INDEXED ON SCOPUS

ESPERIENZE DERMATOLOGICHE

Dermatological Experiences

BOLLETTINO DELL' ISTITUTO DERMATOLOGICO SAN GALLICANO

Estratto da

VOLUME 23 - N. 3 - PAG. 56-8 - SEPTEMBER 2021

AMARNA PERSONAL TECHNIQUE FOR REJUVENATION OF THE NECK AREA

TECNICA PERSONALE AMARNA PER IL RINGIOVANIMENTO DELLA ZONA DEL COLLO

Natalia RIBÉ, Alessia FORZINA

ISG
ISTITUTO DERMATOLOGICO
SAN GALLICANO
ISTITUTO DI RICOVERO E CURA A CARATTERE SCIENTIFICO

EDIZIONI MINERVA MEDICA

PUBBLICAZIONE PERIODICA TRIMESTRALE - POSTE ITALIANE S.P.A. - SPED. IN A. P. D.L. 353/2003 (CONV. IN L. 27/02/2004 N° 46) ART. 1, COMMA 1, DCB/CN - ISSN 1128-9155 TAXE PERÇUE

Esperienze Dermatologiche 2021 September;23(3):56-8
DOI: 10.23736/S1128-9155.21.00519-7

CASE REPORT

Amarna personal technique for rejuvenation of the neck area

Tecnica personale Amarna per il ringiovanimento della zona del collo

Natalia RIBÉ [1] *, Alessia FORZINA [2]

[1]Institut Dra. Natalia Ribé, Barcelona, Spain; [2]IBSA Farmaceutici Srl, Lodi, Italy

*Corresponding author: Natalia Ribé, Institut Dra. Natalia Ribé, Barcelona, Spain. E-mail: nribe@institutnataliaribe.com

Abstract - Riassunto

The neck easily shows signs of aging, while, in different cultures, a slender neck has been considered a sign of femininity and sensuality. To answer the desire of neck rejuvenation with minimal risks and with rapid recovery, the Amarna technique has been designed with the aim of obtaining a slender, firm and hydrated neck. The first phase of the treatment acts on the quality of the superficial part of the skin, by bio-remodeling it with Profhilo® (IBSA Farmaceutici Italia, Lodi, Italy). The second phase of treatment is the hydro-stretch revitalization with Viscoderm® Hydrobooster (IBSA Farmaceutici Italia), which also has a mechanical function. The Amarna technique protocol recommends using 2 mL (1 syringe) of Profhilo® and 1.1 mL of Viscoderm per session at a rate of 2-4 sessions with intervals of 2-4 weeks depending on each case and each patient. A 58-year-old woman, with no relevant clinical history, presented with dry and sagging skin of the neck. The skin was smooth, and the papules of the products were disappeared as the product was integrated into the skin immediately after the first session. These results were maintained after 1 year. Only mild and transient inflammation was observed at the site of injection.

(*Cite this article as:* Ribé N, Forzina A. Amarna personal technique for rejuvenation of the neck area. Esperienze Dermatol 2021;23:56-8. DOI: 10.23736/S1128-9155.21.00519-7)

KEY WORDS: Neck; Rejuvenation; Skin; Hyaluronic acid.

Il collo mostra facilmente i segni del tempo, mentre, in diverse culture, un collo sottile è considerato un segno di femminilità e sensualità. Per rispondere al desiderio di ringiovanimento del collo con rischi minimi e con un rapido recupero, la tecnica Amarna è stata studiata con l'obiettivo di ottenere un collo snello, sodo e idratato. La prima fase del trattamento agisce sulla qualità della parte superficiale della pelle, biorimodellandola con Profhilo® (IBSA Farmaceutici Italia, Lodi, Italia). La seconda fase del trattamento è la rivitalizzazione idro-stretch con Viscoderm® Hydrobooster (IBSA Farmaceutici Italia), che ha anche una funzione meccanica. Il protocollo della tecnica Amarna consiglia di utilizzare 2 ml (1 siringa) di Profhilo® (IBSA Farmaceutici Italia) e 1,1 ml di Viscoderm® (IBSA Farmaceutici Italia) per sessione a una velocità di 2-4 sessioni con intervalli di 2-4 settimane a seconda di ciascun caso e di ciascun paziente. Una donna di 58 anni, senza anamnesi clinica rilevante, si presentava con pelle del collo secca e cascante. Subito dopo la prima seduta di trattamento la pelle è risultata più liscia e senza segni del trattamento in quanto il prodotto era stato immediatamente assorbito dalla pelle. Questi risultati sono stati mantenuti dopo 1 anno. Nel sito di iniezione è stata osservata solo un'infiammazione lieve e transitoria.

Skin aging is characterized by features, such as wrinkles, loss of elasticity, laxity and rough-textured appearance, associated with reduced vascularization of the dermis.[1] This aging process is accompanied with phenotypic changes in cutaneous cells, as well structural and functional changes in the extracellular matrix components, such as collagen and elastin.[1] As a consequence of changes in the subcutaneous structures, the face is altered in its volume and looks sad and tired.[2] In our age, media and social pressures are increasing the importance of physical appearance and the need of a young and healthy appearance. To answer the desire to rejuvenation with minimal risks and with rapid recovery, noninvasive techniques were developed. Available treatments aimed at face rejuvenation include, among many others, resurfacing using laser or pulsed light,[3] platelet-rich plasma stimulation,[4] different fillers, such as collagen, hyaluronic acid, calcium hydroxyapatite, polylactic acid, polycaprolactone,[5, 6] biostimulation with vitamin complexes or with growth factor mimetic peptides and polydioxanone threads.

The neck shows signs of aging, while, in different cultures, a slender neck has been considered a sign of femininity and sensuality. The Amarna technique has been designed with the aim of obtaining a slender, firm and hydrated neck.

This technique is duo-dynamic and uses two products,

acting on the laxity and quality of the skin in the treated area.

The first phase of the treatment acts on the quality of the superficial part of the skin, by bio-remodeling it with Profhilo® (IBSA Farmaceutici Italia, Lodi, Italy) (HCC). This is a stable hybrid cooperative complex of hyaluronic acid (HA), produced with a patented technology, consisting of high-molecular-weight (1100-1400 KDa) HA and low-molecular-weight (80-100 KDa) HA, in a 1:1 proportion. The concentration is 64 mg of HA in a 2 mL syringe. The low-molecular-weight HA promotes the expression of the transmembrane protein CD44, which binds the endogenous HA. The high-molecular-weight HA is positioned in the extracellular matrix for supportive activity. This cooperative hybrid complex is highly resistant to bovine testicular hyaluronidase and persists in the skin over time. In addition, it has negligible proinflammatory effects, with a very low induction of TGF-β expression.[7, 8]

The second phase of treatment is the hydro-stretch revitalization with Viscoderm® Hydrobooster (IBSA Farmaceutici Italia) (VHB).[9] Thanks to the rheological value of viscosity, low stiffness and high elasticity, VHB gel easily integrates into the tissue and may be applied into deep or superficial layers of the dermis, even in the most superficial layers, which are highly dynamic.[9]

The treatment is performed in 10-12 areas, chosen based on the anatomy of the neck, the skin type, and the thickness of skin itself and of the hypodermal fat. HCC is injected with a 29 G needle, depositing the product in the form of papules/boluses of 0.1-0.2 mL per point transversely to the skin, in the superficial subcutaneous tissue.

VHB is injected with a 25 G cannula 38-mm long, with a retro-tracing linear technique, in a fan, depositing the product in lines, subdermally, either with a single-entry point or one entry point on each side of the neck depending on the area to be treated.[10]

The Amarna technique protocol recommends using 2 ml of HCC and 1 mL of VHB per session at a rate of 2-4 sessions with intervals of 2-4 weeks depending on the case and patient.

Case report

A 58-year-old woman, with no relevant clinical history, presented with dry and sagging skin of the neck. No previous esthetic treatment had been previously performed in this area (Figure 1A). The Amarna technique protocol was applied. HCC was injected with a needle, and VHB with a cannula.

After the treatment, an antioxidant cream (Profhilo® Haenkenium, IBSA Farmaceutici Italia) was applied, which activates and maintains cellular vitality, reducing microwrinkles. It contains a complex of HA and a proprietary dry extract of Salvia Haenkei.[11]

Immediately after the first session, the skin was smooth, and the papules of the products disappeared as the product was integrated into the skin (Figure 1B). After the

Figure 1.—A) Before treatment; B) immediately after the Amarna procedure; C) After 3 months; D) after 1 year.

second session and at the control visit at 3 months, the skin had further improved (Figure 1C). After 1 year of the treatment, the skin condition was still maintained (Figure 1D).

The patient had a mild and transient inflammatory reaction at the site of injection, lasting few hours. No hematoma was observed.

Discussion

The Amarna© technique improved in the quality of the skin in both hydration and turgor and benefits could be observed soon after the treatment and were maintained at the 3-month and 1-year follow-ups. Thanks to its high ability to spread, HCC integrates perfectly into tissues. It is important to highlight its ability to flow uniformly through the anatomical units after injection, expanding homogeneously.

The success of the technique lies in the combination of products that feed into each other, making the result greater than the sum of the procedures.

HCC regenerates the skin, counteracting its laxity with a tightening effect, and bio-remodeling the extracellular matrix, improving its elasticity and supporting capacity, thanks to the biological activation that it produces while maintaining the viability of fibroblasts, keratinocytes and adipocytes.[7, 8] VHB low cross-linking HA, hydrating and restructuring the tissue in depth, and has a mechanical action, which smooths the wrinkles on the neck and *décolleté*, achieving a unique tightening effect on the most superficial tissue.[9]

The Amarna technique requires a good anatomical knowledge of a delicate area, such as the neck. The injection technique may change according to the patient's needs, using a needle or a cannula, and the suitable amount of product.

Thanks to the combination of products, the procedure is not usually repeated before 12 months. In our clinical case, the patient shows extraordinary skin quality in her annual check-up. However, this will always depend on both the intrinsic and extrinsic variables of the patient (age, sex, healthy habits, sun exposure, diet, etc.).

Furthermore, when the laxity of the skin is serious, the Amarna technique may be combined with other esthetic medical procedures, such as tensioning threads or sutures. In the present clinical case, Amarna has given satisfactory results as a single treatment.

Conclusions

In conclusion, Amarna is a safe, comfortable technique that can be performed on all skin types and on patients with age-related or premature aging of the neck area, due to any type of factor.

References

1. Montagna W, Carlisle K. Structural changes in ageing skin. Br J Dermatol 1990;122(Suppl 35):61–70.

2. Bains RD, Thorpe H, Southern S. Hand aging: patients' opinions. Plast Reconstr Surg 2006;117:2212–8.

3. Alexiades-Armenakas MR, Dover JS, Arndt KA. The spectrum of laser skin resurfacing: nonablative, fractional, and ablative laser resurfacing. J Am Acad Dermatol 2008;58:719–37, quiz 738–40.

4. Man D, Plosker H, Winland-Brown JE. The use of autologous platelet-rich plasma (platelet gel) and autologous platelet-poor plasma (fibrin glue) in cosmetic surgery. Plast Reconstr Surg 2001;107:229–37, discussion 238–9.

5. Cornejo P, Alcolea JM, Trelles MA. Perspectivas en el uso de materiales de relleno inyectables para tejidos blandos, desde nuestra experiencia. Cir plast 2011;37:393.

6. Alcolea JM, Cornejo P, Trelles MA. Perspectivas en el uso de materiales de relleno inyectables para tejidos blandos, desde nuestra experiencia. Cir plast 2012;38:83.

7. D'Agostino A, Stellavato A, Busico T, Papa A, Tirino V, Papaccio G, *et al.* In vitro analysis of the effects on wound healing of high- and low-molecular weight chains of hyaluronan and their hybrid H-HA/L-HA complexes. BMC Cell Biol 2015;16:19.

8. Donofrio L, Weinkle S. The third dimension in facial rejuvenation: a review. J Cosmet Dermatol 2006;5:277–83.

9. Beatini A, Piersini P, Russo R. "REAL LIFE" Efficacy evaluation of a new hyaluronic acid gel suitable for deep hydratation and fine wrinkles correction. Aesth Med 2019;5:3.

10. Sparavigna A, Tenconi B, Giori AM, Bellia G, La Penna L. Evaluation of the efficacy of a new hyaluronic acid gel on dynamic and static wrinkles in volunteers with moderate aging/photoaging. Clin Cosmet Investig Dermatol 2019;12:81–90.

11. Matic I, Revandkar A, Chen J, Bisio A, Dall'Acqua S, Cocetta V, *et al.* Identification of Salvia haenkei as gerosuppressant agent by using an integrated senescence-screening assay. Aging (Albany NY) 2016;8:3223–40.

Conflicts of interest.—Alessia Forzina is an employee of IBSA Farmaceutici Srl, Italy.

Funding.—This work was funded by IBSA Farmaceutici Srl, Italy.

Authors' contributions.—Both authors read and approved the final version of the manuscript.

Acknowledgements.—The authors would like to acknowledge Josep Padró and Jordi Campillo for their advice; moreover, they acknowledge Laura Brogelli and Aashni Shah (Polistudium Srl, Italy) for the editorial assistance provided.

History.—Manuscript accepted: November 11, 2021. - Manuscript received: April 21, 2021.