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Commercial and Clinical Aspects of HIFEM and Synchronized RF Devices used at Dermatology, Plastic Surgery, and Body Shaping Aesthetic Medicine Practices: A Brief Overview

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Abstract

Background: Aesthetic medicine practices continually seek innovative and effective treatments to remain competitive and satisfy the diverse needs of their clientele. Emsculpt Neo, a groundbreaking device combining Radiofrequency (RF) heating and High-Intensity Focused Electromagnetic (HIFEM) technology, has gained significant attention due to its capacity to address multiple treatment objectives while ensuring patient safety and satisfaction. Emsculpt Neo is a non-invasive body contouring device that has emerged as a promising solution to optimize aesthetic medicine practices.

Objective: This analysis aims to inform on the Emsculpt Neo device user and how it enhances their practice and patient satisfaction.

Methods: Three diverse aesthetic medical practices were followed over a two-year period from the time of acquiring the Emsculpt Neo device. The clinics were surveyed to explore the clinical and commercial experience across different geographical regions and clinical specializations. The commonality of the treatment areas, patient demographics and other trends in the clinical practices were analyzed.

Findings: The review explicated the factors contributing to Emsculpt Neo device appeal, including its ability to attract a higher patient volume, treat multiple body areas, offer alternatives to conventional body-contouring therapy and the robust clinical evidence supporting the efficacy and safety of this device which simultaneously combines HIFEM and synchronized radiofrequency. Upgrading to the Emsculpt Neo device presents an advantageous opportunity for aesthetic medicine practitioners to augment their service offerings, attract a diverse patient base and stay ahead of industry trends.

Conclusions: With its multifaceted treatment capabilities, personalized options and strong clinical backing, Emsculpt Neo represents a strategic investment in the future growth and success of aesthetic medical practices.

Keywords: Muscle toning; Non-invasive; Fat reduction; Body sculpting; HIFEM; RF; Body shaping

Introduction

The demand for non-invasive body contouring treatments has risen dramatically in recent years, with patients seeking alternatives to traditional surgical procedures [1-3]. Wellness (med spa) and aesthetic medical clinics have grown in popularity over the years, catering to the increasing demand for non-invasive and minimally invasive cosmetic procedures. These clinics typically provide a wide range of services, including skin treatments, body contouring and anti-aging treatments. Women still account for the majority of clients (approximately 85%-90%), with men making up the remaining 10%-15%. HIFEM-based devices, such as Emsculpt and Emsculpt Neo, have emerged as popular options, offering non-invasive muscle toning and fat reduction with minimal downtime [4-6].

Emsculpt and Emsculpt Neo are HIFEM devices-based designed to deliver electromagnetic energy to target muscles, promoting contractions that lead to muscle growth and fat reduction. Both devices have been clinically proven effective and safe for non-invasive body contouring [7]. The benefits are muscle toning and strengthening in the treated area. Emsculpt Neo has the added advantage of synchronized Radiofrequency (RF) technology, which increases fat reduction. Utilizing High-Intensity Focused Electromagnetic (HIFEM) technology and Radiofrequency (RF) heating, this innovative device targets both muscle and fat, offering optimal results for patients [8,9]. Emsculpt Neo comes with gentle and advanced treatment protocols, which are discussed here in. Both gentle and advanced treatment protocols with the Emsculpt Neo device have their unique advantages, catering to different patient needs and preferences [10-12].

This paper aims to retrospectively analyze three distinct aesthetic medical practices and review the impact of incorporating the Emsculpt Neo device into their portfolio. Moreover, several aspects focused on practitioner experience, commercial performance, and other practical elements/factors following implementation will provide valuable insights to

inform future developments in various clinical aesthetic medicine specialties.

Materials and Methods

Three diverse practices with different specialties (dermatology, plastic surgery and medical spa), located in three different regions across the USA (West Coast, Central region, and East Coast) and that owned Emsculpt Neo device for over a period of approximately 2 years were shortlisted for the evaluation of the device performance in these practices. The patient demographics are described according to the number of treatments related to the patients' age, gender and treatment area that the Emsculpt Neo device can address. A summary of the main benefits of adding Emsculpt Neo to the clinic's service offerings is also provided.

To conduct a robust analysis, the three distinct aesthetic medicine practices -a plastic surgery, a medical spa and a dermatology clinic-were selected based on various criteria aimed at reducing potential biases and ensuring a comprehensive understanding of the device's performance across various settings. The practices encompass distinct areas of specialization within the aesthetic medical field, enabling analysis of the adoption and use of the Emsculpt Neo device across different practice types and providing a more comprehensive understanding of the device's impact on various medical professionals and their patients.

A two-year approximate evaluation period of 28 months was employed to ensure the reliability of the findings. This time frame filtered out any seasonal trends or confirmed their presence, thereby ensuring the results reflect a stable and accurate representation of the Emsculpt Neo device's performance in the selected practices.

A minimum threshold for the number of treatments performed at each site to ensure that our data represent a sufficient and representative sample was established (500 treatments). Moreover, the clinical sites consented to sharing and publicizing their data from the selected time period. Requiring a certain number of treatments enabled confident assessment of the device's efficacy and popularity while mitigating the risk of drawing conclusions based on small or unrepresentative samples. The stability of the selected practices during the evaluation period was considered, and those that experienced significant disruptions were excluded. By incorporating data from diverse geographical areas, we can better understand the broad applicability and appeal of the Emsculpt Neo device across different populations.

Results

The practices had performed a sufficient number of treatments and are located in different geographic regions, to account for any demographic differences that may in luence the demand for and outcomes of Emsculpt Neo treatments.

Notably, of the Emsculpt Neo therapies, abdominal treatments include the frontal abdomen and lateral abdomen treatments while leg treatments include the front (anterior), back (posterior), inner (medial) and outer (lateral) thigh and calf treatments.

Dermatology clinic

The dermatology clinic (Behr Laser & Skin Care Center, Fresno, California) [13] purchased the device in November 2020. It was surveyed over 28 months, during which 3086 treatments, with an average of 110 treatments per month, were performed. The majority of Emsculpt Neo patients at this clinic were female (91.4%). Abdominal treatments accounted for two-thirds of the overall treatments (65.7%). Most patients (64.9%) fell in the age group 40-49 years old.

Plastic surgery practice

At the facial plastic surgery clinic (Adair Blackledge, Jackson, Mississippi) [14] the device was acquired in November 2020 and surveyed for 28 months. This practice performed 2222 treatments with an average of 79 treatments per month. The majority of Emsculpt Neo patients at this clinic were female (95.7%). Abdominal treatments accounted for nearly half of all the body areas treated (47.7%). Most of the patients (44.5%) were in the age group 50 - 59 years old.

Med spa

The medical spa (Slim studio, Atlanta, Georgia) [15] purchased the device in December 2020 and was surveyed over 28 months. There were 2854 treatments performed (102 monthly average). The majority of Emsculpt Neo patients at this clinic were female (79.9%). Abdominal treatments accounted for the majority (60.22%) of all performed treatments. Most of the patients (44.5%) were in the age group 30-39 years old.

In-depth results of the patients who received Emsculpt Neo treatments at these practices can be found in **Figures 1-3** showing the patient distribution by gender, age and treatment area **(Table 1)**.

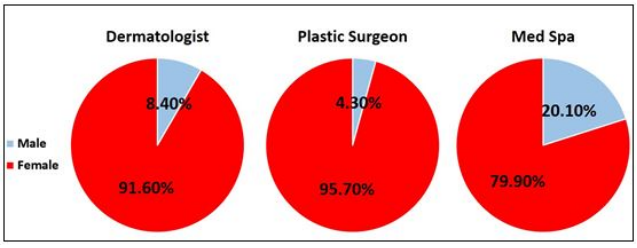

Figure 1: The gender distribution of patients who received Emsculpt Neo treatments at all three practices was similar, with women making up a greater majority of the patients. The med spa clinic saw a higher proportion of male patients.

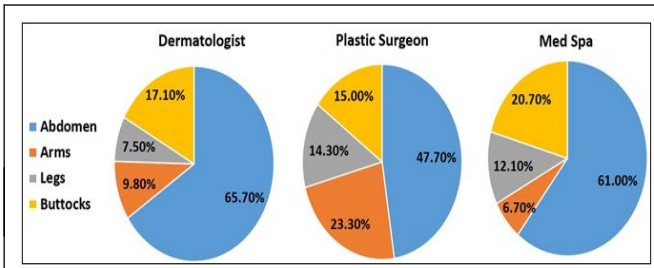

Figure 2: Across all three sites, the prevailing Emsculpt Neo treatments were done on the abdomen, followed by the buttocks.

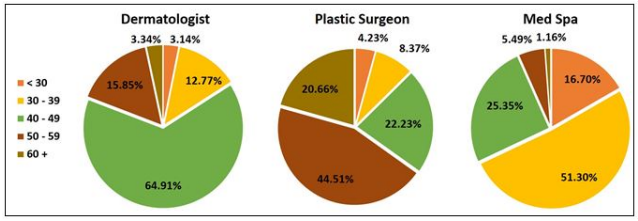

Figure 3: At the plastic surgery clinic, most of the Emsculpt Neo patients were 50-59 years old, whereas, at the dermatology clinic, the majority of patients were 40-49 years old. At the medical spa, the clientele was mostly aged between 30-39 years.

Table 1: Treatment areas indicated for Emsculpt Neo therapy.

Treatment area	Clinical effect and benefits of Emsculpt Neo treatment
Abdomen (frontal and lateral) [5, 16, 17]	•Strengthen and tone core
	•Improve muscle definition
	•Reduce fat
	•Treat abdominal separation
	•Sculpt and tone appearance
Buttocks [18]	•Lifting and toning the gluteal muscles
	•Firmer buttocks and a more defined shape
Thighs (medial, lateral, anterior and posterior) [19, 20]	•Reduce fat and improve muscle tone
	•Create a more sculpted and streamlined appearance
Arms [21]	•Increase muscle definition
	•Reduce upper arm fat
	•Tone and define arm appearance
Calves [22]	•Improve muscle tone
	•Provide a more sculpted appearance

Discussion

This review interrogated three different aesthetic medical practices offering non-invasive body shaping treatments, specifically focusing on the role of the Emsculpt Neo device, utilizing synchronized RF and simultaneous HIFEM, in the clinic. The majority of all Emsculpt Neo patients at each of the clinics were female and the abdomen was the most popular. Incorporating data from diverse geographical areas elucidates the broad applicability and appeal of the Emsculpt Neo device across different populations. Previous evaluations of the HIFEM-based devices demonstrated the safety profile, high treatment efficacy, favorable patient satisfaction and the important element of business growth as the treatment procedure immensely attracted more patients [23].

Clients who visit the clinic for Emsculpt Neo treatments are more likely to explore and invest in additional services, such as skin care treatments leading to increased overall revenue. The clinic's association with innovative treatment devices such as Emsculpt Neo boosts its reputation, attracting a more diverse clientele. A report detailing medical spa treatments showed that women comprise 88% of med spa treatments [3]. In this review, the medical spa had 79% female clients. A larger share of male customers points out an advantage of having Emsculpt Neo in a practice to attract a more diverse clientele. The American Society of Plastic Surgeons report [20,21] stated that female cosmetic procedures made up 92%, with the age group 40-54 years old being the majority (45%), similar to the results of the dermatologist (77%) and plastic surgeon (67%) practices in this review. A digital survey conducted in 2021 highlighted that 47% of consumers were considering undergoing body sculpting treatments [26]. Moreover, the demographic interested in cosmetic and surgical procedures seem to be shifting as well, with the younger population, including millennials, especially in the United States [27]. Males are also beginning to receive more tailored attention with respect to body sculpting [28].

The financial benefits have been significant and attracted a wider client base seeking effective, non-surgical solutions for body sculpting and muscle toning. According to the estimated Minimum Advertising Price (MAP) of the treatment packages

and sets, each of the practices was able to recuperate their purchase expense within 4 months. By offering a wide range of treatment areas (up to ten), Emsculpt Neo is a highly versatile device that can cater to patients' diverse body contouring needs and goals see **Table 1** above [29,30]. The selection of these three aesthetic medicine practices, with distinct specializations, was guided by a focus on reducing biases, ensuring data validity and providing a comprehensive view of the Emsculpt Neo device's performance and appeal across various settings.

The number of treatments a practice can perform with the Emsculpt Neo device per month varies depending on the treatment duration, operating hours and equipment availability. Optimal scheduling and full utilization of the device must, nonetheless, account for client demand and staff availability which may affect the actual number of monthly treatments [31]. Seasonal trends tend to follow patterns related to social events, weather, and personal goals. As the summer season approaches, many clients aim to achieve the ideal appearance, leading to an increased demand for body contouring treatments during the late spring and early summer months. After the holiday season, clients often seek body contouring treatments to help them return to their pre-holiday weight or shape. Post-Holiday season (January and February) typically saw an uptick in demand as people set new fitness goals or resolutions to improve their appearance. In preparation for the holiday season (during late autumn), clients may undergo body contouring treatments to improve their appearance before attending social events and gatherings [32-36]. These seasonal trends can be leveraged by med spa's and aesthetic clinics to optimize their marketing strategies, target specific client segments and ensure they have adequate resources to meet the varying demand for body contouring treatments throughout the year [32].

Emsculpt Neo is a unique non-invasive body contouring device ingeniously combining RF and HIFEM therapy -into a single treatment modality. This groundbreaking integration allows for simultaneous fat reduction and muscle toning. The Emsculpt Neo device offers two distinct treatment settings -gentle and advanced preset. The advanced preset maximizes the potential of the Emsculpt Neo device by improving local fat reduction and muscle strengthening (RF-assisted lipolysis combined with muscle-driven consumption of adipocytes). The gentle preset is mainly focused on muscle strengthening. Ultimately, the two treatment options depend on a patient's needs and goals. By understanding the benefits of each, healthcare providers can ensure their patients receive the most effective and personalized treatment possible. By harnessing the synergistic effects of RF and HIFEM technologies [36], Emsculpt Neo addresses a wider spectrum of concerns and delivers more comprehensive and effective results. Patients have a safe and customizable solution for body contouring.

Incorporating Emsculpt Neo into the clinical practice has several key financial benefits. Emsculpt Neo treatments come with higher price points, positively impacting the clinics bottom line and resulting in increased revenue. The cutting-edge technology attracts new clients seeking these specialized treatments. Furthermore, existing clients who may have otherwise sought these services elsewhere can now access them at the clinic, leading to improved client retention rates. Offering Emsculpt Neo has given the clinic a competitive advantage over other practices in the region, enabling it to stand out in a congested market [37-43].

Conclusion

Emsculpt Neo offers a rapid return on investment for aesthetic clinics, be it plastic surgeons, dermatologists or medical spas. The growing demand for non-invasive body contouring treatments, combined with the proven effectiveness of these devices, positions them as valuable additions to any practice seeking to expand their services and maximize financial returns. Emsculpt Neo's added advantage of simultaneous HIFEM and RF technology provides an edge in overall client satisfaction and financial performance.

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