VOLUME - 9, ISSUE - 8, August - 2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Dermatology

TECH-NECK: TECH-SAVVINESS AT A COST – A CASE REPORT

Dr. Sanket Vashist Department of Dermatology, Venereology and Leprosy, Zonal Hospital, Dharamshala, Himachal Pradesh.

Dr. Aashutosh Sharma Department of Pediatrics, Zonal Hospital, Dharamshala, Himachal Pradesh.

KEYWORDS :

INTRODUCTION

The increased dependence on smartphones, tablets, laptops and similar digital devices results in constant bending of the neck causing more lines and creases around chin and neck area with associated laxity of skin, developing earlier as compared to that with natural senescence. This new aesthetic concern referred to as tech-neck which is likely to increase because of increasing dependence on online services in wake of global novel Corona virus 19 pandemic. Besides these, the associated non physiological posturing adds to posture related comorbidities like cervical spondylitis and backache. The patients may additionally have related headache and sleep disturbances. Hence in totality it is considered a life style disorder related condition with varied spectrum from aesthetic concerns to wider posture related problems. There has been an increase in patients with these concerns presenting to dermatologists especially professionals who rely too much on these devices.

CASE REPORT

This 24 years old otherwise healthy female presented with complaints of prominent horizontal neck creases for which she was cosmetically concerned. The patient noticed them since past about one and half years and they had been progressive since then. History revealed that she was an information and technology professional, working in a multinational firm for past three years with about 6 to 8 hrs of work on laptop screen about 5-6 days a week. Additionally she was spending at least 2-3 hours daily for personal use of smartphone and tablet. The posture was also found to be incorrect and on examination was found to have prominent horizontal skin lines on the neck, disproportionate for her age.

Figure 1,2: Prominent premature horizontal neck creases(necklace lines) on the anterior aspect of neck.

Based on history and clinical profile she was diagnosed as a case of tech-neck. The patient was counselled about prominent role of lifestyle modification, neck exercises, postural correction and prescribed vitamin C serum for application in the morning and tretinoin 0.025% gel for night time application along with liberal and frequent use of sunscreen and moisturizers. Currently the patient is under follow up.

DISCUSSION

The skin over the neck is thin and sensitive but is often neglected as part of anti-ageing therapy and signs of ageing may be more appreciable over the neck as compared to face in some patients. Necklace lines are the horizontal lines that appear across the neck region. Similarly neck bands, on the other hand, are vertical bands that are made when the muscles are tightened under the neck skin. These generally manifest later in life but genetics and lifestyle factors as attributed in tech-neck promote their early appearance and hastening the ageing process. Tech-neck represents the early appearance of these age related changes. Management is multifaceted with realistic end goals.

Lifestyle modifications for this include repositioning of phones, tablets, laptops and other devices, exercise of neck muscles, strengthening of core muscles, improving posture with ergonomically designed equipment and furniture. Dermatological interventions include use of adequate sun screens additionally on the neck, moisturization of skin, vitamin C serum and retinol cream at night. Second line therapy in more concerned patients include Botulinum toxin where small amounts of 1 to 2 U of onabotulinum toxin A are injected into the deep intradermal plane at 2 to 3 cm intervals for horizontal necklace lines. Latest skin tightening modalities include non-invasive ultherapy using prototype device (Ulthera, Inc.). This is FDA approved for improvement in appearance of the face and neck region.[1]. Additional correction of senescence associated changes with injectable soft tissue augmentation can help in the overall outlook of the patient.

Ultherapy is a novel non-invasive treatment which uses ultrasound energy waves and has real-time imaging which allows clinicians to visualise what layer of tissue they are treating. This allows clinicians to control exactly the site of energy delivery and avoid bone and blood vessels allowing precision, safety and efficacy. It bypasses the surface of the skin to deliver the right amount of ultrasound energy at the right depths and temperature.[2,3,4,5]. This energy triggers a natural response under the skin, causing production of fresh new collagen. Treatment is individualized based on skin thickness and fat content using various transducers but the cost of treatment and limited availability are major limiting factors for this novel therapy. This condition being not only limited to aesthetic concerns requires a holistic approach with additional expertise from physiotherapists, orthopaedic experts and lifestyle counsellors depending upon additional non dermatological presentations.

REFERENCES:

1. Carruthers A, Carruthers J, Almedia AT. Dermatology 4th Ed. Elsevier;2018: 2672-73.
2. Glicklich RE, White WM, Slayton MH, et al. Clinical pilot study of intense ultrasound therapy to deep dermal facial skin and subcutaneous tissues. Arch Facial Plast Surg. 2007;9:88-95.
3. Alam M, White LE, Martin N, et al. Ultrasound tightening of facial and neck skin: a raterblinded prospective cohort study. J Am Acad Dermatol. 2010;62(2):262-69.
4. White WM, Makin IRS, Barthe PG, et al. Selective creation of thermal injury zones in the superficial musculoaponeurotic system using intense ultrasound therapy. Arch Facial Plast Surg. 2007;9(1):22-29.
5. Laubach HJ, Makin IRS, Barthe PG, et al. Intense focused ultrasound: evaluation of a new treatment modality for precise microcoagulation within the skin. Dermatol Surg. 2008;34(5):727-34.