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

Dr. Dhanwantari Gorakhanath Saste¹, Dr. Mushraf Sayyad²

¹Assistant Professor, Dep. of Kayachikitsa, Sawkar Ayurvedic Medical College and hospital, Panmalewadi, Satara

²Professor, Dep. of KriyaSharira, Sawkar Ayurvedic Medical College and hospital, Panmalewadi, Satara

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 stigmatization adversely affecting the quality of daily life which definitely has a major impact on psychological individual's state and relationship¹. Based on the symptomatology of Vyanga, they are classified into VatajVyanga, PittajaVyanga, Kaphaja Vyangaand Raktaja Vyanga. The treatment protocols for all the types of Vyanga have explained been in AshtangaSangrahaKshudraRogain detail².

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*, *PittajaVyangaKaphajVyanga* 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.

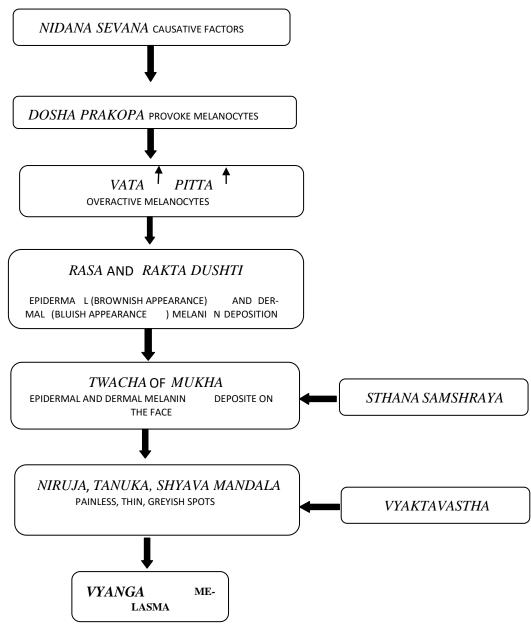
INTRODUCTION

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 Antah-Parimarjan Bahitreated both by and 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-

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

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 *shyavavarna*indicates *Vatajavyanga*. *Pittajavyanga*is identified by *TamrantaneelaVarna*lesion. *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 proctocol of *Vataja Vyanga*^{7,8,9}-

A. AbhyantaraPrayoga

1. ShamanaGhrutapana

- a. Drugs used- Ghruta prepared with following drugs Devadaru, Kulattha, Badara, Bilva, Utpala, Shatavari, Darbhamoola, Shrungi , 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, Lajachurnaalong 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 *Kalpasthana*, both *Urdhwa* and *AdhoShodhana* can be performed.

- 2. Raktamokshana- Jaloukavacharana can be done at the site of the lesion.
- Navananasya- Drugs used are BaladiGhruta or MrudwikadiGhruta

B. Shamana

1. Shamana Sneha-

Drugs used-

- a. Ghrutaprepared withBala, madhuka, Magadhika, Ksheerakakoli, swagupta, kakamachietc.
- b. Ghrutapreparedwith Mridvika, shvetapaki, Kharjura, Parushaka, Souvira, Badara, Punarnava, Meda, Mahameda, Kasheruka, Praval, Vidrumaetc. 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, Rasanjanacan 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, Shashtika Shali, Yava, Godhuma, Mudga, Adaka, Masura, Nimbapatra, Patola Patra, Brihatphala, Chakramarda, Jangala Mruga Mamsa, Mutra of cow, camel, buffalo.
- *Vihara:Lepana* with *SheetalaDravya*, exposure to cold wind, *MukhaPrakshalana* with *SheetalaDravya*,
- Apathya:
- Ahara: Pitta andRaktaaggravating; 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 aesthetical 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 including SushrutaSamhita, Ayurvedic texts 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.

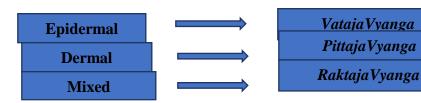
Thus, vitiated *RanjakaPitta*, *RaktaDhatu* as well as *UdanaVata* travel in body through *Dhamanis* and get *SthanaSamshraya* in *MukhagataTwacha* and causes vitiation of *Bhrajaka* Pitta giving rise to discoloration of the skin. onset of symptoms, age factors, pathophysiology and method of treatment 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* (Pathophysiological) 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 tropical 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 Vyaga. 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*haveits specific importance. *Nyagrodha* which has free radical scavenger-flavonals and tritepeneand *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 antioxidantphytochemicals that are able to reduce melanin production. Research on *Kadalimula*showsthat 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.

REFERENCES

- [1]. https://my.clevelandclinic.org/health/diseases/21454 -melasma
- [2]. https://www.ag3derm.com/types-of-melasma/)
- [3]. Sushrut Samhita edited by KavirajAmbikaduttashastri, Chaukambha Sanskrit sansthan, Varanasi, part-1, reprint 2014, Uttartantra chapter
- [4]. AstangHridayam edited by Dr. BramanandTriphathi, Chaukhamba Sanskrit Pratishthan, Delhi, reprint 2014, Uttarasthana, Chapter-31.
- [5]. AshtangaSangraha- Uttara sthana- 36th chapter and 37 th chapter (Kshudrarogavidnyaniyam and Kshudrarogapratishedham)
- [6]. Melasma article By Dr. Mythrey R.C. and Dr. Dhanwantari Saste-RC M, Saste D. Management of Vyanga Vis-A-Vis Melasma Through Ayurveda-A Case Series.
- [7]. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC653 5666/
- [8]. Fitzpatrick, T. B., and Szabo, G. (1959) The melanocyte: cytology and cytochemistry. J. Invest. Dermatol. 32, 197–209.

- [9]. Sturm, R. A., Box, N. F., and Ramsay, M. (1998) Human pigmentation genetics: the difference is only skin deep. Bioessays 20, 712–721
- [10]. Mosher DB, Fitzpatrick TB, Ortonne JP, Hori Y. Normal skin color and General Considerations of Pigmentary Disorders. In: Fitzpatrick TB, Eisen AZ, Wolff K, Freedberg IM, Austen KF. Dermatology in General Medicine. New York: Mcgraw-Hill; 1999. p. 936-44;
- [11]. https://jppres.com/jppres/pdf/vol5/jppres16.195_5.5. 270.pdf
- [12]. http://oaji.net/articles/2017/736-1514979376.pdf