

SKIN REJUVENATION AND ENVIRONMENTAL PROTECTION TARGETING THE NECK: A TWO-STEP SKIN CARE REGIMEN

Tsing Cheng, PhD, Priscilla Tan, BA, and Elizabeth T. Makino, BS, CCRA, MBA

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Skin care regimens have historically been focused on facial rejuvenation. However, the neck area is quickly becoming a concern for many people these days, with a growing number of patients pursuing a younger-looking and aesthetically more pleasing neck. Multiple factors contribute to neck aging including anatomical changes (such as loss of jawline/neck contour, platysmal banding, and submental fat accumulation) as well as skin changes.¹

Neck skin is different from facial skin in several ways. It is thinner and more delicate, and also much more flexible and extensible to allow head movements. Neck skin also loses its elasticity faster with age compared to facial skin resulting in accelerated skin sagging, wrinkle formation, and deeper wrinkles.² Other characteristics of aging neck skin are uneven skin tone, hyperpigmentation, and rough skin texture due to photodamage from sun-exposure in addition to general intrinsic aging. In this perspective, the use of skin care products offering growth factors, antioxidants and sun protection, can help to slow down, reverse and prevent the appearance of skin changes related to the aging neck.

TNS RECOVERY COMPLEX® AND TOTAL DEFENSE + REPAIR FOR NECK SKIN REJUVENATION

Growth factors have been used as a cosmeceutical ingredient since the early 21st century. TNS Recovery Complex® was the first commercially available cosmetic growth factor product for skin rejuvenation. It almost completely (93.6 percent) consists of human fibroblast conditioned media, which is a natural, physiologically-balanced blend of secreted growth factors, cytokines, and other molecules that support the extracellular matrix (ECM) of the skin. The cosmetic benefits of TNS® growth factors for skin rejuvenation have been shown in multiple clinical studies. TNS Recovery Complex significantly reduced the appearance of lines and wrinkles compared to vehicle treatment as shown by optical profilometry and clinical grading. Skin quality and texture were also improved.^{3,4}

Total Defense + Repair is a unique multi-modal product that combines innovative antioxidants (SOL-IR™ Advanced Antioxidant Complex) with comprehensive protection against the damaging effects of UVA/UVB as well as infra-



Figure 1. Reduced sagging and appearance of horizontal lines at (A) baseline, (B) week 6, and (C) week 12 in a 54-year-old female



Figure 2. Improvements in the appearance of wrinkles and skin tone at (A) baseline, (B) week 6, and (C) week 12 in a 70-year-old female

red-A radiation. The current understanding is that infrared-A also contributes to skin damage and photoaging.⁵ Pre-treatment with Total Defense + Repair helps to prevent sunburn cell formation and DNA damage.⁶ In addition to sun protection, Total Defense + Repair supports the skin's ability to restore itself, and helps to correct the signs of aging. Once daily use of Total Defense + Repair resulted in visible reduced appearance of lines and wrinkles as well as improvement in skin texture after 4 weeks of use.⁶

In a clinical usage pilot study in subjects with moderate-severe neck skin condition, a neck skin care regimen consisting of TNS Recovery Complex and Total Defense + Repair showed significant improvements in overall neck appearance, skin texture, the appearance of wrinkles, laxity, crepiness, and skin tone unevenness. These results indicate the cosmetic benefits of the TNS Recovery Complex and Total Defense + Repair regimen for neck skin rejuvenation.⁷

PATIENT EXPERIENCE PROGRAM

The combination of TNS Recovery Complex and Total Defense + Repair addresses the unmet need for patients seeking improvements in the often neglected area of the neck. A 12-week Patient Experience Program (PEP) was conducted at 8 participating office sites to assess patient experience of the TNS Recovery Complex and Total Defense + Repair regimen in patients who had received an in-office aesthetic treatment at least 4 weeks prior to start-

ing the at-home neck skin care regimen. Patients applied TNS Recovery Complex twice daily (morning and evening) after cleansing the neck area, and Total Defense + Repair Broad Spectrum SPF 34 Sunscreen once daily (morning only). Physicians assessments were performed at baseline, week 6 and week 12; patient self-assessment questionnaires and testimonials were taken at week 6 and week 12 visits.

Thirty-seven patients, female and male, between ages 31-70 completed the program. The physicians observed improvements in overall neck skin quality at both visits compared to baseline with an average improvement of 1.7 points on a 5-point grading scale at week 12. Digital photographs were taken to capture neck skin changes (Figures 1 and 2).

The regimen was highly-rated by patients themselves with 94 percent of patients agreeing that it "improved the overall appearance of their neck" after 12 weeks of use. The neck regimen made the neck look and feel tighter, firmer and more youthful. Patients also noticed improved skin texture and a decreased look of lines and wrinkles. Eighty-nine percent of patients agreed that the TNS Recovery Complex and Total Defense + Repair regimen "made my neck look and feel firmer" (Figure 3). By week 6, 76 percent of patients were satisfied with using the neck regimen, and by week 12 the satisfaction rate increased to 92 percent (Figure 4). This was reflected in patients' testimonials: "I feel like the appearance of my neck has been rolled back five years. The crinkly tex-

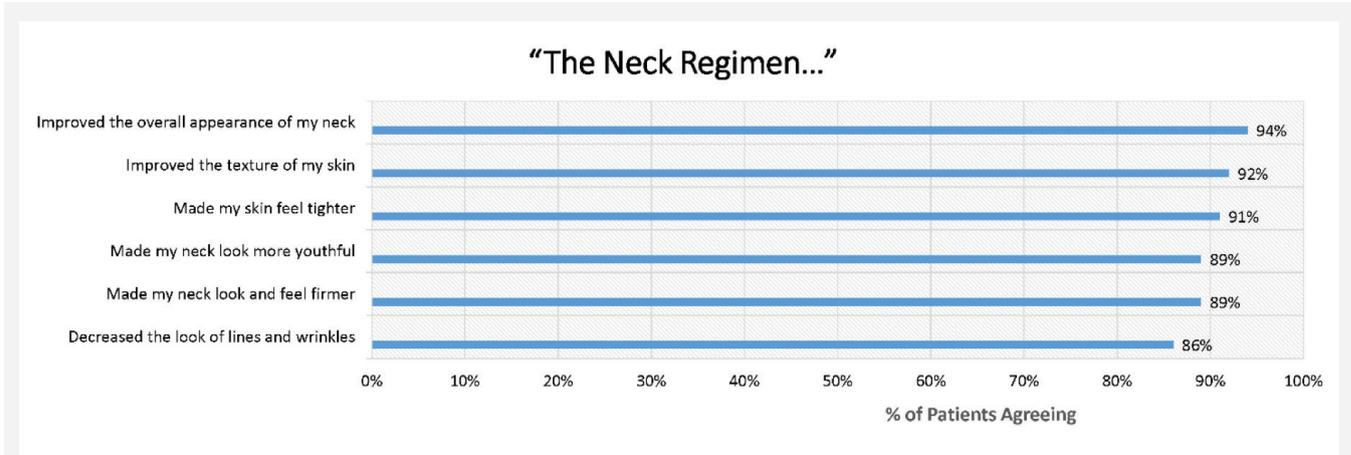


Figure 3. Subject questionnaire results at week 12

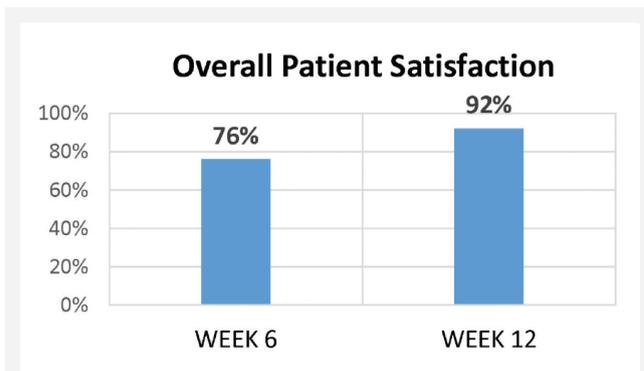


Figure 4. Overall patient satisfaction with the results

ture is gone and tightening has occurred. Which is wonderful for a non-surgical intervention.”

FINAL THOUGHTS

Since skin-related changes occur during the aging process of the neck, a neck skin care regimen should be part

of any neck rejuvenation treatment strategy. A regimen consisting of innovative, clinically proven skin care products (TNS Recovery Complex and Total Defense + Repair) resulted in noticeable improvements in overall neck skin quality and appearance and received high patient satisfaction. The observed benefits show that this skin care regimen provides the essential protection and rejuvenation needed to address skin quality concerns for this targeted treatment area.

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3. Mehta RC, Smith SR, Grove GL et al. Reduction in facial photodamage by a topical growth factor product. *J Drugs Dermatol* 2008; 7(9):864-71
4. Sundaram H, Mehta RC, Norine JA et al. Topically applied physiologically balanced growth factors: A new paradigm of skin rejuvenation. *J Drugs Dermatol* 2009; 8(5 Suppl):4-13
5. Grether-Beck S, Marini A, Jaenicke T et al. Photoprotection of human skin beyond ultraviolet radiation. *Photodermatol Photoimmunol Photomed* 2014; 30:167-74
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7. Data on file at SkinMedica[®]

Most SkinMedica[®] products are intended to meet the FDA’s definition of a cosmetic product, an article applied to the human body to cleanse, beautify, promote attractiveness, and alter appearances. These SkinMedica[®] products are not intended to be drug products that diagnose, treat, cure, or prevent any disease or condition. These products have not been approved by the FDA and the statements have not been evaluated by the FDA.

SkinMedica[®] Total Defense + Repair Broad Spectrum Sunscreen SPF 34 is an over-the-counter drug product which is formulated and marketed pursuant to FDA’s governing regulations set forth at 21 CFR Part 352.

PHYSICIAN INSIGHTS

A CLINICAL PERSPECTIVE



Kathleen L. Behr, MD | Behr Laser & Skin Care Center, Fresno, CA (participating office in Patient Experience Program)

The focus of aesthetics is shifting more and more to the body as a whole; it is not all about the face anymore. Many patients are looking for ways to have younger looking neck, décolleté, and hands, which

are all areas that are frequently exposed.

How do you view the use of skincare following aesthetic procedures for neck rejuvenation?

When it comes to aesthetic medicine, it's not only important to address the anatomical changes underneath the skin, but also the quality of the skin itself such as texture, lines, radiance, and skin tone evenness. People are aware of this when it comes to the face, but it is equally important to the neck. Having good skin quality will help to support aesthetic procedures and to provide a complete younger and healthier look.

What changes did you observe with the TNS Recovery Complex and Total Defense + Repair regimen?

Overall changes in skin quality were noticeable after 6 weeks of use. I saw improvements in texture, laxity and crepiness of the neck skin. Lines and wrinkles looked smoother and skin was firmer. Some patients also showed improved skin tone.



Jeffrey W. Sassmannshausen, MD | Three Rivers Dermatology, Fort Wayne, IN (participating office in Patient Experience Program)

So much focus has been placed on the aging face that patients are now realizing that their neck is what shows their age.

Loose skin, mottled pigmentation, crepey skin, and deeper lines can easily add a decade onto a woman's age. Knowing how much benefit TNS Recovery Complex and Total Defense + Repair gives to the face, I was excited to see what improvement could be achieved for the neck.

How has your experience been using TNS Recovery Complex and Total Defense + Repair for neck skin?

Given how disappointing other neck treatment options have been, I was a skeptic. I expected some improvement in texture and pigmentation, but the extent of improvement astonished me. The tightening of the skin was impressive. There was significant softening of deep coarse lines along with smoothing of overall texture and evening of typical mottled pigmentation.

What is the feedback you received from patients?

My patients were thrilled with their results. While I stressed that the changes may be gradual at first, most were seeing benefits in the first 6 weeks. By week 12, all were commenting on how their necks looked tighter, smoother, and softer. It made them look and feel younger.

What type of patient would you recommend this regimen for?

I would recommend this regimen to all patients, not just those concerned with their neck and décolleté skin showing wrinkles, crepiness, laxity, sagginess and discoloration. Since the regimen includes sun protection, it also prevents further signs of sun damage which is great for all patients. I now stress that the face starts at the hairline and ends at the nipples. ■