

SWARNA ABHA FACE LEPA (A HYPOTHETICAL AYURVEDIC FORMULATION) IN THE MANAGEMENT OF ACNE VULGARIS AND HYPERPIGMENTATION: A CASE REPORT

Dr. Ayushi Biyala^{1*}, Prof. (Dr.) Chandan Singh², Dr. Rajendra Prasad Purvia³, Dr. Manoj Adlakha⁴, Dr. Nikita Panwar⁵

^{1*}PG Scholar, PG Department of Dravyaguna Vigyan, Post Graduate Institute of Ayurved, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur (Rajasthan), 342037, India, Email Id: ayushibiyala@gmail.com, Orchid id 0009-0003-9468-9143

²Professor and HOD, PG Department of Dravyaguna Vigyan, Post Graduate Institute of Ayurved, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur (Rajasthan), 342037, India

³Associate Professor, PG Department of Dravyaguna Vigyan, Post Graduate Institute of Ayurved, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur (Rajasthan), 342037, India

⁴Associate Professor, PG department of Dravyaguna Vigyan, Post Graduate Institute of Ayurved, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur (Rajasthan), 342037, India

⁵Associate Professor, PG department of Dravyaguna Vigyan, Post Graduate Institute of Ayurved, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur (Rajasthan), 342037, India

*Corresponding Author: Dr. Ayushi Biyala, Email- ayushibiyala@gmail.com

ABSTRACT

Background- Acne vulgaris is a common, long-term inflammatory disease of the pilosebaceous follicles that affects people all over the world. Acne vulgaris is the eighth most common skin condition in the world, affecting between 9.4% and 20.5% of people globally. Nearly 85% of young individuals are affected, and women are more likely to experience it (23.6%) than males (17.5%). Up to 71.3% of patients get acne scarring which is a typical consequence.

Case Presentation- A 21 year old female presented with complaint of Pidaka (Papules and pustules) on face including pus (filling material), Todavat peeda (Piercing pain), Daha (Burning sensation), Srava (Discharge) Kandu (itching), shyavta (dark spots/acne marks), blackheads, whiteheads, sunburn, hyperpigmentation, post acne marks.

Intervention- The patient was treated with a topical Ayurvedic lepa, Swarna Abha Face Lepa (a hypothetical formulation) containing Sarson seeds, Vacha root, Lodhra stem, Saindhav lavana, Yastimadhu stem, Sweta chandan stem, Multani mitti along with triphala churna in the night with dietary and lifestyle modifications including yoga and pranayama.

Results- After 30 days of treatment, significant improvement was observed. Reduction was observed in inflammatory lesions, comedones, erythema, and hyperpigmented acne marks, itching.

Conclusion: Swarna Abha Lepa demonstrated significant therapeutic efficacy in reducing acne lesions and post-acne pigmentation. It may serve as a safe and cost-effective Ayurvedic topical therapy for acne vulgaris. Significant result was observed with this treatment protocol in the management of Mukhadushika (Acne vulgaris).

KEYWORDS: Ayurveda, Acne vulgaris, Mukhadushika, Pimples, Dark spots, Acne marks.

INTRODUCTION

Acne vulgaris is one of the most common chronic inflammatory diseases of the skin affecting adolescents and young adults worldwide. It mostly affects the pilosebaceous unit, which is made up of the sebaceous gland and hair follicle. Comedones, papules, pustules, nodules, and cysts are the clinical manifestations of acne vulgaris, which frequently leads to post-inflammatory hyperpigmentation and irreversible scarring. Self-esteem, emotional health, and quality of life are all significantly impacted by the illness, especially in teens. According to epidemiological research, 85% of people between the ages of 12 and 24 have acne at some point in their lives.[1] Acne vulgaris has a complex aetiology including multiple interrelated processes. Increased sebum production, follicular hyperkeratinization, colonisation by Cutibacterium acnes (previously Propionibacterium acnes), and inflammatory reactions inside the pilosebaceous unit are the main causes of acne2.

Puberty-related hormonal changes increase sebaceous gland activity and sebum output, which encourages inflammation and bacterial growth. The formation and severity of acne lesions are also influenced by environmental factors, stress, food, and genetic predisposition.³

Post-inflammatory hyperpigmentation (PIH), which can persist for months or even years after the resolution of active inflammatory lesions, and acne scars are common outcomes of acne. Post-acne pigmentation is a result of increased melanin synthesis caused by inflammatory mediators. These outcomes often lead to psychological distress and cosmetic problems in patients. Therefore, treating active acne lesions, preventing acne marks and scarring, and lowering inflammation should be the main goals of effective treatment.[4]

Acne vulgaris is frequently treated with topical retinoids, benzoyl peroxide, antibiotics, hormone therapy, and systemic medications like isotretinoin. Even while these treatments are frequently effective, they can have a number of unfavourable side effects, such as photosensitivity, erythema, dryness, skin irritation, and the development of antibiotic resistance. Long-term usage of systemic medications may lead to systemic issues. These limitations have led to an increase in interest in complementary and alternative therapies, particularly in herbal and traditional medicinal systems such as Ayurveda.[5]

Ayurveda, an ancient Indian medical system, covers a wide range of skin issues and how to cure them with herbal and mineral therapies. The Ayurvedic condition known as Mukhadushika or Yuvanpidika, which is categorised under Kshudra Roga in traditional Ayurvedic texts, can be linked to acne vulgaris. Ayurvedic literature describes Mukhadushika as having thorn-like facial sores that resemble the spines of the Shalmali tree (*Bombax ceiba*).[6] The pathophysiology of Mukhadushika is mostly associated with the vitiation of Kapha, Vata, and Rakta Dosha, in addition to the involvement of Meda Dhatu (fat tissue). Excessive intake of fatty, spicy, and heavy foods, irregular eating patterns, stress, hormonal changes, and bad lifestyle choices can all exacerbate these Doshas. The exacerbated Doshas blocking the skin's pathways (Srotas) causes facial breakouts (Srotas).[7]

Mukhadushika is treated using both internal and exterior therapies in Ayurveda. Lepa, or the topical application of herbal paste, is one of the several external remedies mentioned in traditional Ayurvedic scriptures that are crucial to the treatment of skin conditions. Acne, pigmentation issues, inflammation, and wound healing are among the problems for which lepa treatment is frequently utilized.

Lepa treatment reduces inflammation, improves blood circulation, and eliminates toxins from the skin by allowing the active herbal ingredients to penetrate the skin and produce local therapeutic benefits. Several herbal components found in Lepa, have antibacterial, anti-inflammatory, antioxidant, and complexion-enhancing qualities that help treat acne and its related problems.[8]

A herbal remedy called Swarn Abha Face Lepa(a hypothetical formulation) is applied topically to treat skin conditions on the face, especially acne vulgaris. Herbal components including , Chandana (*Santalum album*), Manjishtha (*Rubia cordifolia*), Lodhra (*Symplocos racemosa*),Saindhav lavana(Rock salt), Sarso(*Brassica juncea*), Vacha(*Acorus calamus*) are included in the formulation. The anti-inflammatory, antibacterial, antioxidant, and skin-purifying qualities of these plants are well recognized in Ayurvedic pharmacology. While Manjishtha and Lodhra are traditionally used for Rakta Shodhana (blood purification) and skin complexion improvement. Chandana reduces redness and irritation by its cooling and anti-inflammatory properties.[9]

Numerous experimental and clinical studies have demonstrated that herbal formulations containing these compounds significantly improve skin conditions and reduce acne lesions. Herbal remedies are also believed to be safer for long-term use because they have fewer side effects than conventional pharmaceutical treatments.[10] The current clinical investigation was conducted to assess the effectiveness of Swarn Abha Face Lepa in the treatment of acne vulgaris and acne markings in light of the growing need for safe and efficient herbal remedies for the condition. In patients with acne vulgaris, the study sought to evaluate the therapeutic advantages of this Ayurvedic formulation in lowering acne lesions, inflammation, and post-acne pigmentation.

Case Description

Patient Information

A 21 years old hindu female patient ,a university student presents with with complaint of Pidaka (Papules and pustules) on face including pus (filling material), Todavat peeda (Piercing pain), Srava (Discharge), blackheads, whiteheads , hyperpigmentation, post acne marks from the past 3 years. Associated symptoms are Daha (Burning sensation), Kandu (itching). Patient is not having thyroid disorder and is not taking any other medication.

Clinical Findings

General Examination

Blood Pressure- 110/70 mm Hg

Pulse- 76/min

Appetite- Regular

Bowel Habit- Mild constipation

Sleep- Deep sleep

Menstrual history- Regular

Dermatological Examination

- Overactive sebaceous glands of skin resulting oily skin.
- Multiple papules and pustules over cheeks, forehead, chin,i.e. all over face.
- Non inflammatory lesions,i.e., blackheads and whiteheads all over face
- Post Inflammatory acne marks.

Ayurvedic Perspective

Prakriti- Kapha-Pitta

Agni- Mandagni

Koshta- Mridu

Dosha involvement- Vata, Kapha and Rakta

Dushya- Rakta, Meda

Srotas- Rasavaha, Raktavaha, Swedavaha srotas

Samprapti-

Katu, Amla, Lavana Rasa sevana causes Pitta-Kapha prakopa. Due to Agnimandya, Rakta dhatu dushti occurs. Vitiated doshas spread through Raktavaha and Swedavaha srotas. Then Srotorodha/Sanga develops in facial skin channels. Dosha-dushya sammurchana of: Pitta Kapha Rakta occurs in Mukha pradesha. This leads to: Vaktra snigdhatta, Daha, Shula, Ushna Sparsha, Pidaka Utpatti. Yuvanapidika manifests with pidaka, Paka, Srava, Vaivarnya.[11]

Intervention-

Topical application of Swarna Abha Face Lepa (a hypothetical formulation) twice a day along with Triphala churna 2gm in the night before bedtime.

Composition of Swarna Abha Face Lepa (Table-1)

S.No.	Ingredient	Botanical Name	Family	Part Used	Proportion of drug in the lepa
1.	Sarson seed	Brassica juncea	Brassicaceae	Seed	½ part
2.	Vacha root	Acorus calamus	Araceae	Root	1 part
3.	Lodhra stem	Symplocos racemosa	Symplocaceae	Stem	1 part
4.	Saindhav lavana	Rock salt	Mineral		¼ part
5.	Yastimadhu stem	Glycyrrhiza glabra	Fabaceae	Stem	1 part
6.	Sweta Chandan	Santalum album	Santalaceae	Stem	1 part
7.	Multani mitti (fuller's earth)	Solum fullonum	Mineral		1 part

Method of Preparation

All herbal ingredients were dried, powdered separately, and mixed to prepare a fine powder. The powder (5-10 gm) was mixed with goat's milk/rose water to form a paste (Lepa) before topical application. Apply the paste on washed face daily.

Method of Application-

Apply the lepa locally over whole face twice daily for approx. 20 minutes for 30 days.

Outcomes Measures (Table-2)

Symptom	Before treatment	Follow up(after 15 days)	After treatment(after 30 days)
Oily skin	Severe	Mild	Mild
Acne lesions	Severe	Moderate	Mild
Burning sensation	Moderate	Absent	Absent
Itching	Moderate	Absent	Absent
Hyperpigmentation	Severe	Moderate	Mild



Pic 1: Before treatment



Pic 2: Follow up after 15 days



Pic 3: follow up after 15 days



Pic 4: Follow up after 30 days

DISCUSSION

The present study evaluated the efficacy of Swarn Abha Face Lepa, a hypothetical polyherbal Ayurvedic formulation which contains Sarson seeds, vacha root, lodhra stem, saindhav lavana, yastimadhu stem, sweta chandan stem, Multani mitti.

Sarson (mustard) seeds are rich in vitamin A and vitamin E, and antioxidants hence, exfoliate dead skin, reduce acne, and brighten skin tone and have anti aging effect.

Vacha root is used to treat skin issues such as acne, blemishes, and to improve complexion due to its bitter (Tikta) and sharp (Tikshna) properties, it is effective in cleansing, reducing inflammation, and fighting bacterial or fungal skin infections.

Lodhra Stem is a highly valued Ayurvedic drug used in face packs primarily for its ability to treat acne, control excess oil, and improve skin texture. It is known as a "Varnya" herb as it improves complexion, It is a potent astringent, hence, its properties include anti-inflammatory, and antimicrobial action.

Saindhav lavana, a mineral rich content. It contains around 84 essential trace minerals including magnesium, potassium, calcium, and iron which help nourish skin tissues and support healthy skin structure. It acts as a natural exfoliator and keep the pores pure and detoxified. It has Antibacterial & Antifungal action, It keeps skin firm and elastic by balancing skin Ph and hydration.

Yastimadhu stem is used for skin brightening and hyperpigmentation fading (Varnya): The key active compound of yastimadhu is Glabridin which inhibits the enzyme tyrosinase, which is responsible for melanin production. This makes it highly effective at reducing sun tans, dark spots, acne marks, and uneven skin tone. It shows Anti-inflammatory and Soothing Action as it is rich in Glycyrrhizin and flavonoids, which calms skin irritations, reduces redness, and alleviates inflammation. Yastimadhu contains antioxidants that combat free radicals caused by UV radiation and environmental stress, which slows down the aging process and reduces the appearance of fine lines and wrinkles. It provides a protective barrier against harmful UV rays, helping to prevent further sun damage and tan accumulation. Its antibacterial properties combat acne-causing bacteria and help reduce the frequency of breakouts. It acts as a soothing agent that helps seal in moisture, making it effective for hydrating dry skin and strengthening the skin's barrier.

Sweta Chandan (white sandalwood) Stem is widely used in face packs due to its "sheeta" (cooling) properties, combined with potent antibacterial and anti-inflammatory action that helps balance skin heat, reduce acne, and calm irritation. Rich in active compounds like santalol, it acts as a natural purifier and toner, suitable for soothing inflamed or sensitive skin.

Multani mitti (Fuller's earth) is a popular, mineral-rich natural clay used in face packs for its exceptional absorbent, cooling, and cleansing properties. It effectively deep-cleanses pores, reduces excess oil (sebum), treats acne, and enhances skin texture by providing mild exfoliation and improving blood circulation for a radiant glow.

CONCLUSION

The present case report confirms that Swarn Abha Face Lepa (a hypothetical formulation) is:

1. Effective in reducing acne lesions.
2. Effective in improving post-inflammatory hyperpigmentation.
3. Effective in reducing itching and burning sensation.
4. Effective in reducing excess sebum production maintain clear and bright skin tone.
5. Safe and well-tolerated, with no significant adverse effects

Overall, Swarn Abha Face Lepa can be considered a safe, effective, and economical Ayurvedic therapy for the management of acne vulgaris and acne marks. Further studies with larger samples and controlled trials are recommended to confirm these findings and establish standardized protocols for clinical practice

Declaration of Patient Consent

The authors certify that they have obtained appropriate patient consent forms. The patient has given consent for images and clinical information to be reported in the journal while maintaining anonymity.

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Conflicts of Interest

There are no conflicts of interest.

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