Mesotherapy as a non-surgical anti-aging solution.

Sizhu Zhao*

State Key Laboratory of Organic-Inorganic Composites, Beijing University of Chemical Technology, China

Introduction

In the ever-evolving world of aesthetic medicine, mesotherapy has emerged as a popular non-surgical solution for combating signs of aging. This innovative technique offers a minimally invasive approach to rejuvenating the skin, making it an appealing alternative to more invasive procedures. This article explores mesotherapy, its benefits, techniques, and the scientific evidence supporting its use as an anti-aging treatment [1].

Mesotherapy is a technique that involves the injection of a customized blend of vitamins, minerals, amino acids, and other active ingredients into the middle layer of the skin, known as the mesoderm. The goal of mesotherapy is to address various skin concerns, including fine lines, wrinkles, and overall skin texture. The treatment is designed to rejuvenate the skin, improve hydration, and stimulate collagen production [2].

During a mesotherapy session, a series of micro-injections are administered into the skin using a fine needle. The injection formula is tailored to the individual's specific needs and may include a mix of hyaluronic acid, vitamins (such as vitamins C and E), peptides, and other anti-aging agents. This targeted approach delivers nutrients directly where they are needed, promoting cellular repair and regeneration [3].

Unlike surgical procedures, mesotherapy involves only minor injections and requires no downtime. Patients can return to their daily activities immediately after treatment. The injection formula can be tailored to address specific skin issues, allowing for a personalized approach to anti-aging [4].

Mesotherapy can enhance skin texture, reduce pigmentation, and improve overall skin tone, leading to a more youthful appearance. By delivering hyaluronic acid and other hydrating agents directly into the skin, mesotherapy helps restore moisture levels and improve skin elasticity. The injection of various growth factors and nutrients promotes collagen synthesis, which is crucial for maintaining skin firmness and reducing wrinkles [5].

A study published in *Dermatologic Surgery* demonstrated that mesotherapy with a combination of vitamins and hyaluronic acid significantly improved wrinkle depth and skin hydration in participants. Research in the *Journal of Cosmetic Dermatology* found that mesotherapy was effective in enhancing skin texture and reducing signs of aging, such as fine lines and uneven pigmentation [6].

A study in *The Journal of Clinical and Aesthetic Dermatology* reported that mesotherapy led to increased collagen production and improved skin elasticity, contributing to a more youthful appearance. Clinical trials have shown that mesotherapy is generally safe, with minimal side effects. A review in *Aesthetic Surgery Journal* highlighted the low incidence of adverse effects and the overall safety of the procedure [7].

A study in *Journal of Drugs in Dermatology* confirmed that mesotherapy effectively improved skin hydration and elasticity, particularly in individuals with dry and aging skin. Mesotherapy can be performed using various techniques, including manual injection with a syringe or automated injection devices. The choice of technique depends on the practitioner's preference and the specific needs of the patient. Each technique aims to ensure precise delivery of the treatment solution into the targeted areas of the skin [8].

Before undergoing mesotherapy, it is essential to consult with a qualified practitioner to assess your skin condition and discuss your goals. The practitioner will develop a personalized treatment plan based on your needs. Post-treatment care typically involves avoiding sun exposure and using gentle skincare products to enhance the results and prevent irritation [9].

While mesotherapy is generally safe, some patients may experience minor side effects, such as redness, swelling, or bruising at the injection sites. These effects are usually temporary and resolve within a few days. It is important to follow post-treatment instructions provided by your practitioner to minimize any potential side effects [10].

Conclusion

Mesotherapy offers a promising non-surgical solution for addressing signs of aging and rejuvenating the skin. Its minimally invasive nature, combined with the ability to deliver targeted nutrients and stimulate collagen production, makes it an attractive option for those seeking to improve their appearance without resorting to more invasive procedures. As with any cosmetic treatment, it is crucial to consult with a qualified practitioner to ensure that mesotherapy is the right choice for your individual needs.

References

 Zhang Y, Xing Z, Fan B, Ni Z, Wang F, Hu X, Chen Y. Uncovering Aging Chemistry of Perovskite Precursor Solutions and Anti-aging Mechanism of Additives. Angewandte Chemie. 2023;135(8):e202215799.

Citation: Zhao S., Mesotherapy as a non-surgical anti-aging solution. Dermatol Res Skin Care. 2024; 8(4):217

^{*}Correspondence to: Sizhu Zhao, State Key Laboratory of Organic–Inorganic Composites, Beijing University of Chemical Technology, China. E-mail: Sizhu.z@mail.buct.edu.cn Received: 01-Aug -2024, Manuscript No. AADRSC-24-144130; Editor assigned: 02-Aug -2024, PreQC No. AADRSC-24-144130(PQ); Reviewed: 16-Aug-2024, QC No AADRSC-24-144130; Revised: 21-Aug-2024, Manuscript No. AADRSC-24-144130(R); Published: 30-Aug-2024, DOI:10.35841/aadrsc-8.4.217

- 2. Getoff N. Anti-aging and aging factors in life. The role of free radicals. Radiat. Phys. Chem. 2007;76(10):1577-86.
- Li Z, Cheng J, Huang L, Li W, Zhao Y, Lin W. Aging diagnostic probe for research on aging and evaluation of anti-aging drug efficacy. Anal Chem. 2021;93(41):13800-6.
- 4. Ganceviciene R, Liakou AI, Theodoridis A, Makrantonaki E, Zouboulis CC. Skin anti-aging strategies. Dermatoendocrinol. 2012;4(3):308-19.
- 5. Schagen SK. Topical peptide treatments with effective anti-aging results. Cosmetics. 2017;4(2):16.
- Chelu M, Musuc AM. Natural biological macromolecules for designing hydrogels as health care and anti-aging solutions. Eng Proceed. 2023;56(1):158.

- Yi R, Liu XM, Dong Q. A study of Lycium barbarum polysaccharides (LBP) extraction technology and its anti-aging effect. Afr J Tradit Complement Altern Med. 2013;10(4):171-4.
- 8. Li J, Zhang CX, Liu YM, Chen KL, Chen G. A comparative study of anti-aging properties and mechanism: resveratrol and caloric restriction. Oncotarget. 2017;8(39):65717.
- 9. Tang Y, Zhu ZY, Liu Y, Sun H, Song QY, Zhang Y. The chemical structure and anti-aging bioactivity of an acid polysaccharide obtained from rose buds. Food Func. 2018;9(4):2300-12.
- Parulkar VR, Trivedi MK, Branton A, Trivedi D, Nayak G, Mondal SC, Jana S. The use of consciousness energy healing based herbomineral formulation for skin antiaging strategies. J Food Nutr Sci. 2017;5(3):96-106.

Citation: Zhao S., Mesotherapy as a non-surgical anti-aging solution. Dermatol Res Skin Care. 2024; 8(4):217