

## TRADITIONAL MUKHALEPA: ANCIENT WISDOM OF ENHANCING SKIN RADIANCE AND BEAUTY

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### ABSTRACT

Maintaining healthy and radiant skin in today's fast-paced world can be challenging due to environmental factors and lifestyle choices. Conventional cosmetics and skincare products, while promising to enhance appearance, often contain harmful ingredients that have adverse effects on health and the environment. In contrast, *Ayurveda*, an ancient holistic practice, offers a natural and sustainable approach to long-lasting beauty. Ayurvedic cosmetology recognizes that external beauty is a reflection of inner well-being, considering factors such as doshas, digestion, lifestyle, and mental state. A key component of Ayurvedic cosmetology is *Mukhalepa*, a facial rejuvenation therapy involving the application of herbal pastes, oils, and masks to nourish and revitalize the skin. This article aims to review and compile information on Ayurvedic *Mukhalepa* from classical Ayurvedic texts

and contemporary literature. Extensive research was conducted, referencing *Samhitas*, *Nighantus*, and other Ayurvedic texts, as well as modern articles. The focus is on simple herbal formulations recommended for external application, known as *Lepa*, exploring their ingredients, benefits, and their role in achieving a healthy and glowing complexion.

**KEYWORDS:** *Mukhalepa*, *Lepakalpana*, *Ayurvedic* cosmetology, *Varnya* and complexion.

### INTRODUCTION

In today's society, there's a noticeable trend towards showcasing oneself, often fueled by social media and a culture that values external appearances. Many individuals seek beauty not only for personal satisfaction but also to align with societal standards or to gain recognition from their peers. But maintenance of healthy and radiant skin can be challenging due to

environmental factors and lifestyle choices. While current cosmetic products promise to enhance our appearance and confidence, many of them contain synthetic ingredients which may pose side-effects in individuals with sensitive skin. To achieve long-lasting beauty with minimal side effects, some turn to ancient holistic practices like Ayurveda. Ayurvedic cosmetology focuses on inner well-being, recognizing that external beauty is influenced by factors like individual's constitution (*doshas*), digestion (*agni*), daily lifestyle practices (*dincharya* & *ritucharya*), and mental state (*satvabal*). Its goal is to restore balance in these areas to enhance natural beauty and vitality. A key practice is Ayurvedic *Mukhalepa*, a facial rejuvenation therapy using herbal pastes, oils, and masks to nourish, cleanse, and revitalize the skin.

## AIM

This article aims to review and compile detailed information about *Mukhalepa* explaining its concept and significance from classical Ayurvedic texts including *Brihatrayee & laghutrayee Samhitas*, *Nighantus* and other contemporary literature.

## MATERIALS AND METHODS

A comprehensive search was conducted in classical Ayurvedic texts, including *Brihatrayee & laghutrayee Samhitas*, *Nighantus* and other Ayurvedic contemporary literature. Additionally, reliable Ayurvedic journals and modern research articles were explored to gather information on Ayurvedic *Mukhalepa*. The study focuses on identifying simple herbal formulations recommended for external application as *Lepa*, providing insights into the ingredients, its benefits, and its significant role in achieving a healthy and glowing complexion.

## Ayurvedic *Mukhalepa*

*Mukhalepa*, derived from the Sanskrit words "*Mukha*" (face) and "*Lepa*" (application), is a therapeutic Ayurvedic practice that involves the application of herbal pastes, oils, and masks to the face. It is an integral part of Ayurvedic skincare and is designed to purify, nourish, and revitalize the skin while promoting overall well-being.

## Benefits of Ayurvedic *Mukhalepa*<sup>[1]</sup>

- ***Sukhalepanshilanam dhridam bhavati darshanam* (Keeps Your Eyesight Strong):** Regular application of herbal face packs can indirectly benefit your eyesight. By maintaining good skin health, it reduces the risk of eye strain and fatigue, which helps in preserving vision.

- **Vadanam Chaaparimlanam (Maintains a Radiant Face):** Herbal face packs are known for their ability to nourish the skin deeply. They help in improving skin texture, reduces blemishes, and the herbal ingredients used in *Mukhalepa* possesses properties that soothes and rejuvenate the skin, making it radiant.
- **Shlakshanam (Keeps Your Skin Smooth):** Herbal face packs have exfoliating and moisturizing properties which helps in the removal of dead skin cells. The herbal ingredients also soothe irritation and reduce redness, contributing to overall skin smoothness.
- **Tamrasopamam (Makes Your Face Look Fresh and Vibrant Like a Lotus Flower):** By using herbal face packs daily, it helps to achieve a fresh and vibrant appearance, akin to the beauty symbolized by a lotus flower.

### Types of *Mukhalepa*

*Mukhalepa* (face pack) has been classified mainly into three types i.e. *Doshahara*, *Vishhara*, *varnakrita*<sup>[2]</sup> on the basis of their therapeutic use -

- **Doshahara** (pacifies *Dosha*): This variety of *Mukhalepa* (face pack) includes drugs which shows their action directly on the *Doshas* responsible for various skin conditions and disorders such as acne, blemishes and inflammation. It often contains ingredients with antimicrobial, anti-inflammatory and soothing properties.
- **Vishhara** (abolishes poisonous effect): This variety of *Mukhalepa* (face pack) includes the drugs which counteracts the toxins and impurities directly at local level after application. It basically detoxifies the facial skin. It typically includes ingredients that have detoxifying, exfoliating, and pore-cleansing properties.
- **Varnakrita** (promoter of complexion): *Varnya* means “improving complexion” in Sanskrit. This kind of *Mukhalepa* (face pack) includes the drugs which focus on enhancing the complexion and promoting a radiant glow after application. It usually incorporates ingredients with properties that helps reduce pigmentation, aid in minimizing the effect of tanning, even out skin tone and imparts a natural luminosity to the skin.

### General guidelines for application of *Mukhalepa*

1. In Ayurveda, it is recommended to apply *Mukhalepa* (face pack) against the direction of hair follicles, also known as *Pratilom*, on the skin.<sup>[3]</sup> This practice is believed to enhance the effectiveness and quicken the action of the application. An attempt is being

made to elucidate the rationale behind the Ayurvedic recommendation for applying *Mukhalepa* in “*Pratiloma*” direction:

- **Increased Penetration:** Applying *Mukhalepa* in a *Pratilom* or against the direction of hair follicles is believed to facilitate better penetration of the herbal ingredients into the skin. It is thought that this application technique helps the active compounds in the face pack reach deeper layers of the skin, allowing for enhanced absorption and efficacy.
- **Stimulation of Microcirculation:** Applying *Mukhalepa* against the direction of hair growth may stimulate microcirculation in the skin. The gentle friction created by the application technique can increase blood flow to the area, promoting better nutrient delivery and removal of waste products from the skin cells.
- **Exfoliation and Detoxification:** The *Pratilom* application method may also contribute to mild exfoliation and detoxification of the skin. The friction created during application can help remove dead skin cells, impurities, and toxins, leaving the skin feeling refreshed and rejuvenated.

## 2. Thickness of the *Mukhalepa*

The thickness of *Mukha Lepa*, or the face pack, varies depending on its specific purpose. According to Ashtang Hridaya, the recommended thickness is as follows<sup>[4]</sup>:

- **Doshaghna Lepa:** One-fourth ( $1/4^{\text{th}}$ ) *angula pramana* (0.48 cm)
- **Vishaghna Lepa:** One-third ( $1/3^{\text{rd}}$ ) *angula pramana*. (0.65 cm)
- **Varnya Lepa:** Half ( $1/2$ ) *angula pramana* (0.97 cm)

Note: 1 *Angula* = 1.95 cm

## 3. Method of application

Allow the *Lepa* to remain on the face until it becomes completely dry. This allows the herbal ingredients in the face pack to exert their beneficial effects. However, it is important not to leave the *Lepa* on for an extended period once it has dried, as it may lead to excessive drying of the skin.<sup>[5]</sup> Over-drying can potentially disturb the natural balance of the skin and affect its complexion.

- When removing the dried *Lepa*, it is recommended to moisten it first. This can be done by applying water or a damp cloth to the face pack, softening it before gently removing it. Moistening the *Lepa* helps prevent any discomfort or irritation during the removal process.

- After removing the *Lepa*, it is suggested to anoint the face with oil. This practice helps moisturize and nourish the skin, preventing excessive dryness that may occur after the face pack application.
- In addition to the application and removal of *Lepa*, certain lifestyle factors are recommended to maintain skin health. These include avoiding day sleep, excessive talking, exposure to fire and sunlight, as well as managing emotions such as sorrow and anger.

**4. Timing of Application:** Mukhalepa should not be applied at night nor should it be allowed to stay on the face after it has dried up.<sup>[6]</sup> The rationale and intent behind this valuable suggestion can be understood by considering the following perspective:

- Ayurveda emphasizes the importance of following the natural circadian rhythm of the body. Night time is considered a time for rest and rejuvenation for the body and the skin. Applying *Mukhalepa* at night may interfere with the natural healing and regeneration processes that occur during sleep.
- Allowing the *Mukhalepa* to stay on the face after it has dried up can lead to excessive drying of the skin. When the face pack dries, it can cause the skin to become tight and may even lead to discomfort or irritation. Removing the face pack in a timely manner helps prevent these issues.

Overall, the general recommendation is to apply *Mukhalepa* during the day, allowing it to remain on the face for the specified duration, and then gently remove it once it has dried up, ensuring that the skin is not excessively dried or irritated.

#### **General Characteristic of a good quality *Mukhalepa*<sup>[7]</sup>**

- **Uniform Mixing:** The ingredients in *Mukhalepa* should be uniformly mixed to ensure a consistent formulation. This allows for even distribution of the beneficial properties of the herbs and ensures that each application provides the desired effects.
- **Sufficient Liquid Media:** The preparation of *Mukhalepa* should involve the addition of sufficient liquid media to create a paste-like consistency. This ensures ease of application and helps the paste spread evenly across the face.
- **Smooth Paste:** Good quality *Mukhalepa* should have a smooth texture without any gritty particles. This ensures a pleasant application experience and prevents any abrasiveness that could potentially harm the skin.

- **Pleasant Odor:** Good quality *Mukhalepa* should have a pleasant odor. The natural fragrance of the ingredients should be appealing and not overpowering. This enhances the overall sensory experience during the application process.
- **Cleansing Effect:** When applied to the skin, *Mukhalepa* should produce a significant cleansing effect. It should help remove impurities, excess oil, and dirt from the skin, leaving it clean and refreshed.
- **Adherent Coating:** After application, *Mukhalepa* should form an adherent coating. This coating should stick to the skin without causing discomfort or irritation.
- **Easy Removal:** The *Mukhalepa* coating should be easy to remove either by gentle washing or by peeling. It should come off smoothly without causing any discomfort or leaving residue on the skin.

Underscoring the utmost significance of both effectiveness and safety, our perspective emphasizes that a premium *Mukhalepa* in the modern perspective of Ayurvedic cosmetology should showcase these following additional qualities:

- **Natural and Authentic Ingredients:** Good quality *Mukhalepa* should be made from natural and authentic ingredients. It should contain herbs, minerals, clays, oils, and floral extracts that are sourced from reliable and reputable suppliers. Using organic or wild crafted ingredients is preferred to ensure purity and minimize the presence of harmful chemicals or pesticides.
- **Standardized Herbs and Raw Materials:** The herbs and raw materials used in *Mukhalepa* should be standardized. Proper harvesting, drying, and storage techniques are crucial to preserve the potency and therapeutic properties of the ingredients.
- **Standardized Manufacturing Processes:** Good quality *Mukhalepa* should be manufactured using standardized processes as per guidelines to ensure consistency and quality control. This includes following proper hygiene practices, employing skilled artisans, packaging and labelling adhering to good manufacturing practises.
- **Minimized use of Synthetic Additives:** The use of synthetic additives, such as artificial fragrances, colors, or preservatives, should be minimized in making *Mukhalepa*.

- **Safety and Sensitivity Testing:** Good quality *Mukhalepa* should undergo safety and sensitivity testing to ensure that it is suitable for various skin types and does not cause any harmful side effects. This includes conducting demal toxicity test, Primary irritation patch tests and assessing potential allergy or skin irritations before using it in the human subjects.

By ensuring these properties in *Mukhalepa*, you can have a high-quality product that provides an effective and pleasant experience, promoting the desired benefits for the skin.

### Contraindications of *Mukhalepa*

It should not be applied in the person suffering from

- *Pinasa* (Rhinorrhea)
- *Ajirna* (Indigestion),
- Immediately after *Nasya karma* (Nasal drops)
- *Arochaka* (Anorexia)
- *Hanugraha* (Lock jaw)
- *Jagaran* (After keeping awake the previous night).<sup>[8]</sup>

### Herbal Drugs used for *Mukhalepa* in Ayurvedic Classics

Ayurvedic classics provide a generous amount of information about groups of drugs and individual herbs that have *Varnya* action, which can help improve the complexion of the skin. These drugs can be used both externally and internally to promote skin health and treat various skin ailments. Here's an overview of the types of drugs mentioned in Ayurvedic texts:

**Charaka Samhita**, one of the ancient Ayurvedic texts, mentions group of herbs namely *Varnya Mahakashaya* (complexion promoter drugs), *Kushthaghna Mahakashaya* (cures skin ailments) and *Kandughna Mahakashaya* (alleviate itching) that are known to have beneficial effects on the skin. These herbs are used to improve skin health, treat various skin conditions, and enhance the complexion. These herbs can be used in various forms both externally and internally such as powders, decoctions, oils, or pastes.



Table 1: *Varnya Mahakashaya* (Complexion promoter drugs<sup>[9]</sup>).

S. No.	Herbal drugs	Botanical Name	Family	Karma / Indication as per Bhavprakash Nighantu	Pharmacological Actions <sup>[10]</sup>
1	Chandan	<i>Santalum album</i> L.	Santalaceae	<i>Kapha-Pitta shamak, Rakta Doshnashak,</i>  Indications: <i>Daha, Visha</i>	A paste is applied on burns, local inflammations and skin diseases (to allay pruritus). Essential oil—antibacterial, antifungal.
2	Tunga	<i>Calophyllum inophyllum</i> L.	Guttiferae		Oil of seeds—specific for scabies and other skin diseases. Bark—juice pounded with water is applied in orchitis, and for dressing ulcers. Root bark—antibacterial, used for indolent ulcers. Leaf—for chicken pox, skin inflammations, scabies, sunburn.
3	Padmaka	<i>Prunus puddum</i>	Rosaceae	<i>Kapha-Pitta shamak, Raktadoshnashak</i>  Indication: <i>Daha, Kushta, Visarpa, visphota, vrana</i>	Recently, a new flavanone glycoside Puddumin-B, (naringenin-4-methyl-ether -7-O-β-D-galactoside) has been isolated from <i>Prunus cerasoides</i> <sup>[11]</sup> which exhibited anti melanogenesis activity by suppression of tyrosinase protein making it a



					suitable candidate for skin whitening. <sup>[12]</sup>
4	Ushira	<i>Vetiveria zizanioides</i> L.	Poaceae	<i>Kapha-Pitta shamak,</i> <i>Raktadoshnashak</i>  Indication: <i>Daha, Visha,</i> <i>Visarpa, Vrana</i>	Commercially extracted Vetiver zizanioides essential oil (VZ-EO) exhibits significant antioxidant activity and suppresses the $\beta$ -MSH-induced melanogenesis thereby decreasing melanin production through tyrosinase inactivation and the simultaneous suppression of oxidative stress in B16 melanoma cells. <sup>[13]</sup>
5	Madhuka	<i>Glycyrrhiza glabra</i> L.	Fabaceae	<i>Vatpitta shamak</i> <i>Raktaprakopshamak,</i>  <i>Varnakrit, Keshya</i>  Indication: <i>Vrana</i> <i>Shotha Visha</i>	Antiallergic, Anti-inflammatory. Topical preparations, containing glycyrrhetic acid, are used for herpes, eczema, psoriasis.
6	Manjistha	<i>Rubia cordifolia</i> L.	Rubiaceae	<i>Kapha shamak,</i> <i>Raktadoshanashak,</i>  <i>Varnakrit</i>  Indications: <i>Visha</i> <i>Shotha, Kushtha,</i> <i>Visarpa</i>	Roots and dried stem—blood purifier, antiseptic
7	Sariva	<i>Hemidesmus indicus</i> L.	Apocynacea	<i>Tridoshashamak,</i> <i>Aamdoshnashak</i>  <i>Snigdha</i>  Indication: <i>Visha</i>	Blood purifier, antisiphilitic Roots used against leucoderma

8	<i>Payasya</i>	<i>Ipomoea digitata</i> L.	Convolvulaceae	<i>Vata-Pitta shamak,</i> <i>Raktadoshnashak</i>  <i>Varnya, snigdha</i>  Indiacation: <i>Daha</i>	Ksheervidari possess antimicrobial activity and hence using against skin infections, body malodour right from the ancient times itself. <sup>[14]</sup> Viji and Paulsamy (2016) found out different compounds having specific antimicrobial properties like, tetradecanal, E-15-Heptadecenal, Octadecanoic acid and 1-Docosanol methyl ether. Hexadecanoic acid and Hexadecan – 1 – ol trans -9 are the compounds with anti-inflammatory activities in milk yam tubers <sup>[15]</sup>
9	<i>Sita</i>	A variety of <i>Cynodon dactylon</i> L.	Poaceae	<i>Kapha-Pittashamak,</i> <i>Raktavikarnashak</i>  <i>Jivani</i>  Indication: <i>Vrana, Visarpa, Daha</i>	Grass-used in scabies and other skin diseases. Antiseptic properties
10	<i>Lata</i>	a variety of <i>Cynodon dactylon</i> L.	Poaceae	<i>Kapha-Pittashamak,</i> <i>Raktavikarnashak</i>  <i>Jivani</i>  Indication: <i>Vrana, Visarpa, Daha</i>	Grass-used in scabies and other skin diseases. Antiseptic properties

Table 2: *Kushthaghna Mahakashaya* (Drugs for curing skin ailments).<sup>[16]</sup>

S. No.	Herbal drugs	Botanical Name	Family	Karma / Indication as per Bhavprakash Nighantu	Pharmacological actions <sup>10</sup>
1	<i>Khadira</i>	Acacia catechu Willd,	Fabaceae-Mimosoideae	<i>Kapha-Pittashamak, Raktavikarshamak</i>  Indication: <i>Kandu, Krimi, Vrana, Shwitra, Shotha, Kushtha</i>	Root extract shows antibacterial and fungicidal activity Use of dried pieces of heartwood in inflammations, skin diseases and as a blood purifier.
2	<i>Abhaya</i>	Terminalia chebula Retz.	Combretaceae	<i>Tridoshshamak</i>  Indication: <i>Kushtha, Kandu, Shotha</i>	Methanolic aqueous extract of the gall of Terminalia chebula has been found to have potent inhibitory activities against melanogenesis (39.3-66.3% melanin content) in B16 melanoma cells induced by $\alpha$ -melanocyte-stimulating hormone ( $\alpha$ -MSH). Isoterchebulin had reduced the protein levels of MITF (microphthalmia-associated transcription factor), tyrosinase and its related proteins. <sup>[17]</sup>
3	<i>Amalaka</i>	Phyllanthus emblica Linn.	Euphorbiaceae	<i>Tridoshshamak</i>	A Study conducted to evaluate tyrosinase inhibitory activity of ethanolic and methanolic extract of āmlā has shown IC50 value of $247.37 \pm 18.57$ and $193.75 \pm 44.90$ respectively as they inhibit mRNA expressions of

					tyrosinase and its related proteins, proving its efficacy as a skin whitening agent. <sup>[18]</sup>
4	<i>Haridra</i>	<i>Curcuma longa</i> Linn.	Zingiberaceae	<i>Kapha-Pittashamak, Raktavikarnashak</i>  <i>Varnya</i>  Indication: <i>Twagdosha, Shotha, Vrana</i>	Blood-purifier, Anticutaneous
5	<i>Arushkara</i>	<i>Semecarpus anacardium</i> Linn.f.	Anacardiaceae	<i>Vata-Kaphashamak</i>  Indication: <i>Kushta, Shwitra Vrana.</i>	Kernel oil—antiseptic; leucoderma, psoriasis and leprosy.
6	<i>Saptaparna</i>	<i>Alstonia scholaris</i> R.Br.	Apocynaceae	<i>Kapha-Vatashamak, Raktadoshanashak</i>  Indication: <i>Kushtha, Vrana, Jantu</i>	Blood purifier.
7	<i>Aragwadha</i>	<i>Cassia fistula</i> Linn.	Fabaceae-Caesalpinoideae	<i>Kapha-Pittashamak</i>  Indication: <i>Kushta</i>	The study shows that flower extract significantly increased collagen and HA synthesis in a dose dependent manner. The flower extract (50-200 µg/mL) also significantly inhibited collagenase and MMP-2 activity. Furthermore, this flower extract could inhibit the tyrosinase activity that causes hyperpigmentation, which induces skin aging. <sup>[19]</sup>
8	<i>Karvira</i>	<i>Nerium odorum</i> Soland.	Apocynaceae	Indication: <i>Kushta, Kandu, Vrana,</i>	Leaf- for skin diseases has been indicated.

				<i>Krimi.</i>	
9	<i>Vidanga</i>	<i>Embelia ribes</i> Burm.f.	Myrsinaceae	<i>Kapha- Vatashamak</i>  Indication- <i>Krimi</i>	Used in diseases of chest and skin. The plant is also used for its blood purifying properties.
10	<i>Jatipravala</i>	<i>Jasminum officinale</i> L.	Oleaceae	<i>Vatashamak, Raktavikarnashak</i>  Indications: <i>Kushtha, Visha, Mukharog</i>	Plant— used for healing chronic ulcers and skin diseases

Table 3: *Kandughna Mahakashaya* (Alleviates itching).<sup>[20]</sup>

S. No.	Herbal drugs	Botanical Name	Family	Karma / Indication as per Bhavprakash Nighantu	Pharmacological Actions <sup>[10]</sup>
1	<i>Chandan</i>	<i>Santalum album</i> L.	Santalaceae	<i>Kapha-Pitta shamak, Raktadoshnashak,</i>  Indications: <i>Daha, visha</i>	A paste is applied on burns, local inflammations and skin diseases (to allay pruritus). Essential oil— antibacterial, antifungal
2	<i>Nalada</i>	<i>Nordostachys jatamansi</i> DC.	Valerianaceae	<i>Tridoshshamak, Raktaprakopnashak</i>  Indications: <i>Daha Visarpa, Kushtha</i>	Dry rhizomes - obstinate skin diseases, erysipelas.
3	<i>Amalatas</i>	<i>Cassia fistula</i> L.	Fabaceae	<i>Pitta-Kaphashamak</i>  Indications- <i>Kushtha</i>	The flower extract significantly increased collagen and HA synthesis in a dose dependent manner. The flower extract could inhibit the tyrosinase activity that causes hyperpigmentation, which induces skin aging. <sup>[21]</sup>
4	<i>Naktamala</i>	<i>Pongamia pinnata</i> L.	Fabaceae	<i>Kaphanashak</i>	Oil—applied in scabies,

				Indications: <i>Kushta</i> , <i>Vrana</i> , <i>Krimi</i>	herpes, leucoderma and other cutaneous diseases. Juice is used for cleaning foul ulcers and closing fistulous sores.
5	<i>Neem</i>	<i>Azadirachta indica</i> A.Juss.	Meliaceae	<i>Pittanashak</i> Indications- <i>Kushta</i> , <i>Snigdha</i> , <i>Krimi</i>	Leaf, bark—antimicrobial, antifungal, anthelmintic, insecticidal. Measles, smallpox, head scald and cutaneous affections
6	<i>Kutaj</i>	<i>Holerrhena antidysentrica</i> Wall.	Apocynaceae	<i>Kapha-Pittashamak</i> <i>Raktakopanashak</i> Indications: <i>Kushta</i>	Bark—astringent, used in diseases of the skin
7	<i>Sarshap</i>	<i>Brassica campestris</i> L.	Brassicaceae	<i>Kapha- Vatanashak</i> Indications- <i>Snigdha</i> , <i>Kandu</i> , <i>Kushtha</i> , <i>Krimi</i>	studies showed that the Brassicaceae family has antioxidant activity and effects on the modulation of cyclooxygenase 2 and the nuclear factor kappa $\beta$ (NF $\kappa$ $\beta$ ) pathway. The secondary metabolites present in Brassicas are polyphenols (68.75%; n = 11), terpenes/carotenoids (31.25%; n = 5), and glycosylates (25%; n = 4), which are responsible for their anti-inflammatory,

					healing, and antioxidant effects. <sup>[22]</sup>
8	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	Fabaceae	<i>Pitta-Vatashamak</i> <i>Raktaprakopnashak</i>  <i>Varnya, Keshya, Snigdha</i>  Indications: Vrana, shotha, Visha	Topical preparations, containing glycyrrhetic acid, are used for herpes, eczema, psoriasis.
9	<i>Daruharidra</i>	<i>Berberis aristata</i> L.	Berberidaceae	<i>Kapha-Pittashamak, Raktavikarnashak</i>  <i>Varnya</i>  Indication: <i>Twagdosha, Shotha, Vrana</i>	
10	<i>Mustak</i>	<i>Cyperus rotundus</i> Linn.	Cyperaceae	<i>Kapha-Pittashamak</i> <i>Raktakopanashak</i>  Indications: <i>Krimi</i>	Methanolic extract of the plant stimulates the production of melanin in cultured melanocytes. (Plant extract is used in preparations used for pigmentation of skin and hair, also in suntan gels.)

In **Sushruta Samhita**, *Eladi Gana* is mentioned which is a group of herbs that possess various therapeutic properties including *varnaprasadan karm* and are known for their effectiveness in treating skin disorders.<sup>[23]</sup> Hence these herbs can be used individually or in combination as *mukhalepa* for enhancing skin complexion and treating various skin disorders. Herbs mentioned in the *Eladi Gana* group are *Ela* (*Elattaria cardamomum*), *Tagar* (*Dalphinium brunonianum*), *Kushtha* (*Saussuria lappa*), *Mansi* (*Nordostachys jatamasi*), *Dhyamaka* (*Valeriana pyrolaefolia*), *Twak* (*Cinnamomum zeylanicum*), *Patra* (*Cinnamomum tamala*), *Nagapushpa* (*Mesua ferra*), *Priyangu* (*Callicarpa macrophylla*), *Harenuka* (*Amomum subulatum*), *Vyagranakha* (*Helix aspera*), *Sukti* (*Acalina fulica*), *Chanda*



(*Angelica archangelica*), *Sthauneyaka* (*Taxus baccata*), *Sriveshtaka* (*Pinus roxburghi*), *Chocha* (*Cinnamomum Cassia*), *Choraka* (*Angelica glauca*), *Valuka* (*Valanana hardwickii*), *Guggulu* (*Commiphora mukul*), *Sarjarasa* (*Shorea robusta*), *Turushka* (*Styrax officinalis*), *Kunduraka* (*Boswellia serrata*), *Agaru* (*Aquilaria agallocha*), *Spirika* (*Delphinium zaili*), *Bhadradaru* (*Cedrus deodara*), *Kumkuma* (*Crocus sativus*), *White Usheer* (*Vetiveria zizanioides*) and *Punnagakesar* (*Callophyllum inophyllum*) are also included in Varnya Mahakashaya in Charak Samhita.

### Seasonal Herbal Drugs for Mukhalepa

In **Ashtang Hridya Samhita**, the detailed description of different Mukhalepa based on various seasons is its major contribution.<sup>[24]</sup> These formulations highlight the cosmetic value of Lepa and provide insights into the specific ingredients recommended for each season. Ingredients of these Lepas, which are indicated in different seasons, are given as under mentioned:

- ❖ **Hemanta Ritu (Early winter season):** *Kolamajja* (*Zizyphus jujuba*), *Vasamoola* (*Adhatoda vasica*), *Sabara Lodhara* (*Symplocos racemosa*), *Gaurasarshapa* (*Brassica Campestris*)
- ❖ **Sisira Ritu (Late winter season):** *Simghimoola*, *Krishnatila* (*Sesamum indicum*), *Darvitvak* (*Berberis aristata*), *Nistusha Yava* (*Hordeum vulgare*)
- ❖ **Vasant Ritu (Spring season):** *Darbhamoola* (*Desmostachya bipinnata*), *Chandana* (*Santalum album*) *Useera* (*Vetiveria zizanioides*), *Sireesha* (*Albizia lebbek*), *Misi* (*Foeniculum Vulgare*), *Tandula* (*Amaranthus spinosus*)
- ❖ **Grishma Ritu (Summer season):** *Kumuda* (*Nymphaea alba*), *Utpala* (*Nymphaea nouchali*), *Kalhara*, *Doorva* (*Cynodon dactylon*), *Madhuka* (*Glycyrrhiza glabra*), *Chandan* (*Santalum album*)
- ❖ **Varsha Ritu (Rainy season):** *Kaliyaka* (*Berberis aristata*), *Tila* (*Sesamum indicum*), *Useera* (*Vetiveria zizanioides*), *Mamsi* (*Nordostachys jatamansi*), *Tagara* (*Valeriana officinalis*), *Padmakh* (*Prunus cerasoides*)
- ❖ **Sarad Ritu (Autumn season):** *Taleesapatra* (*Abies webbiana*), *Gundra* (*Typha angustata*), *Pundarika* (*Neelumbo nucifera*), *Yashtimadhu* (*Glycyrrhiza glabra*), *Kasha* (*Saccharum spontaneum*), *Tagar* (*Valeriana officinalis*), *Aguru* (*Aquilaria agallocha*).

Common herbal formulations used as *Mukhalepa* (Facepack) for enhancing skin complexion and to treat skin ailments in Ayurvedic contemporaries.

S.no	Mukhalepa	Indications	Reference
1.	<i>Arjuna</i> stem bark with Milk <sup>[25]</sup>	Vyang	Ashtanga Hridaya-Uttarasthana - 32/16
2.	<i>Manjishtha</i> with <i>madhu</i> <sup>[26]</sup>	Vyang	Ashtanga Hridaya-Uttarasthana- 32/16
3.	<i>Mukhkantivardhak lepa</i> ( <i>Rakta chandana</i> , <i>Manjishta</i> , <i>Kushta</i> , <i>Lodhra</i> , <i>Priyangu</i> , <i>Vatankura</i> , <i>Masura</i> ) <sup>[27,28,29]</sup>	Vyang,	Ashtanga Hridaya-Uttarasthana- - 32/17 Chakradatta- 55/43-44 Sharangdhara samhita Uttarkhand -11/9
4.	<i>Jeerak</i> ( <i>Krishna</i> or <i>shweta</i> ), <i>Krishna til</i> , <i>sarshap</i> with milk <sup>[30]</sup>	Vyang, <i>Lanchan</i> , <i>Mukhkantivardhak</i>	Ashtanga Hridaya-Uttarasthana-- 32/18
5.	<i>Masur</i> with milk, ghee & <i>madhu</i> <sup>[31]</sup> <i>Shalmali kantik</i> with milk <sup>[32]</sup>	Vyanga	Ashtanga Hridaya-Uttarasthana- 32/19 Chakradatta- 55/46-50
6.	Fried & dehusked <i>Masura</i> with milk <sup>[33]</sup>	Vyanga	Ashtanga Hridaya-Uttarasthana- 32/19
7.	Tender leaves of <i>Jambu</i> & <i>Amra Haridra</i> <i>dwaya</i> , <i>Mastu</i> with fresh jaggery <sup>[34]</sup>	Vyanga	Ashtanga Hridaya-Uttarasthana- 32/22
8.	Paste of <i>Tinduka</i> mixed with its own juice <sup>[35]</sup>	Vyanga	Ashtanga Hridaya-Uttarasthana- 32/22
9.	Paste of <i>Lodhra dhanyaka</i> & <i>vacha</i> <sup>[36]</sup>	<i>Yuvanpidika</i>	Chakradatta-55/40
10.	Paste of <i>Marich</i> mixed with <i>gorochan</i> <sup>[37]</sup>	<i>Yuvanpidika</i>	Chakradatta- 55/40
11.	<i>Arjuna Bark</i> or <i>Manjishtha</i> with <i>madhu</i> <sup>[38]</sup>	Vyanga	Chakradatta--55/42
12.	<i>Kola phala beeja majja</i> & jaggery with butter, honey <sup>[39]</sup>	Vyanga	Chakradatta- 55/52
13.	<i>Varuna twak</i> with goat's milk <sup>[40]</sup>	Vyanga	Chakradatta- 55/47
14.	Paste of <i>Jatiphala</i> <sup>[41]</sup>	<i>Nilika</i> , <i>Vyanga</i>	Chakradatta- 55/48
15.	Paste of <i>Kaliyak</i> , <i>nilotpala</i> , <i>kushtha</i> , supernatant layer of curd , <i>badar</i> , <i>priyangu</i> , <sup>[42]</sup>	Makes face like moon	Chakradatta- 55/49
16.	Dehusked barley, <i>yashtimadhu</i> and <i>lodhra</i> <sup>[43]</sup>	Complexion enhancer	Chakradatta-55/50
17.	Mustard, <i>haridra</i> , <i>daruharidra</i> , <i>manjishtha</i> , red ochre, ghee and goat's milk <sup>[44]</sup>	Complexion enhancer	Chakradatta- 55/51
18.	Mature curd, <i>sarapunkha</i> , <i>nilotpala</i> (petals), <i>kushtha</i> , <i>chandana</i> , <i>usira</i> paste <sup>[45]</sup>	Improves facial luster and destroys wrinkles and tilakalaka	Chakradatta- 55/52
19.	<i>Sarso</i> , <i>vacha</i> , <i>lodhra</i> , <i>sendhanamak</i> paste <sup>[46,47]</sup>	<i>Yuvan pidika</i>	Chakradatta-55/41 Sharangdhara samhita Uttarkhanda- 11/12

20.	<i>Vata pandu patra, malti patra, raktachandana, kutha, kaliyaka and lodhra</i> <sup>[48]</sup>	<i>Tarunyapitika, vyanga, Nilika</i>	Sharangdhara samhita Uttarkhanda alepa 11/14-15
21.	<i>Arka sheer and haridra lepa</i> <sup>[49]</sup>	<i>Mukhkarshya</i>	Bhavprakash ,madhyam khand - 61/42
22.	<i>Paste of arjun chal, manjishtha &amp; vasa patra</i> <sup>[50]</sup>	<i>Vyang</i>	Yogratnakar , uttarardha shloka 8

## DISCUSSION

The discussion highlights the significance of face and beauty which is deeply rooted in human society and culture. The face is often considered the most visible and expressive part of the body and beauty is highly valued in many societies. Ayurveda recognizes the significance of maintaining a healthy and radiant appearance, and practices like Mukhalepa (face packs) are aimed at enhancing natural beauty and skin health. The application of Mukhalepa (face packs) on the skin plays a vital role in delivering therapeutic effects and improving the bioavailability of drugs by bypassing liver metabolism. This direct application allows for targeted action at the site of treatment.

Commercial cosmetic products, laden with artificial and chemical components, often contain excessive synthetic additives and preservatives. These can deplete the skin's natural oils, leaving it dull, disrupting its balance, and diminishing its radiance and elasticity over time. In contrast, Ayurvedic skincare relies on plant-based ingredients, believed to nourish the skin and enhance its radiance and elasticity without adverse reactions. Mukhalepa, an Ayurvedic practice, is effective against issues like acne, hyperpigmentation, wound healing, leukoderma, and scars. It is a social responsibility to explore Ayurvedic herbs for skincare, with careful consideration of individual skin types and needs. Precision in ingredient selection is vital for the success of Mukhalepa therapy.

## CONCLUSION

In summary, Mukhalepa offers a natural and holistic approach to skincare, enabling individuals to maintain a healthy and beautiful face. Mukhalepa, have the potential to enhance fairness and smoothness, as well as address issues like wrinkles, dark circles, acne, leucoderm, wound healing and pimples. Mukhalepa serve a dual purpose of prevention and cure for various skin problems. They act as helpful measures to maintain skin health, to prevent the occurrence of skin issues and also serve as curative treatments for existing skin problems. By embracing natural substances and understanding one's skin type, the potential

benefits of Mukhalepa can be harnessed to improve skin health, prevent skin problems, and enhance overall complexion and beauty.

While Ayurveda has already achieved great knowledge in the field of Lepakalpa during the Samhita era, there are ample opportunities for further advancements in both therapeutic and cosmetic applications by integrating current science and technology. This allows for the development of more effective and refined approaches to Lepakalpa, aligning traditional Ayurvedic wisdom with modern advancements.

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