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Contents

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Journal article - online* *if there is no DOI, provide the URL for the specific article	Coppinger T, Jeanes YM, Hardwick J, Reeves S. Body mass, frequency of eating and breakfast consumption in 9-13- year-olds. *J Hum Nutr Diet.* 2012; 25(1): 43-49. **doi: 10.1111/j.1365-277X.2011.01184.x**
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Newspaper article - online	Pollack A. FDA approves new cystic fibrosis drug. *New York Times.* January 31, 2012. http://www.nytimes.com/2012/02/01/business/fda-approves-cystic-fibrosis-drug.html?ref=health Accessed February 1, 2012.
Websites	Outbreak notice: Cholera in Haiti. Centers for Disease Control and Prevention Web site. https://www.cdc.gov Published October 22, 2010. Updated January 9, 2012. Accessed February 1, 2012.
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Book chapter - in print	Solensky R. Drug allergy: desensitization and treatment of reactions to antibiotics and aspirin. In: Lockey P, ed. *Allergens and Allergen Immunotherapy.* 3rd ed. New York, NY: Marcel Dekker; 2004:585-606.

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1. Zoellner J, Krzeski E, Harden S, Cook E, Allen K, Estabrooks PA. Qualitative application of the theory of planned behavior to understand beverage consumption behaviors among adults. J Acad Nutr Diet. 2012;112(11):1774-1784. doi: 10.1016/j.jand.2012.06.368.

In-Text Citation Example

LARGE INCREASES IN AMERICANS' CONSUMPTION OF sugar-sweetened beverages (SSB) have been a topic of concern. Between 1977 and 2002, the intake of "caloric" beverages doubled in the United States, with most recent data showing that children and adults in the United States consume about 172 and 175 kcal daily, respectively, from SSB,[1] it is estimated that SSB account for about 10% of total energy intake in adults[2,3]. High intake of SSB has....

References Section Example

References

1. Duffey KJ. Popkin BM. Shifts in patterns and consumptions of beverages between 1965 and 2002. *Obesity.* 2007:15(11):2739-2747.
2. Nielsen SJ. Popkin BM. Changes in beverage intake between 1977 and 2001. *Am J Prev Med.* 2004;27(3):205-210.
3. Drewnowski A. Bellisle F. Liquid calories, sugar, and body weight. *Am J Clin Nutr.* 2007;85(3):651-661.

Use commas to separate multiple citation numbers in text, like you see between references 2 and 3. Unpublished works and personal communications should be cited in the text (and not on the reference list).1 Superscript numbers are placed outside periods and commas, and inside colons and semicolons. When citing the same source more than once, give the number of the original reference, then include the page number (in parentheses) where the information was found. See pages 41-44 of the AMA Manual of Style for more information.

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aesthetic medicine

Original Article

Activity of Viscoderm 0.8 on deep and superficial hydration, on microrelief and on telangectasia of face and decolleté

Adele Sparavigna[1], Danilo Musella[2], Laura Bombelli[2], Gilberto Bellia[2]

[1]Derming s.r.l., Clinical Reserch and Bioengineering Institute- Milano, Italy
[2]Ibsa Farmaceutici Italia s.r.l.- Lodi, Italy

Short title: Viscoderm® 0.8 activity in healthy volunteers

Abstract

Background: ageing and environmental factors are known to induce changes in the way the skin looks and its composition, which are elements that can negatively impact one's ability to appreciate their looks.
Aim: this observational study aimed at evaluating the efficacy of a linear hyaluronic acid containing filler (Viscoderm 0.8) on hydration and microrelief of the face and décolleté of healthy volunteers.
Method: thirty healthy subjects, adhering to the inclusion criteria, were enrolled and received three injections of the studied medical device. Right after the procedure, and after 28 days, instrumental evaluations were performed to assess hydration, texture and the telangiectasia of the skin. Furthermore, a clinical evaluation using well defined scales as well as a self-evaluation of the product's applications was performed.
Results: the use of the studied medical device significantly ameliorates the skin's hydration and brightness in the volunteers. The product was also positively judged by the Investigator and the subjects themselves.
Conclusions: the injection of the studied medical device was proven active by instrumental and clinical evaluations without undesired effects.

Keywords

Hyaluronan, hydration, face, medical device

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Introduction

Hyaluronic acid (HA) is well recognized as a powerful tool to ameliorate changes in the way our skin looks and its composition, due to ageing and environmental factors[1-6]. It is well known, in fact, that both ageing and continuous exposition to environmental factors affect the skin's composition and change the appearance of the body, particularly of the areas mostly exposed such as the face[7-13].
Aesthetic procedures aimed at ameliorating these aspects are increasingly gaining attention, allowing not only for a more harmonious look, but subsequently an increasing self-esteem, favoring interrelationships and in turn increasing one's quality of life. HA is particularly favorable for its own properties (low antigenicity), its abundancy in the human body, and for its favorable therapeutic index[1,2,14].
Different formulations and composition of HA are available, with some having advantages in terms of activity and safety over a more classical HA. Injectable HA formulations, are especially safe and effective in at least partially restoring the skin's brightness, elasticity, and in reducing wrinkles in different areas of the body, including face, décolleté and arms[15-22].

Materials and methods

This was an open, observational, controlled clinical trial, evaluating the efficacy of micro-injections of Viscoderm 0.8 (IBSA Farmaceutici Italia s.r.l.) on the face (cheek) and décolleté.
The study was conducted on 30 healthy females, ranging in age from 30 to 46 years (mean 38 years). All participants received and signed an informed consent. A final version of the study protocol and appendices has been approved by an independent Ethic Committee on the 26th of April, 2021 (Study Number E0121).
The study was planned with three injections, one performed during the first visit (T0, in which both a clinical and instrumental evaluation were performed), the second after 7 days (T7) and the third after an additional 7 days (T14).
At the 28th day (T28), one week after the last injection, there was the final visit with a clinical and instrumental evaluation.
The treatment consisted of a series of intradermal micro-injections, performed at a defined distance (1-2 cm) one from each other in the face (cheek) and décolleté, using a half syringe (0.5 ml) for each hemiface (cheeks) and one syringe (1.0 ml) for the décolleté by using a retrograde linear technique every session.
The main areas of application of Viscoderm 0,8 are showed in *figure 1*. In this area we manage different injections depending on the patient's skin surface status.

Clinical evaluation

The clinical evaluation was performed at basal visit, (T0) and after 28 days (T28). The grade of surface microrelief regularity has been determined following a specific reference photographic scale then linked to the clinical scores as outlined in *table 1*.
The level of telangiectasia was determined according to a specific reference clinical scale and to the four clinical scores: 0 (very homogeneous, no telangiectasia), 1 some telangiectasia, 2 numerous telangiectasia and 3 very numerous telangiectasia.

Instrumental evaluation

All the instrumental evaluations were performed in parallel to the clinical one at T0 and T28.

Hydration (skin electrical capacitance)

In order to obtain this specific measurement, the Corneometer CM825 (Courage – Khazaka, Köln, Germany) was used. It consists of a square sensor (49mm2) frontally covered by a special glass, mounted

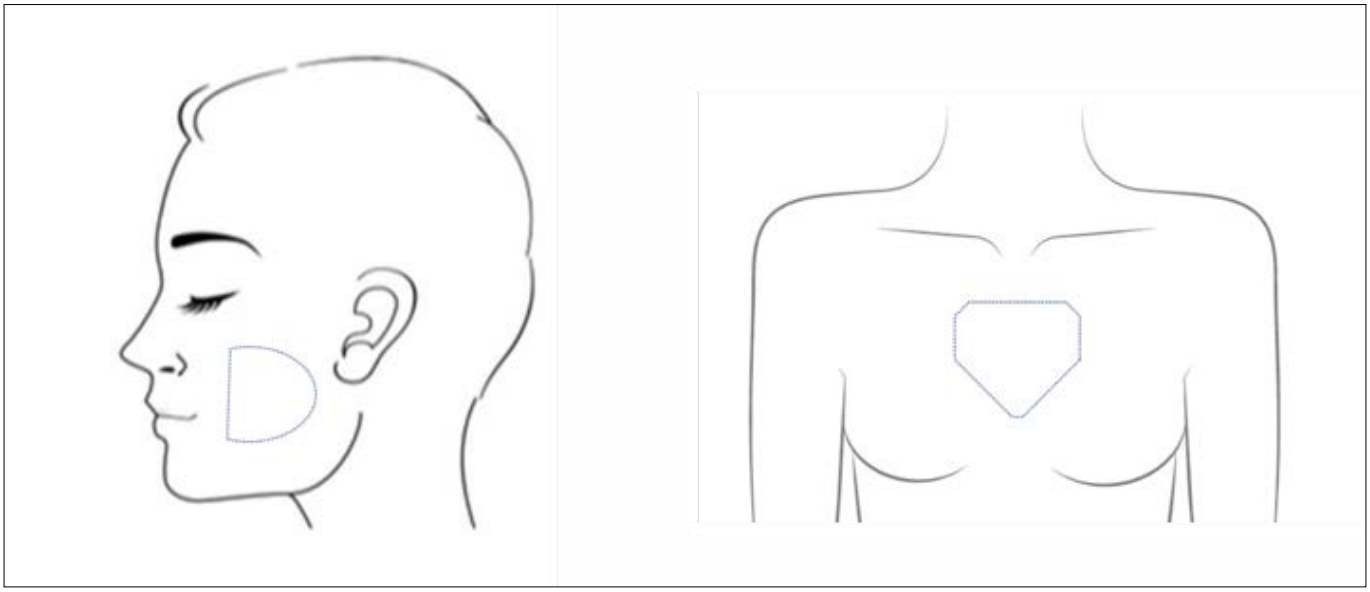


Figure 1 *- Areas of application of intradermal micro-injections on face (cheek) (left) and décolleté (right).*

score		Clinical definition
1	Very regular	The primary lines present all the same depth. The secondary lines are well demarcated and form star like picture (apexes converge of several triangles)
2	Regular	Hiding and loss of secondary lines demarcation. Star-like pictures are still present but with less demarcated secondary lines
3	Irregular	Primary lines irregularity. Strong hiding of lines with low presence of star-like pictures
4	Very irregular	Strong deterioration in the skin. Deep primary lines distorsion and loss of secondary lines.

Table 1 *- Clinical score for the surface regularity.*

on a spring cursor able to measure the electrical capacity. The sensor acts as a capacitor and, when a voltage is applied to this capacitor, the quantity of electric charge stored depends on the dielectric properties of the material in contact with the probe.
Water has an unusually high dielectric constant and so its presence in the skin (i.e a measure of its hydration level) is detectable by this method. To reduce the variability of measurement methods, for each volunteer, three measures on the same skin area were performed and a mean value was recorded. All measurements were performed under standard environmental conditions (Temperature=22+\-2°C; Relative Humidity<60%) and carried out at the medical clinic. Before each visit the volunteers were acclimatized under relaxed conditions for at least 10-15 min.

Tissue dielectric constant of superficial and deep skin layers

The dielectric constant of the skin as well as of the subcutaneous fat (a measure that is directly proportional to the water content) was non-invasively determined using a MoistureMeterD. The instrument generates a high frequency, low power electromagnetic (EM) wave to the region of interest. The reflected EM wave is then recorded. The measured value increases when the water content increases. The measurement depth can be determined by using differently sized probes.

Optical colorimetry

The measurement of the skin's brightness was performed by using a tristimulus colorimeter, (Chroma Meter CR-200®) equipped with three special filters to obtain R,G,B values in accordance with CIE (Commission Internationale de l'Eclairage), the major international organization dealing with color and color measurement. It describes all the colours visible to the human eye; the three coordinates of L*a*b* which represent the brightness of the color (L* = 0 yields black and L* = 100 indicates diffuse white; specular white may be higher), its position between red/magenta and green (a*, negative values indicate green while positive values indicate magenta) and its position between yellow and blue (b*, negative values indicate blue and positive values indicate yellow). The analysis of three different colors yields an Erythema index that is related to skin brightness.

Volunteers' self-evaluation of efficacy

At day T 28 the volunteers were asked to fill a questionnaire in which they had to judge the efficacy of the treatment relative to superficial and deep wrinkles, skin suppleness, brightness, smoothness and hydration, and the face silhouette. The subjects were also asked to report on the product's tolerance, highlighting any eventual adverse event/reaction resulting from the injections.

Statistical analysis

For the instrumental data, the values obtained at T28 were compared to those at T0 by a non-parametric test (Wilcoxon test) when: the normality hypothesis was rejected by the Shapiro-Wilk normality test (threshold at 5%), or when the normality hypothesis was confirmed by the parametric test (Paired t test).
For clinical data, the comparison between T28 and T0 was performed by a non-parametric test (Wilcoxon test).

Results

All the 30 subjects included in the trial concluded the study with no dropouts. The data from the clinical evaluation showed that the three injections of the medical device did not induce any significant visible changes in the skin's microrelief and visual redness in any subject, and this resulted in a superimposable mean clinical score value at T0 (2.07) and T28 (2.07). A trend, not statistically significant, was observed for telangiectasia, with a reduction of 1 clinical score in 3 out of 30 subjects. The mean values for the telangiectasia clinical score were 2.1 and 2.0 at T0 and T28, respectively (*Figure 2*).

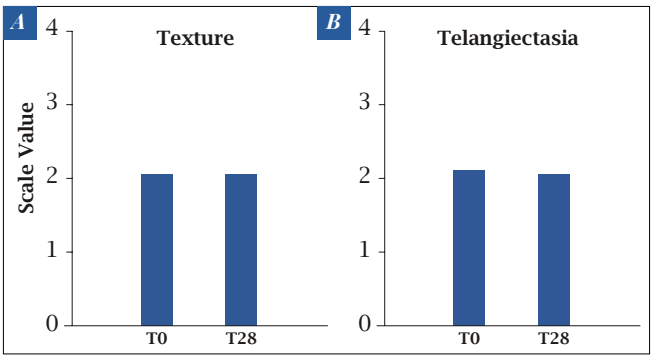


Figure 2 *- Clinical evaluation of texture (Panel A) and telangiectasia (Panel B) in the 30 subjects examined at T0 and T28. Texture was assessed using the Beagley Gibson Scale (1= Very regular, 2= Regular, 3= Irregular and 4 = Very irregular). For telangiectasia the scale included 1 = very homogeneous, 2= Some telangiectasia, 3= Numerous and 4 = Erythrosis. Values are reported as Mean and SD.*

A statistically significant reduction in the erythema index was determined by the instrumental measurement between T28 and T0 (*Figure 3*).

ERYTHEMA INDEX
OPTICAL DENSITOMETER

CYAN		MAGENTA		YELLOW		ERYTHEMA INDEX	
T0	T28	T0	T28	T0	T28	T0	T28
3,03	2,69	2,6	2,49	3,33	2,35	-0,43	-0,2
2,76	2,73	2,73	2,43	2,49	2,29	-0,03	-0,3
1,1	1,15	1,17	1,1	1,9	1,3	0,07	-0,05
2,86	2,69	3,3	2,6	2,78	2,4	0,44	-0,09
2,47	2,58	2,5	2,5	0,38	0,3	0,03	-0,08
0,33	0,32	1,3	1,3	1,77	1,9	0,97	0,96
2,62	2,31	0,44	0,4	1,13	0,2	-2,18	-1,91
2,71	2,74	1,3	1,3	0,58	1	-1,41	-1,44
2,76	2,9	2,07	0,57	0,62	0,58	-0,69	-2,33
2,62	2,8	0,44	0,9	0,66	0,1	-2,18	-1,9
2,01	2,81	2,89	2,71	2,78	2,48	0,88	-0,1
2,9	2,86	2,7	2,72	0,77	0,5	-0,2	-0,14
2,69	2,32	3,63	2,42	2,83	2,4	0,94	0,1
0,25	0,19	0,71	0,15	0,2	0,1	0,46	-0,04
2,62	3,06	2,46	2,34	0,77	0,51	-0,16	-0,72
2,8	2,78	2,5	2,2	0,58	0,7	-0,3	-0,58
0,74	0,58	0,44	0,06	0,77	0,8	-0,3	-0,52
0,96	1,1	2,5	1,63	0,25	0,58	1,54	0,53
3,24	3,3	3,19	2,8	0,65	2,7	-0,05	-0,5
0,4	0,6	0,43	1,03	0,44	0,44	0,03	0,43
2,8	2,8	2,63	2,5	2,5	2,7	-0,17	-0,3
2,73	2,8	2,81	2,65	2,5	2,5	0,08	-0,15
2,32	2,6	2,11	2	1,79	1,9	-0,21	-0,6
0,1	0,1	2,13	2,11	0,96	0,98	2,03	2,01
3,01	3,2	3	2,98	2,45	2,55	-0,01	-0,22
0,67	0,8	0,5	0,5	0,37	0,4	-0,17	-0,3
2,55	2,8	2,93	2,69	2,88	2,76	0,38	-0,11
2,45	2,5	2,17	2,68	1,95	2,48	-0,28	0,18
2,72	2,65	3	2,74	2,16	2,87	0,28	0,09
2,86	2,3	2,71	2,23	2,56	1,74	-0,15	-0,07
2,14	2,17	2,11	1,89	1,53	1,48	-0,03	-0,28
2,14	2,17	2,11	1,89	1,53	1,48	-0,03	-0,28
0,98	0,99	0,97	0,89	0,98	0,97	0,86	0,82
3,24	3,30	3,63	2,98	3,33	2,87	2,03	2,01
0,10	0,10	0,43	0,06	0,20	0,10	-2,18	-2,33

MEAN
ST.DEV.
MAX
MIN

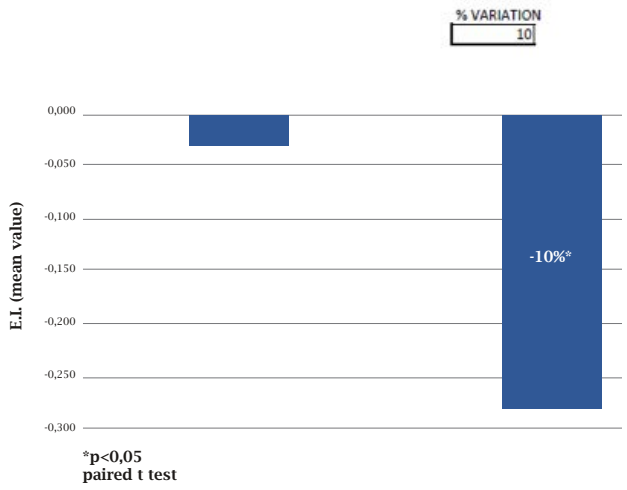
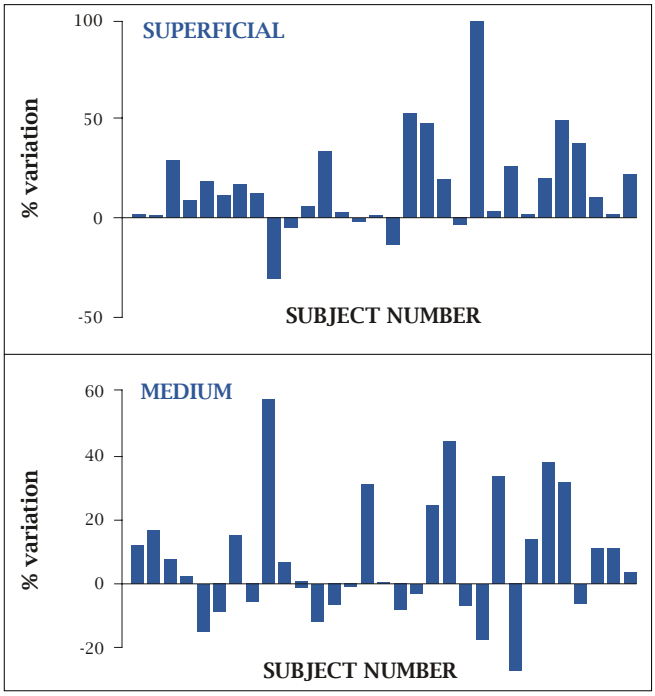


Figure 3 *- Instrumental evaluation of erythema index by optical densitometry determined at T0 and T28. * p <0.05 vs T0.*

Overall, the reduction reached 10% at T28 (p <0.01, T28 vs T0). Importantly, the benefit was achieved in 25 out 30 subjects. Similarly, an improvement in skin hydration was detected, either at a more superficial or deeper skin level (*Figure 4*). For the superficial hydration of the skin, there was a 12% improvement at T28 compared to T0, while for deep hydration the improvement was of 6%. In both cases, the differences between T28 and T0 were statistically significant. The single volunteers' changes in skin hydration are reported in *Supplementary Figure 1*.



Supplementary Figure 1 *- Single subject changes induced by Viscoderm 0.8 on skin hydration. Upper Panel reports the superficial skin level while the lower panel shows the determination performed at deeper level. The data are reported as % variation at T28 relative to T0.*

As can be seen in most subjects, a parallel increase in the dielectric constant was determined in superficial and deep skin, and in some cases a clear strong amelioration was detected and appreciated in some but not in other skin components. Nevertheless, as the increment was quite high in these cases, the sum of the superficial and deep skin hydration resulted positive anyways.
The results of the self-evaluation performed by the volunteers at day T28 are reported in *Table 2*.
The responses, probably due to the increased value of hydration, were highly positive and clearly indicated an amelioration of the skin's look, and a reduction in visible capillaries relative to the baseline. Especially the skin's response showed higher luminosity and revitalization, which were particularly high with 100% and 95% of positivity, respectively. The same holds true for the reduction in visible capillaries, that was confirmed by 70% of the volunteers (and the remaining 30% were neutral), further confirming the volunteers' positive judgement.

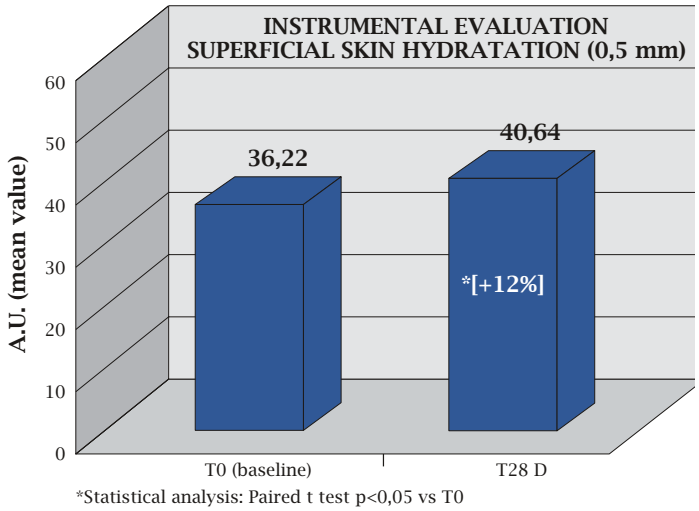
	% OF SUBJECTS				
	disagree	rather disagree	neither agree nor disagree	rather agree	agree
skin is revitalized	0	0	5	45	50
skin more luminous	0	0	0	27	73
capillaries are less visible	0	0	30	55	15

Table 2 *- Self evaluation by volunteers performed at day 28.*

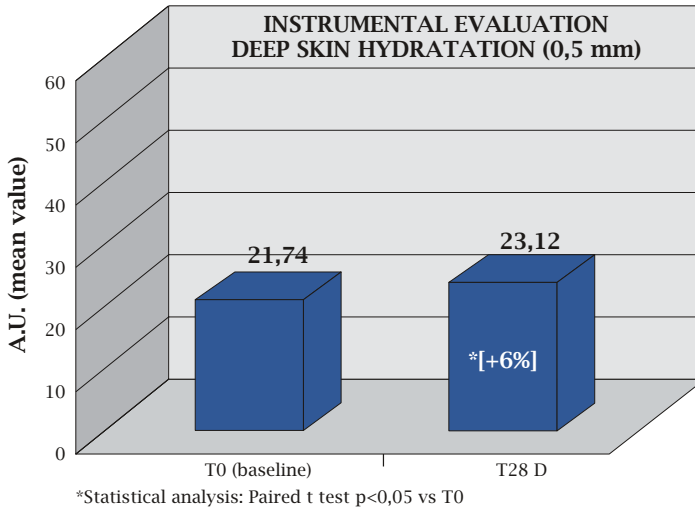
TISSUE DIELECTRIC CONSTANT (HYDRATION)
MOISTUREMETER

	SUPERFICIAL		MEDIUM DERMIS	
	T0	T28	T0	T28
	44	45	24	27
	14,9	15	17,3	20,3
	39,4	51	19,8	21,4
	46	50,2	24	24,6
	43	51,1	24,1	20,5
	39,5	44	21,4	19,5
	32	37,5	19	22
	43,9	49,5	25,1	23,7
	49	33,9	13,6	21,7
	42	40	24	25,7
	44,3	46,9	22	22
	30,8	41,3	25,1	22,1
	41,9	43,3	23,1	21,6
	39,9	39,6	14,2	18,8
	41,9	42,3	24,3	24,5
	49,6	43	26,7	24,5
	24,4	37,5	25,4	24,7
	25	37,1	20	25,1
	35,3	42,3	16,5	24,1
	41,5	40	23,4	21,8
	16,5	33,4	24,4	20,1
	26,6	27,5	20,1	27,1
	28,3	35,8	23,4	16,9
	47,6	48,5	17,7	20,3
	38,1	45,8	23,2	32,3
	28,6	42,8	20	26,6
	24,5	33,9	24,4	22,9
	40,6	45	20,4	22,8
	33,3	34	22,1	24,7
	34,3	41,9	23,5	24,4
MEAN	36,22	40,64	21,74	23,12
ST.DEV.	9,29	7,57	3,34	3,03
MAX	49,6	51,1	26,7	32,3
MIN	14,9	15	13,6	16,9

% VARIATION	
SUP.	DEEP
12	6



*Statistical analysis: Paired t test p<0,05 vs T0



*Statistical analysis: Paired t test p<0,05 vs T0

Figure 4 *- Instrumental evaluation of skin hydration at superficial (left panel) or deep (right panel) level. Hydration was determined at T0 and T28.*

Discussion

The present observational study confirms in general the positive effects of the medical device studied in ameliorating the skin's look and reinforcing its use in the treatment of skin defects in different body areas. The medical device showed a significant improvement for skin hydration, both superficial and deep, thus reflecting the moisturizing activity of the product. More importantly, the clinical and instrumental activities have been confirmed by the self-judgement of the subjects. Most of the subjects agreed in defining their skin as more luminous and revitalized, which reflected in their satisfaction with the treatment. Seventy percent of the participants declared that their capillaries were less visible, and again this well reflects the instrumental data on the erythema index and telangiectasia. Importantly, these positive results were already appreciable two weeks after the third injection, and in total 4 weeks from the beginning of the study.

As the injections were associated with no adverse events or undesired effects detected by both clinicians and volunteers, even if the positive effects would be expected to fade with the passing of time, it is likely that additional applications could be easily performed to invigorate the skin's amelioration. The extremely positive feedback from the subjects not only confirms the clinical and instrumental observations, but is mandatory to guarantee a satisfactory compliance when treatments that must be repeated for longer times are foreseen. In addition, the patient's satisfaction reinforces their trust in their physicians, which is an important factor for the stabilization of the relations between the doctor and patient. This all becomes quite relevant considering that in some cases (as for example well documented in the United States) there has been a decline in the population's trust towards the medical systems[23,24].

Furthermore, these results open up the possibility to combine the application of Viscoderm 0.8 with other treatments (such as the use of crosslinked HA) that have already shown positive results[19,25].

The use of combined aesthetic products, both with very high tolerability, is likely to produce even more pronounced and long-lasting effects than the single applications.

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aesthetic medicine

Original Article

Controlled heat in the treatment of face chronoaging: evaluation of the efficacy, tolerability and safety of different treatment protocols

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Abstract

Objective: to evaluate the efficacy, safety and tolerance of different face aging treatment protocols using subcutaneous radiofrequency (RF).

Material and methods: obtaining prospective data from patients treated with subcutaneous radiofrequency: the patients with mild, moderate e severe ptosis of the middle face were divided into 2 groups, and were treated by the same surgeon, respectively, with a single subcutaneous radiofrequency session at 50° C, or 2 sessions at a distance of 45-60 days at a temperature of 45° C.

The main criterion for efficacy was the assessment of depth reduction of the naso-labial fold and the malar prominence's restoration after 1, 3 and 6 months, the evaluation of the Global Aesthetic Improvement Scale by the patients and an outside procedure surgeon was the second criteria. The safety of this procedure and the patient's tolerance were evaluated through the observed side effects.

Result: a total of 10 patients, divided into group A (3 women and 2 men), and group B (4 women and 1 men), underwent a subcutaneous radiofrequency procedure with different protocols. In both groups there was a clear improvement in facial laxity with the repositioning of the malar prominence and reduction of the nasal grooves, but what distinguished the two cohorts, was fundamentally the treatment without the need for anesthesia and the intermediate improvement period to a stabilized result, which showed a Global Aesthetic Improvement Scale -GAIS- of 2.8 two months after the first session in the group of patients undergoing two sessions, and a GAIS of 3.4 in the group that performed a single treatment session. This value then became uniform in the following checks in the two cohorts in the following months. Transitory adverse effects, more common for cosmetic procedures such as for erythema and edema, were not observed. One patient had a post procedure hematoma. No serious adverse effects such as burning or scars were reported.

Conclusion: this prospective pilot data confirmed that subcutaneous radiofrequency is safe and effective in improving skin laxity. The patients' satisfaction was high. We believe that both protocols lead to a notable improvement result, but the two-session treatment is experienced by patients in a positive way as they see the results earlier and are psychologically more comforted.

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Introduction

Aging is a natural process, which is especially visible in the face.
The association between the gradual loss of tissue integrity and the force of gravity determines a complex condition.
In 2002, the American FDA approved the treatment of the periorbitary wrinkles by monopolar radio frequency (thermage) and in 2004, its extension to the whole face.
The effectiveness of the method is due to the production of heat as the radio frequency waves pass through the tissues (diathermy). The heat induces an immediate effect through the denaturation of the collagen, and a late effect by stimulating the fibroblasts to produce neo-collagen and elastin and by increasing vascularization.
The results depend on the distribution, the temperature reached in the target tissue, and the timing[1-6].
Several studies support the effectiveness of the radiofrequency technology in aesthetic medicine. In the transcutaneous treatment, the limit is represented by the need to avoid causing any damage to the skin, hence by limiting the temperature that can be reached in the subcutis[7-14].
Therefore, a constant scientific development has made it possible to obtain a new radiofrequency generation that allows the heat produced to reach the subcutaneous tissue in a constant and very precise manner, avoiding the increase in skin temperature.
Subdermal induced heat (S.I.H.) technology® is a latest generation radiofrequency with a continuous or pulsed emission of energy and opens the way to the innovation of endodermal radiofrequency, which allows for an alteration of the dermis of the treated tissue with remarkable precision.
The ability to deliver energy and reach preset temperatures at the target tissue level with extreme precision allows for multiple results. Temperatures between 45° and 50° C cause the protein denaturation of collagen fibers with a lifting effect, and secondly a fibroblastic stimulation with the production of neocollagen. A thermal imaging camera monitors the treatment area.
In just a few years, subcutaneous radiofrequency (RF) has established itself as one of the most important innovations in the world of aesthetic medicine, so much so as to require the study of treatment protocols that would optimize the patient's satisfaction.

Materials and methods

After five years of experience, and based on the excellent results obtained[15], a question arose about the optimization of said treatment protocols.
Therefore, we carried out a prospective study on 2 cohorts of subjects with facial chrono ageing.
10 patients with mild, moderate, and severe ptosis of the middle face were included, after obtaining their informed consent. Patients with an ongoing anticoagulant treatment, implanted pacemakers or defibrillator were not included, since this is an absolute contraindication for RF therapy.
Patients with any presence of acute systemic infections and local infections such as herpes simplex or impetigo and those with open wounds in the area of the treatment were excluded. Patients with genetic disorders of the connective tissue, like cutis laxa, were excluded from this trial.
We used the Subdermal induced heat (S.I.H.) technology®, device for capacitive and resistive diathermy, in monopolar mode, using a partially shielded 15cm cannula needle and a probe transmitting the set energy in the sub-dermal tissue. Monopolar systems deliver the current through a single contact point with an assisting grounding pad, that serves as a low resistance path for the current's flow to complete the electrical circuit.
The procedure was carried out with the patient laying down, on an outpatient basis, using troncular anesthesia for group A patients and local anesthesia at the cannula entry point for group B patients.
Patients have been treated by the same surgeon, respectively, with a single endodermal radiofrequency session at 50° C (group A) or 2 sessions at a distance of 45-60 days at a temperature of 45° C (group B).
The principal efficacy criterion was the assessment of depth reduction of the naso-labial fold and the restoration of the malar's prominence after 1, 3 and 6 months, and the other criteria was the evaluation of the Global Aesthetic Improvement Scale by the patients and an outside procedure surgeon.
Safety and tolerance were evaluated through any observed side effects.

Results

The results of the study are very interesting. In both groups there was a clear improvement in facial laxity with the repositioning of the malar prominence and a reduction of the nasolabial furrows, but what basically distinguished the two cohorts was the treatment without the need for anesthesia, and the intermediate improvement period to the stabilized result, which showed a Global Aesthetic Improvement Scale -GAIS- of 2.8 two months after the first session in the group of patients undergoing two sessions and a GAIS of 3.4 in the group that performed a single treatment session, These values became uniform in the following checks in the two cohorts in the following months (*Table 1*, *Figure 1*).
Histological studies conducted in parallel demonstrate the mechanisms leading to these results.
The images with 3D reconstruction of the face of the patients of both cohorts confirm the lifting effect, but above all the restoration of volumes (*Figures 2-3-4*).
The volumetric increase of the malar-zigomatic region and the reduction of the naso-labial fold demonstrate the lifting effect for both the patients' cohort (*Table 2*).
Furthermore, we believe that both protocols lead to a notable improvement in the final result, but the two-session treatment is experienced by patients in a positive way as they see the results earlier.

ENROLLMENT OF 10 VOLUNTARY PATIENTS				
	Group A: 5 patients (3 women and 2 men)		Group A: 5 patients (3 women and 2 men)	
Iconography through QuantifiCare	3D at each follow-up visit		3D at each follow-up visit	
Treatment protocol	Only 50 ° C treatment with troncular anesthesia		Only 50 ° C treatment with troncular anesthesia	
Global Aesthetic Improvement Scale -GAIS- (Values from 1-excellent result to 4- no result) 1 month, 2 months 3 months, 6 months-	1 month	3	1 month	3,2
	2 months	3,4	2 months	2,8
	3 months	2,6	3 months	2,8
	6 months	2,6	6 months	2,6

Table 1 *- Study protocol.*

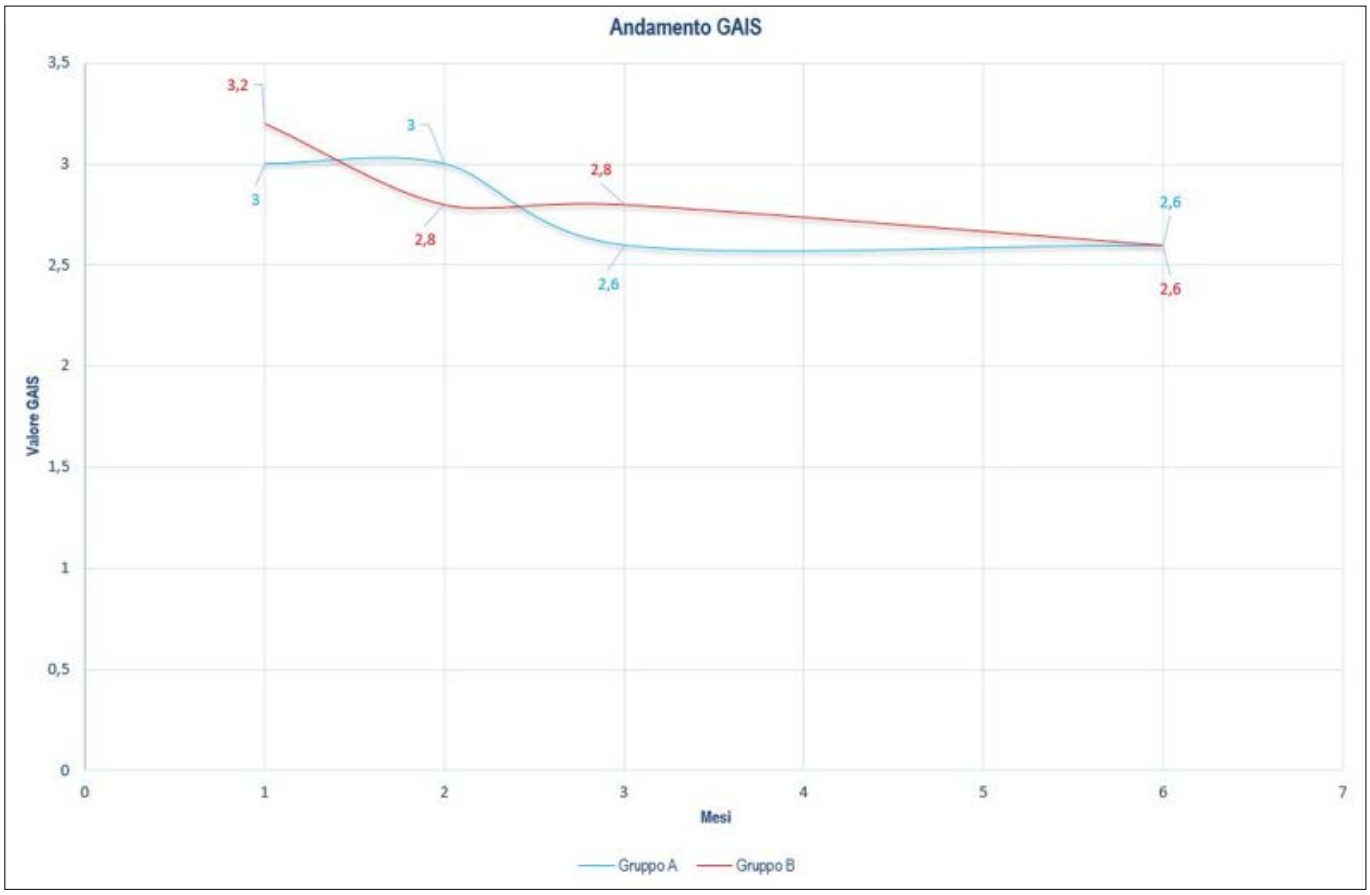

Figure 1 *- GAIS trend over time.*

Figure 2 *- Patient Group B 3D pre-treatment evaluation (SX) after 3 months (DX).*

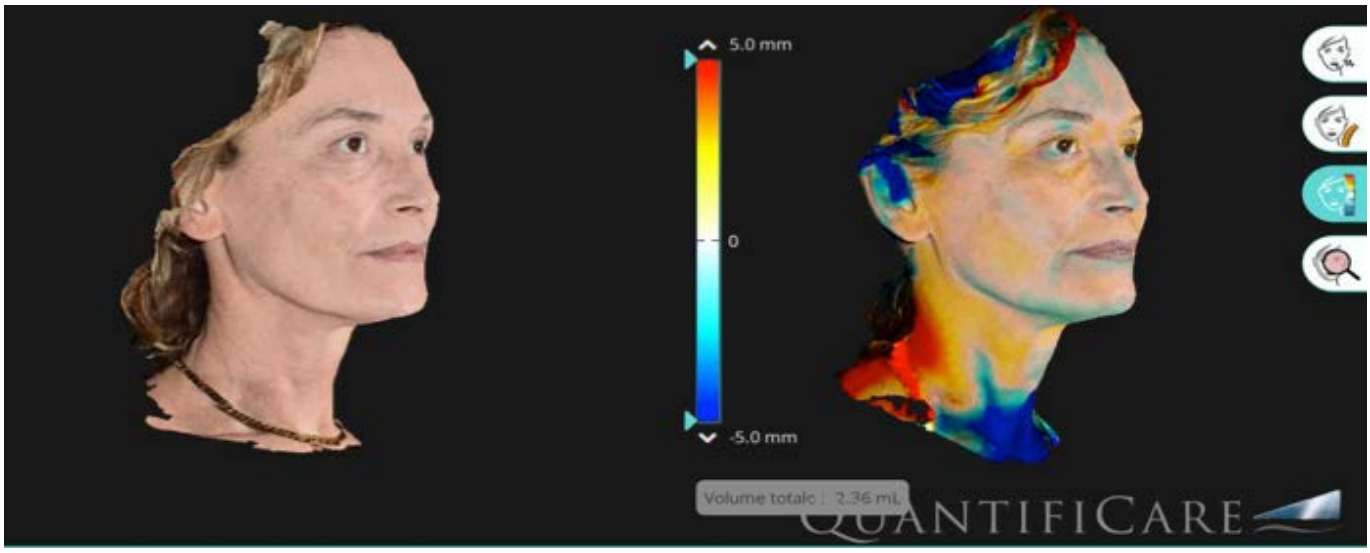

Figure 3 *- Patient Group B 3D pre-treatment evaluation (SX) after 3 months (DX): a color scale demonstrates the face volume repositioning.*

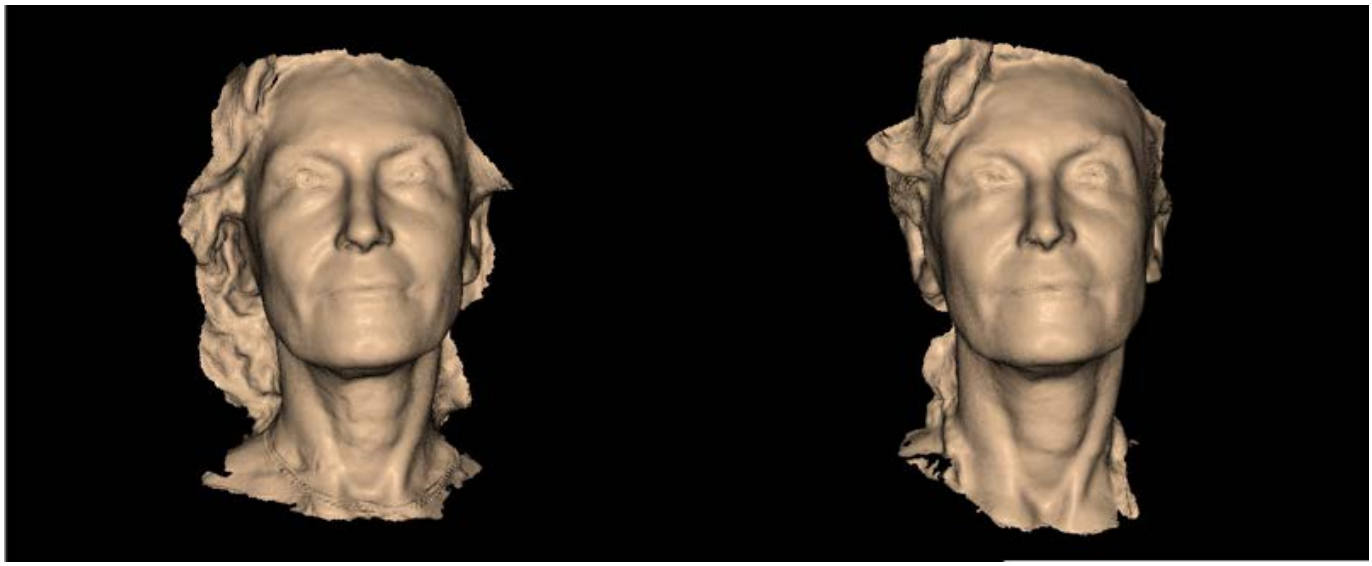

Figure 4 *- Patient Group B 3D evaluation of the pretreatment surface (SX) after 3 months (DX).*

	Mean volume increase of the malar prominence	Decrease of naso-labial wrinkle
A cohort	2,3 ml	-0,9
B cohort	2,2 ml	-1,1

Table 2 *- The volumetric increase of the malar-zigomatic region and the reduction of the naso-labial fold demonstrate lifting effect for both patients cohort.*

Discussion

Numerous clinical studies support the efficacy of RF therapy for aesthetic skin tightening of the face and body. The goal of RF therapy is not to replace excisional procedures when indicated, but rather to achieve skin tightening in the "treatment gap" population, broadening the plastic surgeon's armamentarium.
Seo et al compared facial soft tissue laxity improvements with RF vs a surgical facelift, employing a blinded grading of the photographs. They demonstrated a 49% improvement in the skin's laxity relative to the baseline for a surgical facelift, compared with 16% for fractional RF. Furthermore, the mean laxity improvement from a single fractional RF treatment was 37% of the surgical facelift's[16].
Peterson et al also studied objective measurements of mechanical skin properties and demonstrated a statistically significant improvement (5%-12% decrease in Young's modulus and 10%-16% decrease in retraction time) as well as a 1.42 grade improvement on the Fitzpatrick scale for wrinkles and 0.66 on the Alexiades scale for skin laxity, increasing to an improvement of 1.57 and 0.70, respectively, at 6 months. The patient's satisfaction was noted to be "very high" for >90% of patients[17].
As demonstrated in this manuscript, our clinical experience has shown a marked improvement in skin laxity and fine wrinkling in both patient groups. Adverse effects were not noted.
Surely this study has limitations, given the small number of patients enrolled and the difficulty of having an objective measure of skin laxity. Multicenter studies and more detailed measurements of these results would be useful.
In our judgment the device is a valid tool with high levels of patient satisfaction.

Conclusion

To our knowledge both protocols lead to a notable improvement in their result, but the two-session treatment is experienced by patients in a positive way as they see the results earlier and are psychologically more comforted.

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Case Report

Association of cutaneous lymphangioma circumscriptum and multi-cystic abdominal lymphangiomas in a child: a case report

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Running Title: cutaneous lymphangioma circuscriptum in a child

Abstract

Lymphangiomas are lymphatic malformations, accounting for 4% of vascular tumors. Among them, cutaneous lymphangioma circuscriptum is the most common. They can vary in depth, size and origin.
Their diagnosis is usually based on the clinical history and examination, but an echography and history can help too. Different diagnoses include other vascular lesions, as well as molluscum contagiosum and nevi.
Lymphangiomas are rare entities in children, often characterized by their placement in atypical areas such as the head and neck. On the contrary, in adults, the abdomen would be a less frequently involved area.
Lymphangiomas do not regress spontaneously, and infections and trauma are common sequelae.
We report, a case of a child affected simultaneously by a cutaneous lymphangioma and multi-cystic abdominal lymphangiomas.

Keywords

Cutaneous lymphangioma, echography, pediatric, dermoscopy

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A 13-year-old male patient referred to the dermatology department because of multiple lesions on the abdomen. Upon physical examination, a group of translucent vesicular papular lesions, with a frog spawn-like morphology was identified (*Figure 1*).
The mother reported that the lesions appeared 10 years prior and then remained circumscribed.
The mother reported that, due to abdominal pain, her son had been subjected to a cutaneous ultrasound that showed, in left hypochondrion, the presence of multiple fluid, contiguous and confluent formations, without any significant vascularization.
Based on the clinical morphology and the patient history, a diagnosis of cutaneous lymphangioma in association to multi-cystic abdominal lymphangiomas was made.
Lymphangiomas are lymphatic malformations, accounting for 4% of vascular tumors[1]. Among them, cutaneous lymphangioma circuscriptum is the most common[1]. They can vary in depth (superficial vs deep[2]), size and origin (congenital vs acquired forms). Furthermore, deep lymphangiomas can be divided into cavernous lymphangiomas and cystic hygromas[3]. Superficial lymphangiomas can be further classified in lymphagioma circuscriptum and lymphangiectasia: the latter originates from lymphatic vessels which were previously normal[3]. Lymphangiomatosis is the condition that is characterized by the presence of multiple lymphangiomas[4]. Congenital lymphangiomas originate from the abnormal relationship between lymphatic channels, while the acquired forms are secondary to surgery, cancer and traumatic events[3].
Clinically, it typically shows clustered translucent, frog spawn-like lesions, dermoscopically identified as pale red and yellowish lesions with characteristic hypopion-like areas[1]. Depending on the blood content, these lesions could be mistaken for haemangiomas[1].
The diagnosis is usually based on the clinical history and examination, but an echography and history can also help[3,5]. Different diagnose include other vascular lesions, as well as molluscum contagiosum and nevi[1].
Lymphangiomas are rare entities in children, often characterized by the localization on atypical sites such as the head and neck, while the abdomen, such as in our case, is less frequently involved[5].
Associated symptoms may simulate an acute abdominal syndrome, as in the case of mesenteric lymphangiomas, hence a rapid identification of the disease may avoid an overtreatment[5]. Lymphangiomas do not regress spontaneously and infections and trauma are common sequelae[2]. The treatments available consist in a surgical excision, cryotherapy, laser photocoagulation and carbon dioxide ablation[1]. However, the recurrence rate of this type of lesion even after removal is high, and post-surgical complications like fistulas, leaks and chronic wounds are not rare[2].

Conflict of Interest
None.

Funding Source
None.

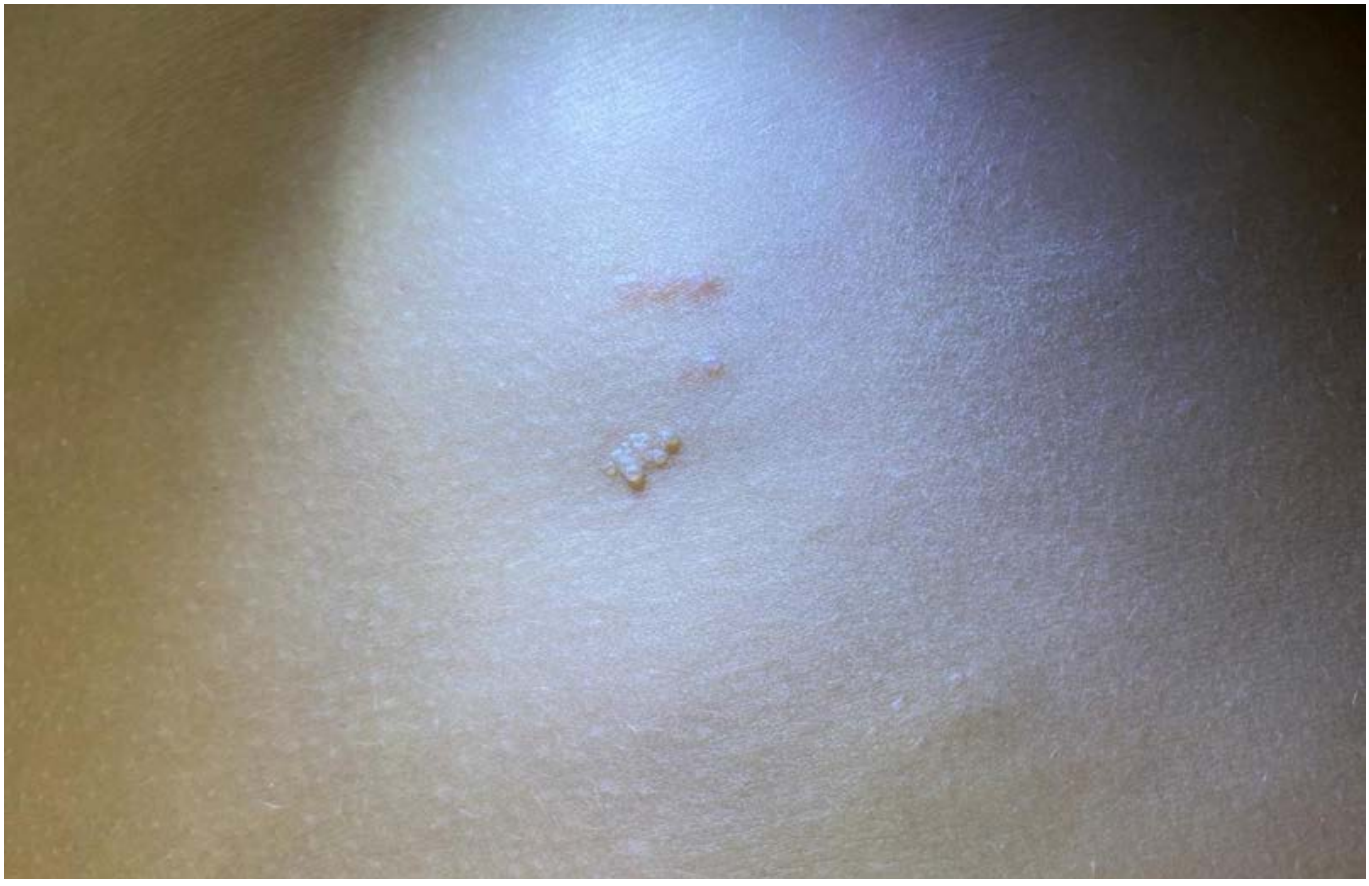

Figure 1 *- Cutaneous lymphangioma in a 13-year-old boy. Multiple translucent grouped vecicles are evident.*

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Case Report

Scar Endometriosis - A Case Report and A Brief Review

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Abstract
Scar endometriosis is a rare condition and usually difficult to diagnose. “Endometriosis” is defined as the presence of a functional endometrial tissue outside the uterine cavity when this occurs on the previous scar site, hence the name scar endometriosis. The patient is often found with painful nodules over the scar site, with a history of previous surgery. Ultrasound seems to be the most cost effective form of diagnosis, however MRI is are more sensitive for the confirmation of said diagnosis. A wide local excision was performed in this patient. We therefore present a rare case of scar endometriosis in a 34 yr old woman, 5 years after her last Cesarean section.

Keywords
Scar endometriosis, lower segment cesarean section (LSCS), endometrial tissue

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Introduction

Endometriosis is a condition where the tissue lining the uterus, grows outside of the uterus[1]. It affects women of the reproductive age group. The ovaries, lungs, pleura, kidney, bladder, omentum, colon, lymph nodes, and abdominal wall are the most common sites involved[2]. The abdominal wall endometriosis is the most common site amongst these. It occurs due to scars from past surgical procedures such as episiotomies, c-sections, hysterectomies, and tubal ligations.
The Caesarean scar endometriosis is the most frequently reported type of abdominal wall endometriosis (AWE). A scar endometriosis in a c-section is rare with the incidence of 0.03 – 0.45%[3-5]. We present with this study a case of the forementioned cesaerean scar endometriosis.

Case Report

A 34-year-old multiparous woman came to our surgical opd with complaints of pain in her lower abdomen, that she had been feeling for 1 year. The pain was insidious in onset, gradually progressive, dull aching, aggrevated during her menstrual cycle and only allowed her moment of relief when she took analgesics.
There were no other complaints. In 2014 and 2016, she underwent other previous caesarean procedures. She had undergone two caesarean sections with a Pfannenstiel incision, with an uneventful post-operative period. Upon physical examination, there was a mass of size 3 X 2 cm on both the lateral ends of the scar. It was non-tender, mobile and firm in consistency.
The Ultrasound findings showed 2 irregular hypoechoic mass lesions; with the largest solid mass (2.4 X 1.1cm) seen in the intramuscular and subcutaneous plane, with a minimal intrinsic vascularity of the mass at the right end of the LSCS scar region; the patient also had a smaller mass of 1.6 X 1cm, seen in the midline scar region (*Figure 1*). The patient was therefore indicated a wide local excision of the mass.
Intraoperatively, two firm masses over the incision site were found; a mass of 2 X 3cm over the right end of the scar, and a mass of 2 X 2cm over the midline of the scar; both had a firm consistency, and an irregular border (*Figure 2*). Histopathological reports showed scar endometriosis from said mass and the microscopic study showed a fibromuscular tissue with a fatty tissue and strips of a squamous epithelium.
The underlying stroma shows multiple islands of cystically dilated glands surrounded by fibroelastic proliferation with myxoid changes. The focus was mainly on hemorrhages, hemosiderin laden macrophages, the endometrial stroma and occasional glands with an endometrial type of proliferation.
The patient was observed during the post-operative period and a relief from their symptoms were seen after the procedure (*Table 1*). The patient showed substantial symptomatic improvement. During a follow up visit, the patient didn't complain about feeling any pain elsewhere.

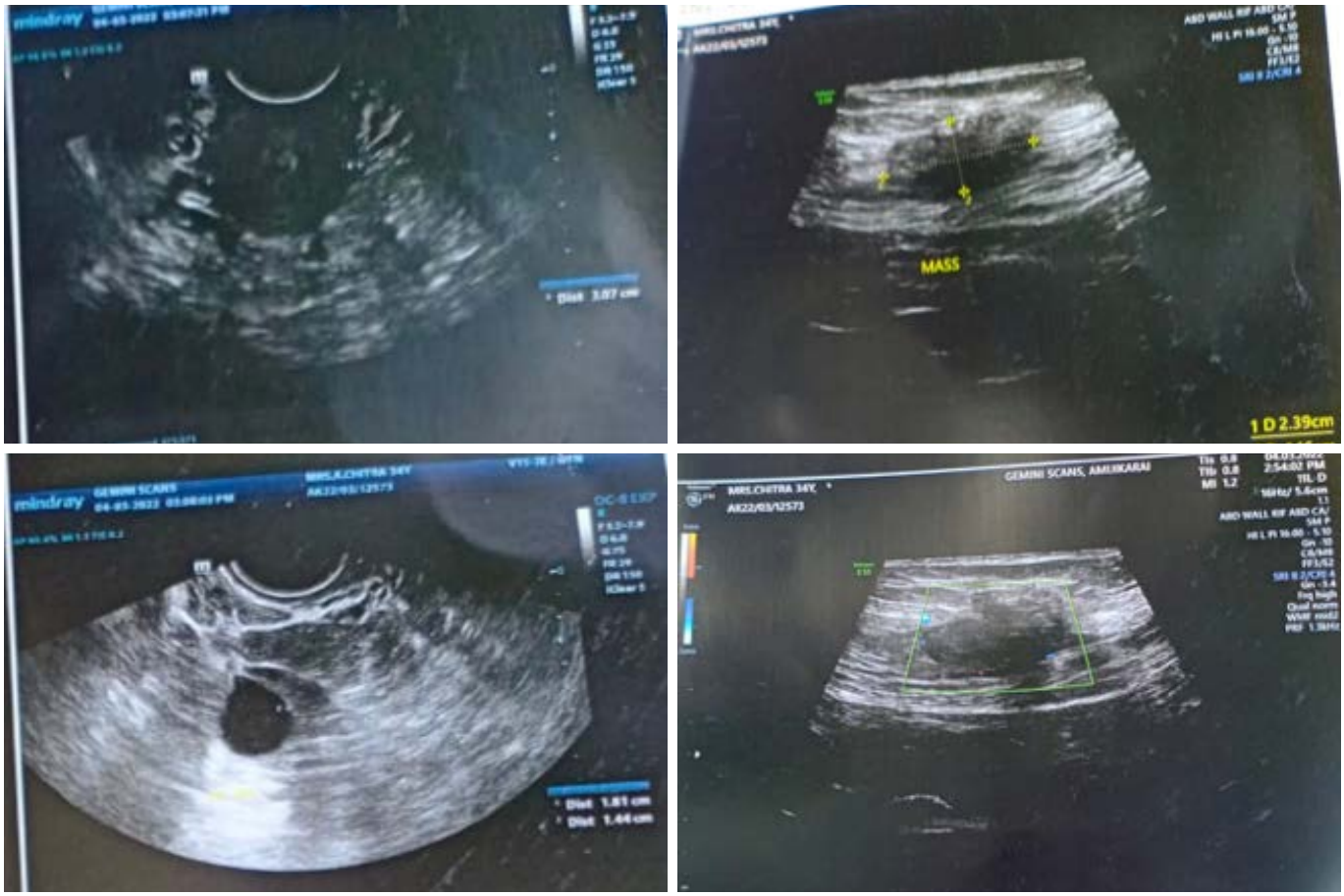

Figure 1 *- Ultrasound images showing the mass of a scar endometriosis.*

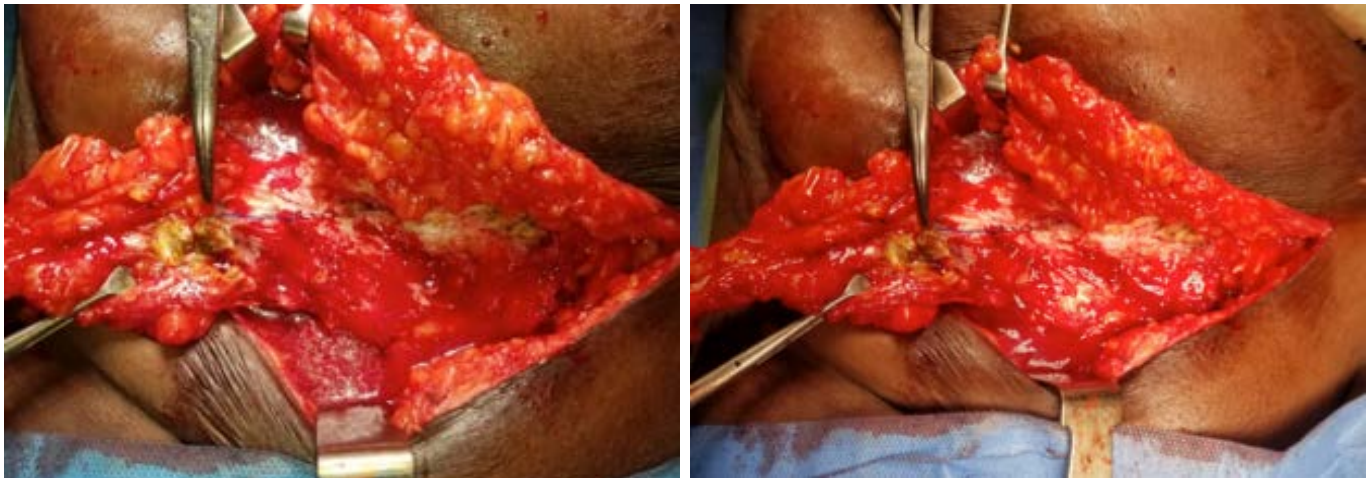

***Figure 2** - Intra operative picture of the endometrial mass.*

Timeline	Information
2014	1st caesarean section (pfannensteil)
2016	2nd caesarean section (pfannensteil)
April 2021	Mild to moderate pain in the lower abdomen, dull aching type , increases during the menstruation, relieves on taking medications
March 2022	Ultrasound done in view of persistent pain and mass in the scar region; observed 2 irregular hypoechoic masses; in the midline of the scar and in the right end of the scar respectively
April 2022	Mass resection of the endometrial scar and histopathological confirmation of the diagnosis

***Table 1** - Timeline and information of the patients Procedure.*

Discussion

Endometriosis is the ectopic implantation of a functioning endometrium. Most often, the cause being an Abdominal wall endometriosis (AWE). The Caesarean section and hysterectomy are the most common surgeries related to scar endometriosis[6].

In a study conducted, the scar endometriosis was found to be 0.08 percent after 30 years of the incisional endometriosis following a caesarean section[7].

Scar endometriosis has become more common in recent years as the number of caesarean sections and laparoscopies performed has increased. The percentage of women who have had a caesarean section scar is 1.96 percent[8-9].

The most plausible theory behind scar endometriosis is named direct mechanical implantation surgeries, where the uterus is opened, leading to an accidental spilling of the endometrial tissue into the incision. This forms a mass and becomes symptomatic during menstruation[10].

The primary cutaneous endometriosis could have been based on a retrograde tubal spread, however the genetic influence, influence on immunology, and the lymphatic and vascular spread cannot be explained by the forementioned theory[11].

Our patient had no past history of an endometriosis, so the main factor would be the direct mechanical implantation that might have happened during the procedure.

Caesarean scar endometriosis could be dormant for several years before showing any symptoms, and can take anywhere from 12 months to 21 years to develop. Some of our most common complaints revolve around cyclical pain and swelling over the scar site which worsens during the menstrual cycle. Caesarean scar endometriosis can be identified through a general physical examination and composite history-taking, but should be carefully differentiated from a hematoma, tumors and hernia (ventral/ incision). An ultrasonographic examination was done for our patient. An MRI is another better useful modality[12,13].

Recent studies show that the irrigation of abdominal wounds using a saline solution prevents recurrence[14].

A Wide local excision of the lesion with a reconstruction is most preferred for scar endometriosis. It is effective in avoiding recurrence and risking any transformation into cancer.

Conclusion

Caesarean scar endometriosis should always be taken into account in the reproductive age for women with lower abdominal pain. More so during menstruation and/or if there's a presence of any mass at the caesarean scar site from a previous delivery or following an obstetric and gynecological surgery. Both radiological imaging

and histo-pathological examinations are important to arrive at a complete diagnosis. A wide local excision of the lesion is the recommended procedure to deal with this issue. In a mass at the site of a Caesarean section with any feeling of pain or discomfort associated with menstruation, the first possible diagnosis is a scar endometriosis. For both the diagnosis and treatment, a wide local excision is the best option; even though malignant transformations are exceptionally rare.

Conflict of Interest

The Authors declare that they have no conflict of interest.

Funding source

None.

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Brief Report

"Speed Dating with Your Plastic Surgeon" Plastic Surgery Teleconsultation in the Era of the COVID-19 Pandemic

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Short Running Head: Plastic surgery teleconsultation

Abstract

Background: the COVID-19 pandemic has mandated adaptations in our daily behavior and practices. Although many aspects have come to a halt during lockdown periods, patients still seek consultations and medical advice. Remote consultations by video (VC) or telemedicine have therefore become quite popular.
Aim: to evaluate whether short VCs are comparable to in-person consultations when measuring conversion rates and the physician's satisfaction.
Methods: during one of the lockdown periods, teleconsultations were offered by two independent plastic surgery offices. The conversion rates from consultation to treatment and from VC to an in-person consultation were calculated. The quality of the consultations was evaluated by comparing the treatment offered to that given.
Results: between March 16th and April 19th, 2020, 238 patients responded to an advertisement for a free VC offered by the first office, and 38 (16%) of them used the service. The conversion for an in-person office re-consultation was 26% (10/38), with 80% (8/10) of them treated after the re-consultation. In the second office, 700 patients responded to the facial rejuvenation consultation offer. Forty two (6%) of them agreed to pay for the VC, and out of those 10 (24%) later converted to an office consultation and treatment. All the surgical procedures and interventions offered during the VCs were administered.
Conclusions: a short VC can be effective for screening patients for cosmetic plastic surgery. Conversion rates were high among patients coming for in-person consultations after a VC. We believe that offering short, free VCs can significantly increase these conversion rates, and is cost-effective.

Keywords
Plastic surgery, remote consultation, COVID-19, teleconsultation

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Introduction

The Covid-19 pandemic has changed everyone's life. It has mandated adaptations in medical practices due to the need for social distancing and personal protective equipment. Just like with other medical professions, plastic surgery practices have come to a halt with the mandatory lock-down that was enforced on ambulatory, non-urgent medical procedures[1,2]. Nevertheless, our patients still sought consultations and medical advice from their physicians. Patients progressed to the use of electronic forms of communication so that they would be ready to be treated once it became possible.
The use of remote video consultations (VCs) or telemedicine, has proven to be a useful and economical, yet limited tool[3–8]. Regulations regarding this modality have changed due to the COVID-19 pandemic and have led to it becoming an acceptable standard of care for many patients[9,10].
In this retrospective study, we aimed to evaluate whether VCs were comparable to consultations conducted in person when measuring conversion rates and the overall physician's satisfaction.

Materials and methods

During the complete lockdown in Israel from March 16th to April 19th, 2020, two independent plastic surgery clinics offered consultations via video calls. Both clinics advertised through social media a new service offering teleconsultations via WhatsApp, (WhatsApp, Inc., Menlo Park, CA) or a video call on Zoom (Zoom Video Communications, Inc., San Jose, CA), and all the consultations were scheduled in accordance with the patient's availability. In the first office (Office A), patients who requested the service were contacted by a representative for primary screening. This included questions regarding the reason for the need of a consultation, sex, age (no consultations were provided to people under the age of 18), family status, medication use, and previous medical conditions. During the consultation, the information was documented by the surgeon in the patient's medical chart. A summary of the recommendations, any need for a follow-up, and the length of the consultation were also documented.
After the lockdown ended, we recorded all the data from the patients' follow-ups, with the indication of undergoing a previously proposed treatment, or for a re-consultation through a 4-month period. All the data was documented in a Microsoft Excel spreadsheet (Redmond, WA, USA). The patients' satisfaction with the new service offered was also documented.
The second office (Office B) advertised VC services for facial rejuvenation. Prospective patients gave their contact information and were later contacted by the office representative. Two options were offered to patients: a VC with a junior partner at a specific cost, or a consultation with a senior partner for 3 times the cost. Following the VC, patients were scheduled for the chosen treatment. A quantitative analysis was described by the mean, standard deviation (SD), median and range.
The qualitative data was represented through frequencies and percentages. The differences between the groups in categorical variables were analyzed using the Chi-square or Fisher exact test. A two-sided p-value of <0.05 was considered significant.
The conversion rates from consultation to treatment and from VC to in person consultations were calculated. We also evaluated the quality of the consultation by comparing the treatment offered to the one that was given. An Institutional review board approval to review the patients' records was obtained.

Results

In office A, 238 prospective patients responded to the advertisement for a free VC. Following a short screening conducted by an office representative for incompatible requests with office services or any other issue that might have been detected, 38 (16%) patients received a free remote video consultation. In office B, a total of 700 prospective patients were interested in the service offered. Among them, 42 (6%) patients chose to have a VC with a junior partner, and none chose to consult with a senior partner. The differences between the two offices were statistically significant (16% vs. 6%, p <0.001). A Subgroup analysis showed that in Office A, 29 patients were female (76%) and 9 were male (24%), at an average age of 38.5 years (range 21-73). Seventeen (45%) were single, 7 (18%) married and 14 (37%) divorced. Most patients (33, 79%) had no relevant medical history, while the most common pre-existing medical conditions were hypothyroidism, seen in 3 patients (8%), and hypertension in 2 patients (5%). A total of 5 patients (13%), were not offered any treatment, due to an insufficient amount of medical information (4 patients, 10%) or dysmorphism in one patient (3%).
The most common reasons for requesting a consultation in office A were face and nose fillers (7 patients, 18.4%), body contouring (5 patients, 13%), face lifts (5 patients, 13%), liposuction and fat injection (6 patients, 16%), blepharoplasties (4, 10.5%), breast surgery for male and female (4 patients, 10.5%) and other reasons such as: nevus removal, penis augmentation, ear surgery, vaginoplasty and dimple creation (7 patients).
In office B, 41 patients (98%) were female, and 1 was male, with an average age of 58 years.
The conversion rates in office A for a formal re-consultation were 26% (10/38 patients). Following the re-consultation, 80% (8/10 patients) converted to a treatment and 1 (3%) came directly for treatment. The overall conversion from an in person consultation to treatment in office A was 82%.
In office B, following the VC, 10/42 patients (24%) converted to an in-person consultation and treatment (26% in office A vs. 24% in office B). The final conversion from an in person office consultation to treatment was 82% in office A and 100% in office B, with no statistical significance. All the procedures offered via the VC were administered later in both offices. The average consultation times were 7 minutes in office A and 20 minutes in office B. The total amount of conversions from prospective patients who responded to the adds

Variable	Office A	Office B	P-value
Prospective patients	238	700	-
Consultations N (%)	38 (16)	42 (6)	<0.001*
Women (of those consulted), N (%)	29 (76)	41 (98)	<0.05*
Mean age, years	38.5	58	-
Formal consultation, N (%)	10 (26)	10 (24)	.768
Conversion to treatment, N (%)	9 (82)	10 (100)	.081
Mean consultation time, minutes	7	20	-

N; number of patients, *statistically significant

Table 1 - Patient characteristics and consultation rates in offices A and B.

for VCs were 16% and 6% in office A and B respectively, which eventually led to 4% and 1.4% formal consultations which almost all led to actual procedures. The patients' characteristics and consultation rates in offices A and B are outlined in *Table 1*.

Discussion

The need for social distancing and self-protection during the current COVID-19 pandemic has induced many professions to use electronic modalities to adapt to the situation and requirements. Currently, plastic surgeons cannot perform surgeries or minimally invasive procedures without seeing patients face-to-face.

Ongoing contact with previous patients and consultations with former and new patients are now possible due to the quick and facilitated access to electronic devices, instant messenger applications, and video access in every computer and smart phone.

In this study, we recorded the experience of two plastic surgeons with the use of VCs during a period of complete lockdown in Israel. In one clinic, 38/238 (16%) prospective patients were consulted remotely.

In the second clinic, 42/700 (6%) of those who responded to the advertisement were willing to pay for a VC (16% vs. 6%, p<0.001). We found that most patients seeking consultations in both clinics were women (75% and 98%), with average ages of 38 and 58 years in offices A and B, respectively. The number of men receiving a treatment in office A (25%), was nearly twice as high as that reported worldwide (13.5%)[11]. This is a unique feature of that office and might be a demonstration of the increasing trend for plastic and cosmetic treatments requested by men globally. Most patients were either single (45%) or divorced (37%); a relatively high number compared to previous reports where most people seeking cosmetic intervention were married[12,13]. The average age was higher in office B, as would be expected, as facial rejuvenation is intended to improve the appearance of aging skin and facial structures.

In office A, a variety of problems were addressed, ranging from minimally invasive procedures (fillers or lesion excisions) to surgery. In most cases (87%), the consultation was sufficient for the treatment offered, and only a few (13%) of the patients were invited to come to the office for a frontal physical examination to better assess and understand the problem presented. The rate for in-person consultations after the VC was only 16%, but 82% of those were ultimately treated.

Prior to the COVID-19 pandemic, conversion rates were about 50%. These rates were achieved after patients went through a short evaluation process that included a concise formal consultation by the physician directed at understanding and assessing the patients' goals and expectations at a certain fee.

Later, patients were met by the manager or office coordinator to settle future payments prior to undergoing a more thorough and detailed examination and construction of a treatment plan, which typically lasts from about 30 to 60 minutes.

When prospective patients in office B were offered the option of paying for a consultation with either a junior or a senior partner, they all opted for the lower-priced junior partner consultation. The conversion to VC was significantly lower in office B (16% vs. 6%, p <0.001), where a fee was charged. We can assume that currently, patients do not value VCs as much as in-person consultations and thus prefer a free or significantly lower-price consultation. The final conversion rates for the treatment after the VC were comparable between the offices (82% vs. 100%). In the studied offices, based in Israel, adds during the lockdown period converted to 16% and 6% for VCs in offices A and B respectively, these eventually led to 4% and 1.4% in person consultations which almost all led to procedures and the consultation times were significantly reduced after the short VC.

Previous reports showed that patients who payed for a consultation from a physician or services have more trust in them and are highly committed to the process, as compared to other methods of physician payment such as capitated or salary-based payments[14]. Accordingly, it is the author's impression that when patients pay for a consultation, they have a stronger commitment to the proposed treatment plan and consequently have higher conversion rates. A major difference from the usual consultation process was that the VCs were offered either for free or for a small charge and would therefore attract patients who are "shopping around" without an intent to commit to a time consuming and possibly life changing process. Therefore, although the actual conversion rates from all the VCs conducted seem lower than those achieved prior to the pandemic, patients that followed-up with an in-person consultation were already evaluated and were more likely to choose the treatment route. Furthermore, the VCs were also conducted

during a limited time period and patients who did not receive treatment during this period may return for further consultations. Patients also reported that they were satisfied with the service and felt like they were receiving a personalized and dedicated consultation.

Video consultations have also proven to economize costs for both the patient and the treating physician[3,5]. The time spent travelling to the office, in the waiting room and during the consultation is reduced for all the parties involved. This modality is a more ecologically friendly solution and should be further advocated. The use of VCs will also allow those who seek a cosmetic treatment, yet have limitations due to the need to travel a long distance to the office, mobility limitations or have a very busy schedule, to obtain a consultation at their convenience, without travelling. Once prospective patients have received the consultation, they can then decide whether to proceed and visit the office for a treatment. Incorporating VCs into one's daily practice will result in a broader patient base, leading to an increase in procedures and treatments conducted.

First impressions can make a big difference.

Short, targeted consultations enable physicians to screen patients for possible incompatibilities prior to conducting a longer formal consultation. We believe that professionally conducted, accessible VCs will have the same conversion rates in the future, if not higher. From our experience, it seems that VCs offered at a certain cost might lead to fewer consultations. Yet, the use of VCs led to a comparable and in some cases higher rate of conversions to treatment among patients who returned for a formal visit and can be cost-effective compared to only in-person office visits. We are of the idea that a short, free VC is more efficient and beneficial compared to a longer consultation at a certain cost. This modality can appeal to and reach a larger number of potential patients who might otherwise not consider obtaining plastic and aesthetic services. It also seems that currently, our patients do not value the VC as much as a classic formal meeting and therefore, are reluctant to pay for this new service. Some members of the older population might experience technological barriers, which might also explain the low conversion rates from advertisement to VCs when the service offered (e.g. facial rejuvenation) is intended to attract an older population. We should aim to make this modality as appealing as possible, keeping in mind that a quarter of those who consult via VC will later convert to a formal consultation and treatment.

Although in some countries, plastic surgeons' offices already offered VCs prior to the current pandemic with and without publicizing them, our experience with this modality during the lockdown period has highlighted the advantages that VCs offer when used appropriately. Our study also strengthens the notion that VCs for screening patients prior to aesthetic procedures are useful and feasible and should be kept concise and free. This study had several limitations as it was conducted during a short period of time and included a relatively small sample of patients. The follow-up period after the VC was also limited.

In conclusion, a short VC seems to be an effective tool for screening patients for cosmetic plastic surgery treatments and can even be used to formulate adequate treatment plans. Conversion rates to treatment were high among patients who came for an in-person consultation after the VC. We believe that even after the current pandemic ends, short free VCs might be an effective tool for primary patient screenings and can significantly increase the conversion rate from consultation to treatment, whilst proving to be cost-effective.

Authors' contributions

The study conception and design were done by AL, AB, and AS. RE, EW, EW and OSA assisted greatly with material preparation and data collection. Data analysis was performed by AL, AB and AS. The first draft of the manuscript was written by AB and AS and all authors commented on previous versions and contributed substantially to its revision. All authors read and approved the final manuscript.

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Conflict of interest

None to declare.

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Courses and Congresses 2022

8 - 10 September - Pretoria (South Africa)
17th Aesthetic Medicine Congress of South Africa AMCSA 2022
CSIR International Convention Centre
President: A. Clark
Email: info@aesthmed.co.za
Web: https://aesthmed.co.za/

9 - 10 September - Paris (France)
42nd Congress of Aesthetic Medicine and Dermatological Surgery
French Society of Aesthetic Medicine
Palais des Congrès de Paris
President: JJ. Legrand
Email: info@sfme.org
Web: www.sfme.org

9 - 11 September - Opatija (Croatia)
3rd Croatian Congress of Aesthetic Medicine
Croatian Association of Aesthetic Medicine
Amadria Park Grand Hotel
President: E. Bunar
Email: congress@huem.eu
Web: https://croatianaestheticmedicinecongress.com/home

29 September - 1 October - Lima (Peru)
3rd Scientific Congress of Aesthetic Medicine
Scientific Association of Aesthetic Medicine of Peru - ASOCIME
Hotel Sol de Oro
President: I. Ogata
Email: informes3@grupomilenium.pe
Web: https://www.facebook.com/Asocime/

21 - 22 October - Toronto (Canada)
CAAM 19th Annual Conference
Canadian Academy Aesthetic Medicine
The Westin Harbour Castle
President: J. Carroll
Email: info@caam.ca
Web: https://www.caam.ca/conference-education-

11 - 12 November - Long Beach (California - USA)
18th AAAMC
American Academy of Aesthetic Medicine Congress
Hilton Long Beach Hotel
President: M. Delune
Email: enquiries@aaamed.org
Web: http://www.aaamed.org/congress/

25 - 27 November - Warsaw (Poland)
20th International Congress of Aesthetic and Anti-Aging Medicine
Polish Society of Aesthetic and Anti-aging Medicine - PTMEiAA
Hotel Hilton Warsaw
President: A. Ignaciuk
Web: https://www.ptmeiaa.pl/

8 -10 December - Cascais, Lisbon (Portugal)
6th National Congress Aesthetic Medicine
Portoguese Society of Aesthetic Medicine
Hotel The Oitavos, Cascais
President: J. Vale
Email: secretariado@spme.pt
Web: spme.pt/6congresso

Courses and Congresses 2023

23 -25 February - Malaga (Spain)
38th National Congress
Spanish Society of Aesthetic Medicine
Palacio de Ferias y Congresos, Malaga
President: J. A. Lopez
E-mail: seme2023@pacifico-meetings.com
Web: seme2023.org

10 - 11 March - Mexico City (Mexico)
20th Mexican Scientific Society of Aesthetic Medicine and Longevity
Mexican Scientific Society of Aesthetic Medicine
Pepsi Center, WTC Mexico City
President: B. Miller
Email: inscripciones@congressmcme.com
Web: congressmcme.com/2023

19 - 21 May - Rome (Italy)
44th SIME Congress
Italian Society of Aesthetic Medicine
Rome Cavalieri Congress Center
President: E. Bartoletti
Email: congresso@lamedicinaestetica.it
Web: www.lamedicinaestetica.it

19 - 21 October - Quito (Ecuador)
XIII Panamerican Congress of Aesthetic Medicine
12th Ecuadorian Congress of Aesthetic Medicine
Ecuadorian Society of Aesthetic Medicine
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