

Management of Vyanga (Melasma) with Vyanganashak Lepa: A Case Report

MRUNAL SUNIL BOLE¹, SOURABH DESHMUKH², TRUPTI THAKRE³



ABSTRACT

Melasma is a widespread acquired symmetrical hypermelanosis characterised by irregularly shaped but clearly defined dark brownish maculae on photo-exposed areas, particularly the forehead, temples, nose, eyelids, chin, and upper lips. It is a major cosmetological issue that can also affect a person's psychological well being. Melasma can be correlated with *Vyanga* in Ayurveda. *Vyanga* is one of many *Kshudra Rogas* and *Raktapradoshaj Vikaras*. According to modern medicine, local application of corticosteroids is preferred for the management of melasma. However, due to the relapse of the disease and the side effects of steroids, an Ayurvedic approach is beneficial. Ayurveda mentions *Shaman Chikitsa* in the form of *Lepa*, which has *Vatapittahara*, *Varnya*, *Twachya*, *Kushthaghna*, and *Raktaprasadaka* properties as the line of treatment. Hereby, the authors present a case report of a 46-year-old female who reported to the Outpatient Department (OPD) of Kayachikitsa, complained of brownish discolouration on her face for six months, which was diagnosed as *Vyanga* (melasma). Ayurvedic treatment was planned according to the classical principle of *Shaman Chikitsa*, with a local application of *Lepa* containing depigmenting and skin rejuvenating drugs, along with lifestyle modifications. Due to the recurring nature of the disease, a proficient treatment approach was required. *Vyanganashak Lepa* has skin resurfacing and revitalising properties that act efficiently on the disease. In present case, *Vyanganashak Lepa* was found to be highly effective and showed remarkable results with continuous usage in a short period.

Keywords: Hyperpigmentation, *Kshudrakushtha*, *Rakta pradoshaja vikara*, *Twachya*

CASE REPORT

A 46-year-old female patient presented to the Outpatient Department (OPD) of Kayachikitsa with chief complaints of prominent, moderately dark brownish hyperpigmented lesions on her bilateral cheeks, nose, forehead, and chin for the past six months. The condition was associated with occasional itching at the sites. The patient was premenopausal and had experienced prolonged and irregular menstrual cycles. She was also a known case of hypertension for three years and was on regular medication. There was no family history of any skin disease. The lesions gradually increased in size and darkened in colour. She was stressed due to cosmetic concerns and therefore requested immediate intervention.

On dermatological examination, there were moderately dark brown lesions on the bilateral malar region, nose, forehead, and chin, which were symmetrically distributed, irregular in shape, but clearly defined, leading to the diagnosis of *Vyanga* (Melasma) [Table/Fig-1].



[Table/Fig-1]: Moderate dark brown colour lesions over forehead, bilateral cheeks, nose, upper lip and chin (all over face).

The elements of pathogenesis (*Samprapti Ghatak*) that explain the manifestation of the disease are as follows:

- Dosha: Vata (Udaana), Pitta (Bharajaka)*
Dushya: Rasa, Rakta
Adhishthana: Mukhagata Twaka (bilateral cheeks, nose, forehead, and chin)
Vyadhi Marga: Bahya
Srotasa: Rasavaha, Raktavaha
Strotodushti: Vimargagamana
Doshagati: Tiryaka, Vridhhi
Agni: Vishamagni
Sadhya-Asadhyata: Sadhya
Swabhava: Chirkari

According to arbitrary grading on the symptom-*Shyavata* [Table/Fig-2] and assessment of grading and severity of lesions [Table/Fig-3], it was observed that the patient had a moderate dark brown lesion on the face with a score of 3 and Grade 3 (severe) [1].

Features	Score
Deep dark brown colour lesion over face	4
Moderate dark brown colour lesion over face	3
Light dark brown colour lesion over face	2
Faint dark brown colour lesion over face	1
Normal skin tone	0

[Table/Fig-2]: Arbitrary grading on the symptom – *Shyavata* [1].

Grade	Grade of point	Sign (degree)	Remark
G4	4	++++	Very severe
G3	3	+++	Severe
G2	2	++	Moderate
G1	1	+	Mild
G0	0	Nil	Normal

[Table/Fig-3]: Assessment of grading and remarks on severity of lesions [1].

The treatment was initiated by making a thick paste of *Vyanganashak Lepa* [Table/Fig-4]. This *Lepa* was applied locally to the face daily and scrubbed off with cold water after 20 minutes for 30 days. Along with this, lifestyle modifications and an exercise regimen were advised. Dietary modifications included restrictions on spicy foods, hot garlic, masalas, chillies, excessive salty and sour food items, pickles, fried items, fermented foods, and yogurt. The patient was advised to consume green gram khichdi, seasonal fruits, and foods with less oil and salt. In addition to the dietary changes, the patient was encouraged to practice *Pranayama* early in the morning.

Contents of <i>Vyanganashak Lepa</i>	Quantity
Masoor dal powder	2 tsp
<i>Manjishtha churna</i>	2 gm
<i>Raktachandan churna</i>	2 gm
<i>Yashtimadhu churna</i>	2 gm
<i>Jatiphala churna</i>	2 gm
<i>Kumkumadi tailam</i>	3-4 drops
Raw cow milk	Q.S
Rose water	Q.S

[Table/Fig-4]: Ingredients of *Vyanganashak Lepa*.

After 15 days, during the first follow-up, the scoring reduced to two, with light dark brown lesions on the face and Grade 2 (moderate). After 30 days of treatment, the scoring decreased to one, with faint dark brown lesions on the face and Grade 1 (mild) [Table/Fig-5].



[Table/Fig-5]: After 30 days of treatment, the severity of lesions reduced and showed faint dark brown colour that is mild pigmentation.

DISCUSSION

Vyanga is one of many *Kshudra Rogas* and *Raktapradoshaj Vikaras* [2,3]. It is a significant cosmetological issue that can also affect a person's psychological well being. *Vyanga* can be correlated with melasma in modern medicine. According to Ayurveda, *Shoka* (sadness), *Krodha* (anger), and *Ayasa* (fatigue) are the causative factors of *Vyanga* [4]. As per modern science, ultraviolet rays and stress lead to the majority of cases of melasma. Vagbhattacharya explained that vitiated *Pitta* and *Vata* generate *Mandalas* of *Shyava Varna* on the face, known as *Vyanga* [5]. Acharya Sushrut explained that *Vyanga* is a skin disease in which *Vata* and *Pitta* are aggravated by *Shoka* (sadness), *Krodham* (anger), and *Ayasa* (fatigue), which ultimately leads to *sthanasamshraya* (accumulation) in the *Mukhapradesha* (face) and produces patches that are *Tanu*, *Shyava*, and *Niruj* [6]. Melanocytes produce melanin, and the transfer of melanosomes to nearby keratinocytes results in cutaneous

pigmentation [7]. Melanosomes differ in number and size in different individuals, while the number of melanocytes remains the same.

Melasma is a widespread acquired condition characterised by symmetrical hypermelanosis, presenting as irregularly shaped but clearly defined dark brownish macules on photo-exposed areas, particularly the forehead, temples, nose, eyelids, chin, and upper lips. The two types of treatments (*Chikitsa*) used in Ayurvedic treatment for *Vyanga* are *Shodhana* and *Shamana*. Various treatments such as *Lepa* (external application), *Siravyadha* (bloodletting), *Abhyanga* (oil massage), *Nasya* (nasal therapy), *Pana* (drinking), *Vamana* (emesis), *Virechana* (purgation), and *Udwartana* (powder massage) are mentioned [8].

Lepa is regarded as one of the easiest and most efficient methods among these treatments. Panigrahi M et al., conducted a study on *Vyanga* and provided *Mukhakantivardhaka Lepa*, which is already mentioned in the Sharangdhar Samhita [9]. Lekshmi AG et al., also highlighted the use of *Lepa* for the management of melasma, noting that its use is well-documented in classical texts. The incorporation of *manjishtha* in *Lepa* is well known due to its *Twakprasadak* (skin-enhancing) properties [10]. In present study, *manjishtha churna* is used in combination with other effective drugs to accelerate the results in such severe cases. Kumari D et al., mentioned the use of *Jatiphala churna* along with milk, which aligns with present study, as it possesses properties that help scrape away the rough, dark patches of melasma [11].

When multiple drugs with such remarkable properties are used together, significant changes can be observed in a short time span, as demonstrated in this case study.

Several *Lepas*, such as *Varnya Gana Lepa* mentioned in the Charak Samhita [12], *Manjishthadi Lepa* [13], and *Jatiphala churna Lepa* [14], are referenced in classical texts, with many studies conducted on them. Some *Lepas* provide temporary relief. However, in present case, after addressing and understanding the foundations of Ayurvedic classics, a combination of new formulations was created to treat the underlying root causes and eliminate the recurrence of the disease.

The formulation includes easily available ingredients found at home, such as red lentils, which have significant results when used in a specific manner. Each ingredient has a contributing action towards treating pigmentation and revitalising the skin. By combining commonly available drugs with classically mentioned *Varnya* and *Kushthaghna* drugs, a beneficial outcome is achieved.

Along with the *Lepa*, lifestyle modifications were advised, including practicing *Pranayama* early in the morning, which reduced stress and simultaneously addressed the root cause of the disease. The patient was advised to follow a healthy diet regimen and to perform *Pranayama* and exercises [15]. The patient was instructed to apply the *Lepa* daily for 30 days. The ingredients of the *Lepa* (face pack) each possess different properties that have a combined effect on skin rejuvenation and depigmentation.

Masoor Dal (Red Lentils), being the main ingredient, has exfoliating properties and helps to remove blackheads. It has a bleaching effect that makes the skin lighter and more toned. Additionally, it removes tan, fine lines, blemishes, and dark spots [16]. *Manjishtha* (*Rubia cordifolia*) is known for its blood-purifying (*Raktashodhak*), anti-inflammatory (*Shothahara*), wound-healing (*Vranaropaka*), and skin disease-fighting (*Kushtaghna*) properties. It balances *Kapha* and *Pitta shamaka*, acts as an antihelminthic (*Krimighna*), and enhances metabolism (*Deepana*) and digestion (*Pachana*) [17].

Yashtimadhu (*Glycyrrhiza glabra*) acts as a heat pacifier, analgesic, and anti-inflammatory agent. It is also beautifying (*Varnya*), alleviates itching (*Kandughna*), rejuvenates, and balances skin doshas (*Tvacha Doshahara*). Due to its unctuous nature, it pacifies *Vata*, and because of its sweet and cooling properties (*Madhura Sheeta Guna*), it pacifies vitiated *Pitta* [18].

Rakta Chandan (*Pterocarpus santalinus*) has blood-purifying (*Raktashodhaka*), heat-pacifying (*Dahashamaka*), *Kapha-pittashamaka* balancing, anti-inflammatory (*Shothahara*), antihelminthic (*Krimighna*), beautifying (*Varnya*), and skin-dosh balancing (*Twakdosahara*) properties [19]. *Jatiphala churna* (*Myristica fragrans*) possesses exfoliating properties that help in the formation of new, fresh, healthy skin by removing unhealthy layers [20,21].

Kumkumadi Taila reduces pigmentation and brightens the skin. This oil contains compounds that modify immunological and melanocyte activity, leading to reduced hyperpigmentation. It works against inflammation, hyperpigmentation, and free radicals, likely reducing the amount of melanin pigment released [22].

Rose water balances *Vata* and *Pitta doshas*. It acts like an elixir by maintaining skin tone, cleansing and nourishing the skin, subduing blemishes and dark spots, and functioning as an exfoliant. It also has anti-aging and antioxidant properties [23].

A significant portion of the medications used in the *Lepa* (paste) have *Vata-Pitta* pacifying properties, which favour the effective treatment of the condition. The ingredients of the *Lepa* are recommended to be used with raw cow milk, which also helps calm vitiated *Pitta* and *Vata*. Local application and lifestyle modifications showed significant results after 30 days of treatment in this case. The patient was later followed-up for recurrence. After 30 days of treatment, local application of only *Kumkumadi Taila* was advised to avoid relapse and maintain the results.

CONCLUSION(S)

Vyanga is not only a cosmetic concern but also a physiological skin disease. Various treatment options are available for its management, but the recurring nature of the disease is notable. Therefore, if the root cause of the disease is not targeted, it may relapse. *Vyanganashak Lepa* has depigmenting and skin rejuvenating properties; hence, it is considered highly effective and has shown remarkable results with continuous use in a short period for the management of melasma.

REFERENCES

- [1] Nath R, Mandal SK. Classical diagnostic approach of the disease *Vyanga* (A type of dermatological disorder). *Journal of Scientific and Innovative Research*. 2017;6(4):135-37.
- [2] Shastri Ambika Dutt (ed.) *Sushruta Samhita*, Volume 1, NidanaSthana, Kshudraroganidana Adhyaya, Chapter 13, Verse no.- 45,46, 14th ed. Varanasi: Chaukhamba Sanskrit Sansthan, 2003. p. 288.
- [3] Shastri Kashinath, Chaturvedi Gorkhnath (ed.) *Charaka Samhita with Vidyottini Hindi Commentary*, Sutrasthan, Trishothiyaaadhyaya, Chapter 18, Verse no - 25. Reprint 2009, Varanasi: Chaukhambha Bharti Academy, p.379.
- [4] Paradakar Shastri (ed.), *Ashtangahridayam*, Uttartantra, Kshudrarogvigyanaya Adhyaya, Chapter 31, Verse - 28, 9th ed. Varanasi: Chaukhamba Surbharati Prakashan; 2011, p. 889.
- [5] Tripathi B. *AshtangaHridayam of Srimadvagbhata*. Delhi: Chaukhamba Sanskrit Pratisthan, Uttarsthana; 31/28, P. 1117.
- [6] Vaidya Yadavji Trikamji. *SushrutaSamhita with Nibandhasangraha*. Varanasi: Chaukhamba Sanskrit Sansthan; 2013: Nidanasthana, 13/45,46. P. 210.
- [7] Fitzpatrick TB, Szabo G. The melanocyte:cytology and cytochemistry. *J Invest Dermatol*. 1959;32:197-209.
- [8] Srikantha Murthy KR. *Vagbata's Ashtanga hridayam*, Vol 3. Varanasi: Chaukhambha; 2015; p. 301.
- [9] Panigrahi M, Vyas M, Mohanty KP. A holistic approach in the management of *vyanga* (facial melanosis)-A case study. *World Journal of Pharmacy and Pharmaceutical Sciences*. 2016;5(7):1938-45.
- [10] Lekshmi AG, Deepak NP, Shivakumar, Lohith BA. Ayurvedic management of *vyanga* w.s.r melasma: A case study. *IJBPAS*. 2023;12(12):1263-67.
- [11] Kumari D, Chaudhari V, Nakade M, Gaikwad P, Pawar S. Management of melasma through Ayurveda: A case report. *Journal of Natural Remedies*. 2023;23(4):1541-46.
- [12] Pallavi G, Gupta KV, Shreevathsa M, Chate VA, Balakrishna DL. Clinical evaluation of *Varnya Gana Lepa* in *Vyanga* (melasma). *AYU (An International Quarterly Journal of Research in Ayurveda)*. 2015;36(2):151-56.
- [13] Govindachary Purushottam Ganesh Nanal Vidya, Sarth Bhav Prakash. 61 Adhyaya, Madhyam Khand. *Chikitsa Prakaran Kshudrarogadhikar*, Raghuvanshi Prakashan. Shlok no. 39, p. 6858.
- [14] Govindachary Purushottam Ganesh Nanal Vidya, Sarth bhav Prakash. 61 Adhyaya, Madhyam Khand. *Chikitsa Prakaran Kshudrarogadhikar*, Raghuvanshi Prakashan, Shlok no. 40, p. 685.
- [15] Thakur R. Role of yoga in stress management. *Hill Quest*. 2016;3(2):41-53.
- [16] Cheppaatt Achutha Varier K. *Chakradatta*, Kollam: VS Press; 1989; p272.
- [17] Prof. P.V. Sharma, *Dravyagunavigyana-Vol 2*, Chaukhambha Bharati Academy, Varanasi, 2006, p. 800.
- [18] Prof. P.V. Sharma, *Dravyagunavigyana-Vol 2*, Chaukhambha Bharati Academy, Varanasi, 2006, p. 253.
- [19] Prof. P.V. Sharma, *Dravyagunavigyana-Vol 2*, Chaukhambha Bharati Academy, Varanasi, 2006, p. 718.
- [20] Srikantha Murthy KR. *Bhavaprakasha of Bhavamisra*. Vol 2. Varanasi: Chaukhambha; 2012; p. 552.
- [21] Yasmin S, Renu D, Bhaskara RKVV. Clinical and comparative study of *Jatiphala* and *Javitri* in Hyperpigmentation. *World Journal of Pharmaceutical Research*. 2016;6(1):598-630.
- [22] Gupt KA, Editor. *Ashtang Hriduya of Vagbhata*. Vidyotini Hindi commentary. Vol. 2 Uttartantra chapter 32 verse 27-30). Edition 3. Varanasi: Chaukhamba Prakashan, 2011; 566.
- [23] Song YR, Lim WC, Han A, Lee MH, Shin EJ, Lee KM, et al. Rose petal extract (*Rosa gallica*) exerts skin whitening and anti-skin wrinkle effects. *Journal of Medicinal Food*. 2020;23(8):870-78.

PARTICULARS OF CONTRIBUTORS:

1. Postgraduate Scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod, Wardha, Maharashtra, India.
2. Associate Professor, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod, Wardha, Maharashtra, India.
3. Assistant Professor, Department of Kaumarbhritya, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod, Wardha, Maharashtra, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Mrunal Sunil Bole,
Postgraduate Scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Datta Meghe Institute of Higher Education and Research (Deemed to be University), Salod (Hirapur), Sawangi, Wardha-442107, Maharashtra, India.
E-mail: bolemrunal02@gmail.com

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. Yes

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Apr 24, 2024
- Manual Googling: May 27, 2024
- iThenticate Software: Aug 21, 2024 (4%)

ETYMOLOGY: Author Origin

EMENDATIONS: 8

Date of Submission: Apr 23, 2024
Date of Peer Review: May 24, 2024
Date of Acceptance: Aug 22, 2024
Date of Publishing: Nov 01, 2024