

Role of Collagen Patches in Facial Rejuvenation

Ravi Kumar Chittoria

How to cite this article:

Ravi Kumar Chittoria. Role of Collagen Patches in Facial Rejuvenation. Int.Phy.2024;12(1):25-27.

Abstract

The skin laxity is a feature which appears early over the face with age. The skin laxity associated with old age can be corrected by various surgeries. Non-surgical treatment may be another option. Hereby we are sharing our experience of using a non-surgical technique for skin tightening using gel eye patches which contains collagen.

Keywords: Facial Rejuvenation; Collagen Gel Patches; Collagen; Anti-aging.

INTRODUCTION

Skin laxity and the appearance of fine lines and wrinkles are inevitable results of aging and chronic sun exposure. Non-surgical techniques are now becoming more popular especially for mild to moderate skin laxity with lower risks of complications. The main component of skin is fibroblast and extracellular matrix (ECM).

Author Affiliation: Professor, Department of Plastic Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605006, India.

Corresponding Author: Ravi Kumar Chittoria, Professor, Department of Plastic Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605006, India.

E-mail: drchittoria@yahoo.com

Received on: 11.05.2023

Accepted on: 01.04.2024

MATERIALS AND METHODS

Current study was performed in the Department of Plastic Surgery at a tertiary care center. The departmental ethical committee approval as well as informed written consent was obtained. A 50 year old gentleman was with bilateral saggy eyes (Fig. 1). He was provided with gel eye patches containing aqua, glycerine, paraffinumliquidum, dimethicone, cetearyl alcohol isopropyl palmitate, sorbitan stearate, propylene glycol butylene glycol, phenoxyethanolhydrolyzed collagen. Total 6 pairs were applied, 1 pair every week for 6 weeks. After washing and cleaning the face with water, face was dried, and the gel patches were applied over the saggy eyes (Fig. 2). The patches were left in place for 20 minutes and then carefully removed followed by massage of the area with fingertip. The assessment was done using visual assessment using two independent evaluators who both were kept blind about the treatment.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0.

RESULT

Collagen patches containing the collagen are effective in managing the skin laxity causing saggy eyes with any adverse effects (Fig. 3).



Fig. 1: Before The Application of Gel eye patches



Fig. 2: Gel eye patches applied



Fig. 3: After the application

DISCUSSION

The aging process of skin starts early even in mid 20s due to excessive damage of the skin due to sunlight exposure or various chemical pollutants, all these are ultimately associated with decreased collagen production and excessive collagen damage which will slow down the skin repair mechanism. The aged look on the face on the individual will influence the psychological wellbeing of the patient as well as his confidence there are various methods in practice to prevent or manage the aging process. Reason why collagen is required due to the fact of reduction in production of collagen with age. The another reason for effect of ageing is elastosis. Skin tightening techniques target collagen and elastic fiber remodeling and synthesis to rejuvenate the skin. Laser therapy is one of the non-surgical procedure.

CONCLUSION

Surgical intervention remains main treatment for skin laxity. While non-surgical skin tightening technologies have gained popularity, they historically have not achieved the same levels of treatment durability and efficacy.

Conflict of interest: *None*

Declarations

Author's contributions

All authors made contributions to the article

Availability of data and materials: *Not applicable*

Financial support and sponsorship: *None*

Consent for publication: *Not applicable*

REFERENCES

1. Burke, J.F. *et al.* (1981) Successful use of a physiologically acceptable artificial skin in the treatment of extensive burn injury. *Ann. Surg.* 194, 413–428.
2. Balasubramani M, Kumar TR, Babu M. Skin substitutes A review. *Burns.* 2001;27:534–44.
3. Singh O, Gupta SS, Soni M, Moses S, Shukla S, Mathur RK. Collagen dressing versus conventional dressings in burn and chronic wounds: A retrospective study. *J CutanAesthet Surg.* 2011;4:12–16.

4. Lazovic G, Colic M, Grubor M, Jovanovic M. The Application of collagen sheet in open wound healing. *Ann Burns Fire Disasters*. 2005; 18:151-156.
5. Brett D. A review of collagen and collagen-based wound dressings. *Wounds*. 2008; 20:12.
6. Bhattacharya S, Tripathi HN, Gupta V, Nigam B, Khanna A. Collagen sheet dressings for cutaneous lesions of toxic epidermal necrolysis. *Indian J Plast Surg*. 2011; 44:474-7.
7. Yamada KM. Cell surface interaction with extracellular materials. *Ann Rev Biochem*. 1983:509-48.

