

Critical Review to Understand Vagbhata's Treatment Protocols of Vatadi Types of Vyanga Vis-À-Vis Melasma

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ABSTRACT

Background: Melasma is a skin condition characterized by dark spots and patches on the nose, cheeks, forehead and jawline. Although it is completely harmless, it causes skin discoloration which is difficult to fade away with routine skin care. Melasma can lead to social isolation and stigmatization adversely affecting the quality of daily life which definitely has a major impact on individual's psychological state and social relationship¹. Based on the symptomatology of *Vyanga*, they are classified into *VatajVyanga*, *PittajaVyanga*, *Kaphaja Vyanga* and *Raktaja Vyanga*. The treatment protocols for all the types of *Vyanga* have been explained in *AshtangaSangrahaKshudraRogain detail*².

As many of the clinical features of different types of melasma can be correlated with *Vatadi* types of *Vyanga*, treatment protocols explained by *Vagbhata* can also be applied for them.

Objectives: To review the treatment protocols of *VatajaVyanga*, *PittajaVyanga*, *KaphajVyanga* and *RaktajaVyanga* which are explained in *AshtangaSangraha*.

Conclusion: Alternative to topical steroids, this research provided a sound literature review on both internal and external treatments of *Vatadi* types of *Vyanga*.

Keywords- Melasma, *Vataja Vyanga*, *Pittaja Vyanga*, *Kaphaja Vyanga*, *Raktaja Vyanga*, Hyper pigmentation.

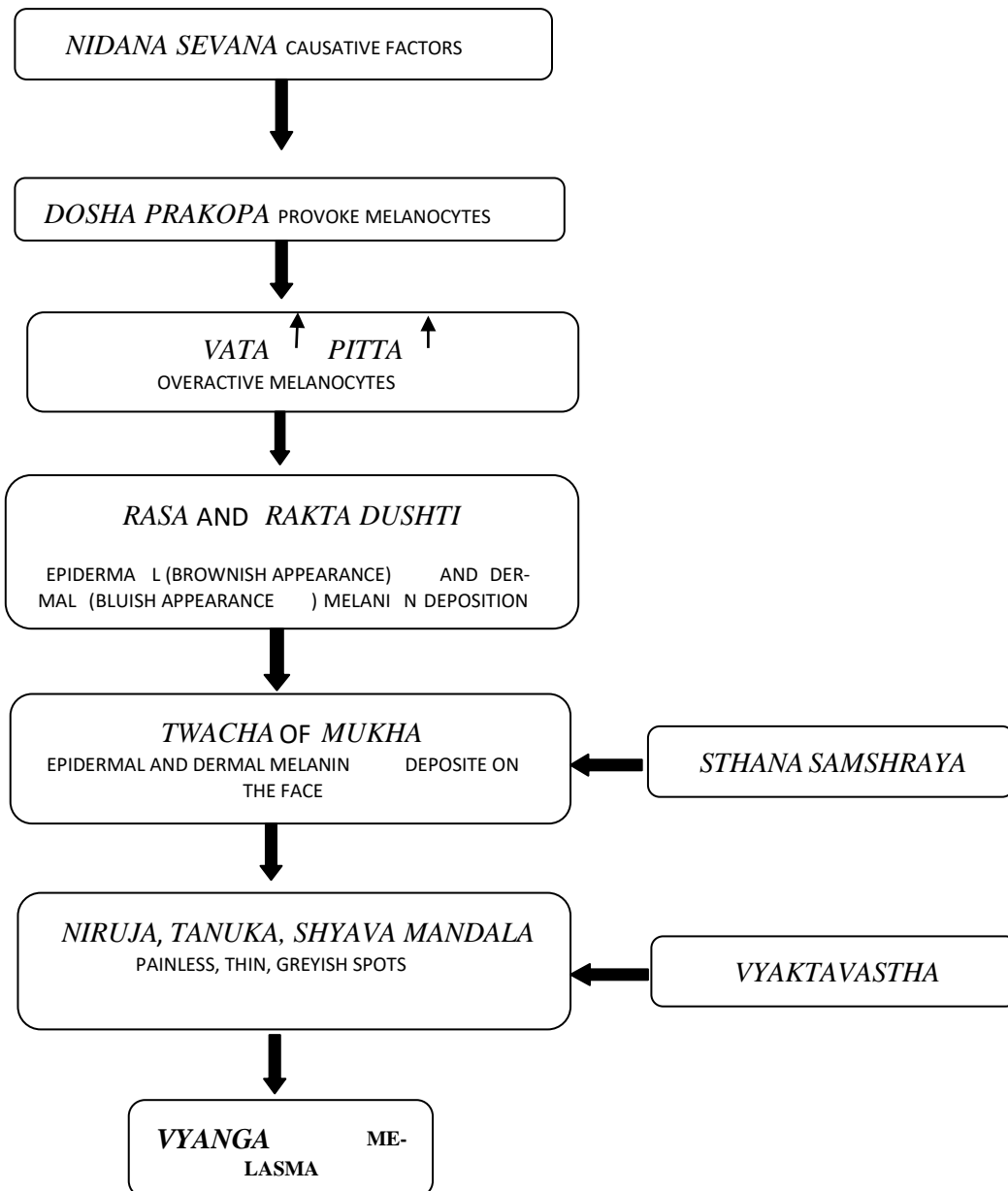
INTRODUCTION

Vyanga (Melasma) is a common, acquired and symmetrical hypermelanosis characterized by more or less dark brownish maculae, with irregular contour, but clear limits, on photo exposed areas, especially the face, forehead, temples, and more rarely on the nose, eyelids, chin, and upper lips. In Ayurveda, *Vyanga* has been elaborated as one of the *KshudraRogas* (minor ailments).

Vyanga is a disease which belongs to *Swalpa* variety of *KsudraRoga*^[1]. *Vayu* aggravated by *Krodha* and *Ayasa*, get associated with *Pitta* and suddenly produces a thin, grey colored circular patch when reaches the face. Both modern and Ayurvedic sciences have considered the use of topical as well as oral medications and their combinations for the treatment of *Vyanga*. In Ayurveda, *Vyanga* has been treated both by *Antah-Parimarjan* and *Bahi-ParimarjanaChikitsa*. Though, several Ayurvedic texts such as *SushrutaSamhita*, *AshtangaSamgraha&Hridaya*, etc^{2,3,4,5]}, have elaborated the pathophysiology and treatment of *Vyanga*, the available references are scattered. Thus, there is need of in-depth review and compilation of Ayurvedic texts and literatures.

This review may be helpful in better understanding of comparative pathophysiology and management of *Vyanga* (Melasma).

Causative factors-



Samprapti Ghataka-

<i>Dosha</i>	<i>Vayu (Udana, Vyana) Pitta (Bhrajaka)</i>
<i>Dushya</i>	<i>Dhatu- Rasa, Rakta. Upadhatu- Twak</i>
<i>Srotas</i>	<i>Rasavaha, Raktavaha</i>
<i>Agni</i>	<i>Jataragni, Dhatvagni (Rasagni, Raktagni)</i>
<i>Marga</i>	<i>Shakhagata</i>
<i>Sthana</i>	<i>Twak</i>

AshtangaSangraha has explained in detail about *Vatadi* types of *Vyanga*. Along with its symptomology, its treatment protocols are mentioned in detail. Signs and symptoms of *Vyanga* have greater resemblance to *melasma*.

Symptoms like *Parusha*, *Parushasparsha* and which is of *shyavavarnaindicates* *Vatajavyanga*. *Pittajavyangais* identified by *TamrantaneelaVarnalesion*. *KaphajaVyanga* has lesions having *Shvetantavarna* and *Kandu*. *RaktajaVyanga* has *raktavarna* lesions along with *osha* and *chimchimayan*.

According to modern science, there are three types of *melasma* and they have to do with the depth of the pigment. A Wood's lamp that emits black light may be used to determine the depth of the pigment. The three types are:¹

1. **Epidermal:** Epidermal *melasma* has a dark brown colour, a well-defined border, appears obvious under black light and sometimes responds well to treatment.
2. **Dermal:** Dermal *melasma* has a light brown or bluish colour, a blurry border, appears no differently under black light and doesn't respond well to treatment.
3. **Mixed melasma:** Mixed *melasma*, which is the most common of the three, has both bluish and brown patches, shows a mixed pattern under black light and shows some response to treatment.
Some texts mention about 4th type i.e. an unnamed type which is noticeable among people with dark skin tone²
Treatment protocols mentioned in ayurvedic classics can also be applied to these types of *melasma*

Critical review on Treatment protocol of *VatajaVyanga*^{7,8,9}-

A. *AbhyantaraPrayoga*

1. *ShamanaGhrutapana*

- a. Drugs used- *Ghruta* prepared with following drugs *Devadaru*, *Kulattha*, *Badara*, *Bilva*, *Utpala*, *Shatavari*, *Darbhamoola*, *Shruni* , *Vidanga garbha*, *Vidari* , *Yava*, *Duralabha* , *Brihati*, *Manjishtha*, *Murva*, *Apamarga*, *Trayanti*, *Trayamana*, *Shukanasa*, *Bala* etc.
- b. *Matra* -12gm
- c. Time of administration- *Adhobhaktam*
- d. Duration- till the *lakshanas* reduce or for 30 days

2. *Navananasya*

- a. Drug used- *Ghruta* prepared with above mentioned drugs
- b. *Matra*- 8 *bindu*
- c. Time of administration- *Sayam kala*
- d. Duration- 5 days or 7 days

B. *BahyaPrayoga*

1. *Mukha Abhyanga*-
 - a. Drug- *Devadarvyadighruta*
 - b. Time of application- *Sayam kala*
 - c. Duration- for 20 minutes
2. *MukhaPralepa*-
3. *Pralepa*
 - a. Drugs used-
 - *Churna* prepared with *Nyagrodha*, *Devadaru*, *Haritaki*, *Putikaranja*, *Madanaphala* along with *go ghrutacan* be applied to lesions.
 - *Badaramajja*, *kodrava*, *Lajachurna* along with *go ghrutacan* be applied.
 - b. Thickness- 0.49cm or 0.98cm
 - c. Direction of *lepa*- *pratilomagati*
 - d. Duration- not to leave till it dries up
 - e. Time of application- Morning hours

Critical review on Treatment protocol of *PittajaVyanga*-

A. *Shodhana*-

1. *Vamana* and *Virechana*-
With the help of *Ikshu rasa* along with other *Kalpas* mentioned for *Vamana* and *Virechana* in *Kalpasthanas*, both *Urdhwa* and *AdhoShodhana* can be performed.
2. *Raktamokshana*- *Jaloukavacharana* can be done at the site of the lesion.
3. *Navananasya*- Drugs used are *BaladiGhruta* or *MrudwikadiGhruta*

B. *Shamana*

1. *Shamana Sneha*

- a. *Ghruta* prepared with *Bala*, *madhuka*, *Magadhika*, *Ksheerakakoli*, *swagupta*, *kakamachi* etc.
- b. *Ghruta* prepared with *Mridvika*, *shvetapaki*, *Kharjura*, *Parushaka*, *Souvira*, *Badara*, *Punarnava*, *Meda*, *Mahameda*, *Kasheruka*, *Praval*, *Vidruma* etc. along with *ksheera*

C. *Bahyaprayoga*

1. *Mukha Abhyanga*-
Drugs used- *Baladighruta* or *Mrudwikadighruta*
2. *Mukhaaalepa*-
 - Face pack prepared with *Madhuka*, *Sariva*, *Bala*, *Chandana*, *Lodhra*, *Utpala* along with *goghruta* can be applied.
 - Face pack prepared with *Prapoundarika*, *Madhuka*, *Padmaka*, *Neelotpala*, *Sariva*, *Kadalimula*, *Pravala*, *Suvarna*, *Gairika* etc. can be applied.

Critical review on Treatment protocol of KaphajaVyanga-

A. AbhyantaraPrayoga

1. *ShamanaGhrutapana*
- a. Drugs used- *Ghruta* prepared with following drugs *Dashamoola, Devadaru, Haritaki, Shwadramshtra, Aamalaki, Musta, Kushtha,*
- b. *Matra* -12gm
4. Time of administration- *Adhobhaktam*
5. Duration- till the *Lakshanas* reduce or for 30 days

3. *NavanaNasya*
- a. Drug used- *Ghruta* prepared with above mentioned drugs
- b. *Matra*- 8 *bindu*
- c. Time of administration- *Sayamkala*
- d. Duration- 5 days or 7 days

C. BahyaPrayoga

1. *MukhaAbhyanga-*
- a. Drug- *DashamuladiGhruta*
- b. Time of application- *Sayam kala*
- c. Duration- for 20 minutes

2. *MukhaPralepa-*
3. *Pralepa*
- a. Drugs used- *Churna* prepared with *Tuttha, Rochana, Lodhra, Priyangu,* with *Madhu and Ghruta* can be applied.
- *Devadaru, Sarala, Bala, Shigrumoola,* can be applied to lesions.
- *Manasheela, Tuttha, Rasanjanacana* can be applied.
- b. Thickness- 0.49cm or 0.98cm
- c. Direction of *Lepa- PratilomaGati*
- d. Duration- *Dashamatra* (10 *Nimesh* and *UnmeshaMatraKala*)

Critical review on Treatment protocol of RaktajaVyanga-

A. Shodhana –

1. *Raktamokshana-*
Siravedha should be performed after proper *Snehana* of body.
2. *Vamana* and *Virechana-*
Procedures told in *PittajaVyanga* can be followed.

B. Bahyaprayoga

1. Aalepa-

- Face pack prepared with the *kalka* of *Chandana, Madhuka* along with *Ghruta* to be applied.
- Facepack prepared with *kalka* of *Sarjarasa, Neelotpala, Shankhavetasa, Kadalimula, Murva, Madhuka* can be applied.

➤ **Pathya-Apathya**

- **Pathya:**
- **Ahara:** *Guna- Laghu, Hita, ShashtikaShali, Yava, Godhuma, Mudga, Adaka, Masura, Nimbapatra, PatolaPatra, Brihatphala, Chakramarda, JangalaMrugaMamsa, Mutra* of cow, camel, buffalo.
- **Vihara:** *Lepana* with *SheetalaDravya*, exposure to cold wind, *MukhaPrakshalana* with *SheetalaDravya,*
- **Apathya:**
- **Ahara:** *Pitta* and *Raktaaggravating; Ahara, Guna- Drava, Guru, Vidahi, Vishtambhi; Masha, Moolaka, Amla Phala, Tila, AnupaDeshaMrugaMamsa, Dadhi, Ksheera, Madhya, Guda.*
- **Vihara-** *Suryarashmi, Diwaswapna, Vyayama, Vegadharana.*

DISCUSSION

It is worth highlighting that melasma is one of the unaesthetic dermatoses that lead to great demand for specialized dermatological care, even though they are just a common and benign pigmentation abnormality. This might be explained by its cosmetically compromising nature and the associated emotional and psychological effects in individuals affected by this problem, who often, because of dissatisfaction with their appearance, eventually reduce their social lives, even with cases of suicide reported. Although this condition often has only aesthetic implications, such concern can be very important and impacting on the social, family and professional lives those affected, causing psychological effects that cannot be neglected.[6]

Vyanga is one of the most common skin problems in all over the world treated by dermatologists. Several Ayurvedic texts including *SushrutaSamhita, AshtangaHridaya, Bhavaprakash, Chakradatta, Yoga-Ratnakar, CharakaSamhita, SharangadharaSamhita* and modern literatures have been reviewed concerning with melasma. After review, it has been observed that both sciences have shown great similarity in the understanding of melasma in terms of causative factors, which in turn affects the *Jatharagni* and normal functioning of *RanjakaPitta* i.e., *Varnotpatti*. Based on *Ashraya-AshrayeeBhavas*, the derangement of *PittaDosha* leads to abnormality of *RaktaDhatu*. *Shrama* and *Shoka* will lead to *Udana Vata* vitiation.

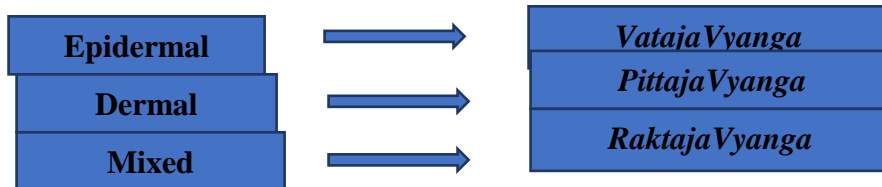
Thus, vitiated *RanjakaPitta, RaktaDhatu* as well as *UdanaVata* travel in body through *Dhamanis* and get *SthanaSamshraya* in *MukhagataTwacha* and causes vitiation of *Bhrajaka Pitta* giving rise to discoloration of the skin. onset of symptoms, age factors, pathophysiology and method of treatment of melasma. *Vyanga* has been elaborated in Ayurveda as a *KshudraRoga* (minor ailment), as it is not a serious or life threatening disorder but it

seriously impacts quality of life of person. *Vyanga* is used in Ayurveda to define melasma. In *Samprapti* (Patho-physiological) process of *Vyanga*, factors stated by Acharya's has given special emphasis towards psychological factors like *Krodha* (anger), *Shoka* (grief) and *Shrama* (exhaustion), which are commonly found in most of the patients. In *Samprapti* of *Vyanga*, Acharya Charaka has mentioned that the aggravation of *Pitta* along with *Rakta* is the chief culprit for initiation of the pathology.

Vyanga is a *RaktaPradoshajaVyadhi*, hence the very first *Dosha* affected is *RaktaDhatu*. *DoshaPrakopakaHetus* like *Krodha*, *Shoka* and *Shrama* are mainly *Tama* (*ManasikaDosha*), *Pitta* and *Vata* (*ShareerikaDosha*) dominance, vitiates the *Agni* (*PittaDosha*) which resides in *Rasa* and initiates the pathogenesis of *Vyanga*. Here

RanjakaPitta is responsible for the conversion of *RasaDhatu* into *RaktaDhatu* which results in the formation of normal skin color. However due to etiological factors like *Krodha* and *Shoka* mainly *Pitta* vitiation takes place as far as the treatment of *Vyanga* is concerned, both the sciences advise the use of topical as well as oral medications. Modern science describes the treatment as per the severity of *Vyanga*, similarly Ayurveda has also advised *Raktamokshana* for severe cases of *Vyanga*. Ayurveda believes in expelling the root causes of *Vyanga* by giving *SodhanaChikitsa*. Modern science also aims at eliminating one of the main factors of *Vyanga* by advising oral as well as local antibiotics. Effective treatment modalities are available in both the sciences, but sometimes adverse effects of modern medicines limit their use.

Comparison between *Vatadi* types and types of melasma Based on symptoms



Mode of action of drugs ^[10,11,12].

Drugs mentioned in *Vyanga* by *AshtangaSangraha* have its specific importance. *Nyagrodha* which has free radical scavenger-flavonals and triterpeneand *Haritaki* with its gallic acid could suppress melanogenesis in melanocytes and inhibits mice skin hyperpigmentation induced by UVB radiation. Phenolics especially flavonoids and catechins have been known as antioxidant phytochemicals that are able to reduce melanin production. Research on *Kadalimulashow* that it could reduce melanogenesis effectively. Drugs like *Madanphala*, *Badara*, *Bala*, *Chandana* etc exhibit the strongest tyrosinase inhibitory activity.

CONCLUSION

Though *Vyanga* is *Kshudraroga*, the consequences of *Vyanga* on society is more unpleasant now a days. Though it is a painless physically, causes mental pain or ill health. By considering these factors *Chikitsa* of the *Vyanga* is the ultimate solution, modern treatment comprises topical steroids which causes adverse effects like irritation, rashes etc. So, to treat the disease properly in Ayurveda, the complete understanding of the disease in Ayurveda and modern much needed. Looking at in-depth knowledge, Ayurveda can certainly contribute in the development of newer effective and safe remedies for the treatment of *Vyanga*. Therefore, as far as the treatment of *Vyanga* is concerned it is most important for the drugs to have

KaphaPittaShamaka, *RaktaPrasadaka* and *Varnya* property.

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