission technology induces up to 1500 energy pulses per second, with frequencies ranging from 1 to 350 Hz, which prevents facial muscles from relaxing between individual signals.

# **Objective of This Article**

This article aims to share the results regarding the safety and efficacy of the new facial radiofrequency technology combined with neuromuscular stimulation for treating wrinkles through the remodeling of facial tissue using WonderFace technology.

# Method

A. Over the course of one month, we performed facial rejuvenation treatments with simultaneous emission of synchronized radiofrequency and neuromuscular emissions on the following individuals:

Number of participants: 85 people

• Women: 84

• Men: 1

Average age: Between 50 and 70 years

B. All treatments took into account the following contraindications:

- Not pregnant or breastfeeding
- Not underage
- No diseases of any kind
- Not epileptic
- Not recently operated on
- No internal electrical devices such as pacemakers
- No skin diseases, dermatitis, inflammations, or irritation
- C. Skin phototypes ranged between I and V.
- D. All individuals received 4 sessions over the month, with a frequency of one session per week.
- E. All were treated exclusively with the Lifting program, which emits neuromuscular signals at a fixed frequency of 250 Hz.

- F. The neuromuscular emission intensity varied between 25 and 35 points out of a maximum of 50.
- G. Based on the professional's assessment and the subjects, who had before and after photos taken, an improvement was observed that can be represented as follows:
- H. After 4 sessions, once a week:
  - 30% of users experienced a 10% improvement in skin and overall facial condition.
  - 40% of users experienced a 20% improvement in skin and overall facial condition.
  - 30% of users experienced a 30% improvement in skin and overall facial condition.
- I. Therapy comfort and subject satisfaction were also evaluated, with participants reporting no pain or discomfort of any kind, and describing the treatment as pleasant and comfortable.

# Conclusion

According to the professional assessment of the treatment providers and the treated patients, we can state that the average improvement in this group of 85 individuals was 20% after one month of treatment with a weekly session using the lifting program.

No severe adverse effects were reported, with the only side effect being mild to moderate redness that disappeared within 15 to 30 minutes maximum.

Based on our experience, we believe that the WonderFace device is an effective and safe tool for achieving satisfactory results in non-invasive facial rejuvenation treatments.

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