

AYURVEDIC SKIN ENHANCING HERBS, HYALURONIC ACID AND SALICYLIC ACID FOR EVERYDAY SKIN CARE: A COMPARATIVE REVIEW**Dr. Pranjal Prabhakar Parab^{1*} and Dr. Dipti Gaurav Kadam²**

¹PG Student, Department of Dravyaguna Vigyan, Dr. G.D. Pol Foundation's YMT Ayurvedic Medical College.

²Associate Professor, Department of Dravyaguna Vigyan, Dr. G.D. Pol Foundation's YMT Ayurvedic Medical College.

Article Received on
30 December 2023,

Revised on 20 Jan. 2024,
Accepted on 10 Feb. 2024

DOI: 10.20959/wjpr20244-31302



***Corresponding Author**

**Dr. Pranjal Prabhakar
Parab**

PG Student, Department of
Dravyaguna Vigyan, Dr.
G.D. Pol Foundation's YMT
Ayurvedic Medical
College.

ABSTRACT

Since early mankind there has always been a race for the best skin, the external appearance of skin has always stood out in comparison to internal health. Ayurveda has always believed skin to be a byproduct of internal health. Nowadays we see a lot of hype regarding Hyaluronic Acid (HA) along with Salicylic acid (SA) and its use in multiple cosmetic products like serum, gels, lotions and so on. The benefits of HA and SA are proven scientifically and these age old Ayurvedic herbs have been proving their worth throughout the years, this comparative review throws light on the pathway of skin enhancing effects of the select Ayurvedic herbs like Chandan, Haridra, Kumari, Manjistha, Nimba, along with HA and SA. Ayurvedic Bruhatrayee, Nighantus, articles from Google scholar, PubMed were reviewed. Skin enhancing factors were reviewed from concerned Ayurvedic and modern texts were reviewed. The HA and SA references were searched on Google scholar, related Modern textbooks and Articles were

reviewed. With thorough study it was found the impact of HA and SA is not remarkably very different to what the Ayurvedic Herbs provide with regular use. Skin enhancing factors mentioned in Ayurveda are more deep rooted compared to modern science and thus the use of these herbs are more deep rooted in comparison to use of HA and SA on a daily basis as a part of skin care routine.

KEYWORDS: Skin enhancing herbs, Hyaluronic acid, Salicylic acid, Chandan, Haridra, Manjistha.

INTRODUCTION

Skin is the largest organ of the integumentary system. Like the rest of the human body, the skin is subject to changes caused by the process of natural ageing. Changes in the appearance of skin are often the first visible signs of ageing and this can have implications on our emotional and mental wellbeing.^[1] The search for maintaining healthy skin is always around with modern science bringing up new concepts or trends for different benefits of skin every now and then. On the other hand, Ayurveda has mentioned around 200 herbs, minerals, stating their benefits for skin through karmas like Varnya, Raktaprasadan, Raktashodhan, Twak dosha nivaran, Rasayan, Kushth nashak, Tridosha shaman and so on.

According to Ayurveda, healthy skin is not just about the external appearance but the reflection of our internal systemic balance of Tridosha and the formation of Dhatus. Acharya Charak, Sushrut and Vagbhat have given different explanations regarding embryogenesis of skin. The major factors being Pitta dosha, Rasa, Rakta and Mamsa dhatu. Out of the many, herbs like Chandan, Haridra, Kumari, Manjistha and Neem are commonly used by masses in different forms and are also available in the market under Ayurvedic cosmetics.

The wide spread of HA and SA, by various cosmetic companies and influencers given its scientifically proven benefits jumped up the charts as the best friend for all your major skin problems.

RESULTS

Ayurveda has recently gained stardom and has been steadily coming to terms with the public. The properties of select herbs and their part used as per Ayurveda are mentioned in the given tables.

Table 1: Properties & Part Used.^[4-8]

Herb	Latin Name	Common name	Part Used	Rasa	Virya	Vipak
Chandan	<i>Santalum album</i>	Chandan, Sandalwood	Heartwood, Bark	Tikta, Madhur	Sheeta	Katu
Haridra	<i>Curcuma longa</i>	Haldi, Turmeric	Rhizome	Katu, Tikta	Ushna	Katu

Kumari	<i>Aloe barbadensis</i>	Gvarpatha, Korphad, Aloe vera	leaves, Eluva, Mussabar	Tikta, Madhur	Sheeta	Katu
Manjistha	<i>Rubia cordifolia</i>	Manjeth, Indian maddar	Root	Madhur, Tikta, Kashay	Ushna	Katu
Neem	<i>Azadiracta indica</i>	Kadunimba	Leaves	Tikta	Sheeta	Katu

Table 2: Guna & Karma of Herbs.^[4-8]

Herb	Guna	Doshagnata	Action on Dhatu	Karma	Rogagnata
Chandan	Laghu, Ruksha	Kapha, Pitta shamak	Rakta	Varnya, vrushya, rakta prasadak,	Raktapitta, pitta vikar, daah,
Haridra	Ruksha, Laghu	Kapha, pitta nashak	Rakta	Varnya, twagdosha	Shotha, pandu, vran, prameha
Kumari	Guru, Snigdh, Picchila	Vata, Pitta har	Rakta, Mamsa	Rasayan, bruhan, balya, vrushya	Charmarog, Agnidagdh, granthi, visphot.
Manjistha	Guru, Ruksha	Kapha, Pitta	Rakta	Varnakrut, tvagdosha har,	Kushtha, visarpa, vran, prameha
Neem	Laghu, Ruksha	Pitta, Kapha	Rakta, Mamsa	Krumi, Twagdosha har, Shothghna, Yakrut uttejaj	Kustha, Prameha, Vran, Krumi

This age old system of medicine recommends a combination of external applications as well as internal consumption of select herbs for skin health.

Table 3: Method for usage of herbs.^[4-8]

Herb	Internal consumption	External Application
Chandan	Consumed after certain modifications.	Face pack, an ingredient of utna, scrub, Tinctures, oil
Haridra	Powder can be consumed with Milk.	In powder form used as Scrub, Lepa, tinctures
Kumari	The gel can be consumed, available in juice form.	as a base with different ingredients.
Manjistha	Kadha form	

Neem	Powder can be consumed after certain modifications	Oil, Leaves powder, Tinctures.
------	----------------------------------------------------	--------------------------------

Skin (Twacha) has a very elaborate explanation in Ayurvedic texts, its embryogenesis is exclusively explained by Charak, Sushrut and Vagbhat and a healthy skin is put forth in the form of Twaksarata which is nothing but Rasadhātu Sarata it states Individuals having excellence of Twak or skin are characterised by.^[9]

1. Snigdha Twacha (unctuous, oily)
2. Shlakshna Twacha (smooth)
3. Mridu Twacha (soft)
4. Prasanna (fresh in appearance)
5. Sukshma, Alpa, Gambhir, Sukumar Lomal having very fine clear, less numerous, deep rooted and tender body hairs)
6. Saprabha Twak (having natural glow over it).

Such individuals are endowed with Sukh (happiness), Saubhagya (good fortune), Aishwarya (prosperity), Upbhoga (enjoyment), Buddhi (good intellect), Vidya (knowledge/wisdom), Arogya (health), Praharsha (cheerfulness and happiness seen on face) and Ayushatvam (Longevity of life).^[9]

On reviewing the formation and development of Skin and all the factors involved in maintaining its lustre, the ayurvedic herbs perfectly act on these particular factors through various properties.

Table 4: Factors Influencing Skin as per Ayurveda.^[10]

Vayasthapan - Anti-aging	Bruhan - Nourishing	Vran ropan - Wound Healing
Varnya - Acting on complexion	Krumi - Anti bacterial	Shothaghna - Anti inflammatory
Raktaprasadan - Blood enhancer	Rasayan - Rejuvenating	Tikta Rasa - Acts on pitta as pitta shamak, Kapha Shamak, Vata kar
Raktashodhan - Blood Purification	Kushta nashak - Useful in various skin disorders	Sheeta Virya - Helps in pitta shaman and kapha vardhan
Twak dosha nivaran - Clearing skin defects	Tridosha shaman - Balances vitiated dosha	Ushna Virya - Increases pitta

MODERN TREND

Hyaluronic acid, also known as hyaluronan, is a clear, gooey substance that is naturally produced by your body. The largest amounts of it are found in your skin, connective tissue and eyes. Hyaluronic acid (HA) plays multifaceted role in regulating the various biological processes such as skin repairmen, diagnosis of cancer, wound healing, tissue regeneration, anti-inflammatory, and immunomodulation.^[11] HA based formulations (i.e., gels, creams, intra-dermal filler injections, etc.) exhibit remarkable anti-wrinkle, anti-nasolabial fold, anti-aging, space-filling, and face rejuvenating properties.^[12,13]

Salicylic acid (SA) is a beta hydroxy acid that occurs naturally in plants such as willow bark. Salicylic acid has anti-inflammatory and antibacterial properties, and also works as an exfoliant to remove dead skin cells. Salicylic acid penetrates your skin and works to dissolve the dead skin cells clogging your pores.^[13]

Table 5: Usage Of HA & SA.

Product	Internally	Externally
Hyaluronic Acid	In the form of capsules	Serums, Gels, Creams
Salicylic Acid	— —	Serums, Facewash

Table 6: Actions of HA & SA.

Product	Actions
Hyaluronic Acid	Moisturising agent, water retention, Wound healing, Anti ageing, Tissue lubrication.
Salicylic Acid	Skin whitening, acne, cleansing agent

DISCUSSION

With the compilation of all properties and actions of Chandan, Haridra, Kumari, Manjistha, Neem from major Ayurvedic texts it explains the benefits of these herbal drugs in day to day skin care. These herbal drugs can be consumed orally in the optimised quantity to impart multiple benefits to skin and the body as a whole.^{[14][15]} Although the use of HA and SA is also remarkable in skin care it cannot be brought to the same level as these herbs since it does not give an all rounder effect and is limited to external application only along with certain skin types.^[16]

Thus, the trend of using HA and SA is not because it's perfect from all angles but majorly because of the hype that is created by the cosmetic industry and paid partnerships with public influencers. The actions of these select herbs on the body are more large scale and more easier to use in different forms, easily available in the market at cheaper rates as compared to HA and SA.

CONCLUSION

The skin enhancing effect of both Ayurvedic herbs and Hyaluronic acid and Salicylic acid were remarkably similar, but since the skin enhancing factors mentioned in Ayurveda are not limited parameters but as a whole, the Herbs have an undue advantage. As the modern trend goes of using HA or SA in your daily skin care routine, these herbs can also be made part of your daily skin care regimen. In fact the use of these herbs has more profound effect and can be easily used in different forms according to one's comfort. Since Ayurveda believes that every individual is unique and does not provide only a symptomatic approach, it rather dives deep to the root, use of these herbs as well as others mentioned in the Ayurvedic texts just need a little more elaboration and push into the world. This ensures that the masses use what is preferable and necessary according to the skin type and not blindly follow trends.

ACKNOWLEDGEMENTS

1. Dr. Manoj Kadam, HOD, Dept of Dravyaguna Vigyan, YMT Ayurvedic Medical College.
2. Dr. Renu Kokane, PG Scholar, Dept of Rasashastra and Bhaisajya Kalpana, YMT Ayurvedic Medical College.
3. Teachers and fellow PG scholars of Dept of Dravyaguna Vigyan, YMT Ayurvedic Medical College.

REFERENCES

1. Roy Neha, ANALYTICAL STUDY OF SKIN IN AYURVEDA, AYUSHDHARA ISSN: 2393-9583 (P)/ 2393-9591.
2. Erica Julson, MS, RDN, 7 Surprising Benefits of Hyaluronic Acid, Healthline magazine, 21 April, 2018.
3. Salicylic Acid Gel - Uses, Side effects WebMD <https://www.webmd.com/drugs/2/drug-18-866/salicylic-acid-topical/salicylic-acid-keratolytic-topical/details>.
4. Padmashri Prof. Krushnachandra. Chuneekar, Bhavprakash Nighantu, Varanasi, Chaukambha Bharati Academy, Edition, Verse 11 to 13, 2010.

5. Padmashri Prof. Krushnachandra. Chuneekar, Bhavprakash Nighantu, Varanasi, Chaukambha Bharati Academy, 2010 Edition, Verse 196 – 197.
6. Padmashri Prof. Krushnachandra. Chuneekar, Bhavprakash Nighantu, Varanasi, Chaukambha Bharati Academy, 2010 Edition, Verse 230.
7. Padmashri Prof. Krushnachandra. Chuneekar, Bhavprakash Nighantu, Varanasi, Chaukambha Bharati Academy, 2010 Edition, Verse 190, 191.
8. Padmashri Prof. Krushnachandra. Chuneekar, Bhavprakash Nighantu, Varanasi, Chaukambha Bharati Academy, 2010 Edition, Verse 13 to 16.
9. Dr. Brahmananda Tripathi. Charak Samhita. 7th ed. Varanasi Chaukhamba Surbharti Prakashan, 2000, Cha. Vi.8/103. 763p.
10. Datta, H. S., & Paramesh, R. Trends in aging and skin care: Ayurvedic concepts. Journal of Ayurveda and integrative medicine, 2010; 1(2): 110-113.
11. Hyaluronic acid: A key molecule in skin ageing, Eleni Papakonstantinou, Michael Roth & George Karakiulakis, Dermato-Endocrinology, Taylor and Francis online, 2012; 4(3).
12. Hyaluronic Acid, Cleveland Clinic <https://my.clevelandclinic.org/health/articles/22915-hyaluronic-acid>.
13. Whitening Effect of Salicylic Acid Peels in Asian Patients, HYO HYUN AHN MD, IL-HWAN KIM MD, First published: 31 March, 2006.
14. Sharma, K., Joshi, N., & Goyal, C. Critical review of Ayurvedic Varnya herbs and their tyrosinase inhibition effect. Ancient science of life, 2015; 35(1).
15. The Roles of Vitamin C in Skin Health by Juliet M. Pullar, Anitra C. Carr and Margreet C.M. Vissers.
16. Hyaluronic acid, a promising skin rejuvenating biomedicine: A review of recent updates and pre-clinical and clinical investigations on cosmetic and nutricosmetic effects - Syed Nasir Abbas Bukhari, Zahid Hussain, International Journal of Biological Macromolecules, Part B, December, 2018; 120: 1682-1695