

**REVIEW ON SUSHRUTOKTA LOHITA TVAKA WITH SPECIAL  
REFERENCE TO VYANGA****Akshay Laxman Bade<sup>1\*</sup> and Vinod M. Choudhari<sup>2</sup>**

<sup>1</sup>PG Final year Student, Department of Rachana Sharir, Shri Ayurved College, Nagpur,  
Maharashtra, India.

<sup>2</sup>HOD and Guide, Department of Rachana Sharir, Shri Ayurved College, Nagpur,  
Maharashtra, India.

Article Received on  
02 March 2022,

Revised on 22 March 2022,  
Accepted on 12 April 2022

DOI: 10.20959/wjpr20225-23862

**\*Corresponding Author****Dr. Akshay Laxman Bade**

PG Final year Student,  
Department of Rachana  
Sharir, Shri Ayurved  
College, Nagpur,  
Maharashtra, India.

**ABSTRACT**

Skin (Tvaka) is the general covering of the entire external surface of body. It is the largest organ of body both by surface area and weight. It is most prone to diseases as it is exposed to external environment. Acharya Sushruta mentioned Skin as Tvaka and its layers in Ayurveda. Lohita is the second layer of tvaka. Acharya Sushruta has mentioned Vyanga roga in Lohita tvaka (second layer). Vyanga can be correlated with Melasma in modern science. It is an acquired pigmentary condition, occurring most commonly on the face. This disorder is predominantly attributed to ultraviolet (UV) exposure and hormonal influences. Melasma is generally a clinical diagnosis consisting of symmetric reticulated hyper melanosis which decreases glowing

complexion of face.

**KEYWORDS:** Skin, Lohita Tvaka, Vyanga, Melasma, Hyper melanosis, Ayurveda.

**INTRODUCTION**

Skin is general covering of all external surface of body. Importance of skin is explained in Ayurveda in Tvaka Sharir. It includes definition of Tvaka, formation of each layer and its Adhishtan in respective layer. Acharya Sushruta has mentioned Lohita is the second layer of tvaka and Vyanga disease in the Lohita tvaka.<sup>[1]</sup> According to Acharya Sushruta, due to excessive anger and work the Pitta and Vata increases and causes black hyper pigmented patch on face which is called Vyanga.<sup>[2]</sup> On the basis of clinical features, it can be compared with Melasma. It is an acquired pigmentary condition, occurring most commonly on the face.

This disorder, which is more prevalent in females and darker skin types. It interrupted the complexion, texture and decreases glowing, smoothness of skin. Melasma has a significant impact on appearance, causing psychological and emotional distress which affect quality of life. Considering impact of Vyanga in person's life treatment of this disease is important.

### AIMS AND OBJECTIVE

- To study anatomical structure of skin.
- To study Lohita Tvaka
- To re-evaluate Vyanga disease and its aetiology, pathophysiology and management.

### Literature review

In Ayurveda skin is explained as Tvaka. It is Adhishtana of Vayu and brings out its function.<sup>[3]</sup> Acharya Sushruta described the formation of Tvaka from metabolism of Shukra and Shonita by Tridosha.

### Tvaka stara (Layers of skin)

In Sushruta samhita seven layers of Tvaka are mentioned which is correlated with modern anatomy of skin as follows.<sup>[10]</sup>

**Table no. 01: Tvaka stara (Layers of skin).<sup>[4]</sup>**

Sr. no.	Tvaka stara (Sushruta)	Size (Vrihi)	Layers of skin (Modern Anatomy)	Skin Diseases
1.	Avbhasini	1/18	Stratum corneum	Sidhma, padmakantaka
2.	<b>Lohita</b>	<b>1/16</b>	<b>Stratum lucidum</b>	<b>Vyanga</b> , nyachha, tilkalaka
3.	Shweta	1/12	Stratum granulosum	Mashaka, ajagallika, charmadala
4.	Tamra	1/8	Malphigian layer	Kilas, kushtha
5.	Vedini	1/5	Papillary layer	Visarpa, kushtha
6.	Rohini	1	Reticular layer	Granthi, galganda, apachi, arbuda, shlipada
7.	Mamsadhara	2	Subcutaneous tissue and muscular layer	Arsha, bhagandara, vidradhi

### Lohita tvaka (Stratum lucidum)

Acharrya Sushruta mentioned lohita tvaka as second layer of tvaka which can be correlated with stratum lucidum. It is the epidermal layer of skin. 2-3 cell layers, present in thicker skin found in the palms and soles. It is a thin clear layer consisting of eleidin which is a transformation product of keratohyalin.<sup>[5]</sup>

## Skin

Skin is the largest organ in the body and covers the body's entire external surface. It is made up of three layers, the epidermis, dermis, and the hypodermis, all three of which vary significantly in their anatomy and function. The skin's structure is made up of an intricate network which serves as the body's initial barrier against pathogens, UV light, and chemicals, and mechanical injury. It also regulates temperature and the amount of water released into the environment.

## Vyanga

According to Acharya Sushruta, due to excessive anger and work the Pitta and Vata increases and causes black hyper pigmented patch on face which is called Vyanga. It is one of the kshudra rogas mentioned in Sushruta Samhita. According to Ayurveda different types of hyper pigmented patch are differentiated into;

- **Vyanga**, hyper pigmented patch on face
- Tilakalak, a mole
- Mashak, an elevated mole
- Nyaccha, hyper pigmented birth mark
- Neelika hyper pigmented patch on body other than face

## Causative factors (Hetu)

There are many factors that can cause Vyanga (melasma) or pigmentation; whether it is a mild or severe form, it is usually associated with one or a combination of the below:

- Pregnancy the pigment may or may not fade after the delivery.
- Hormonal contraceptives, including oral contraceptive pills and injected progesterone.
- Sun exposure is also a very strong risk factor.
- Nutritional deficiency.
- Scented or deodorant soaps, toiletries and cosmetics can cause a phototoxic reaction.
- Poor immune system.
- Medications.
- Genetic factors.
- Ovarian or thyroid disorder.
- Stress.

According to Sushruta excessive work and anger may increase Vata and Pitta Dosha and when they do Sthansanshraya on face it may cause Vyanga.

## Symptoms

As per Ayurveda Vyanga is appearance of Tanu (thin), Niruja (painless), Shyav varna (blackish brown) circular patch over face.

According to Dosha predominance symptoms can vary. These are as follows:

- Vataja Vyanga - Skin appears hard rough in nature blackish discoloration.
- Pittaja Vyanga - Boundries are copper red.
- Kaphaja Vyanga - Boundries are whitish in colour and associated with itching
- Raktaja Vyanga - Boundries are red and coppery red in centre and associated with tingling and burning sensation.<sup>[12]</sup>

## Melasma

It is an acquired pigmentary condition, occurring most commonly on the face which is more prevalent in females and darker skin types, is predominantly attributed to ultraviolet exposure and hormonal influences. Melasma is generally a clinical diagnosis consisting of symmetric reticulated hypermelanosis in three predominant facial patterns: centrofacial, malar, and mandibular.<sup>[6]</sup>

Though common, the management of this disorder remains challenging given the incomplete understanding of the pathogenesis, its chronicity, and recurrence rates.

## Management of vyanga according to Ayurveda and Modern

- ❖ Siravedhan (Bloodletting).<sup>[7]</sup>
- ❖ Lepa – Some Shita (cold) as well as Ushna (hot) Lepas are mentioned in Ayurvedic texts.<sup>[8]</sup>

## Shita lepas

Lepas include herbs like Manjishta, Lodhra, Raktachandan, Vatankur, Daruharidra, Shalmalee Kantak, Badari Fala Majja, Amrapatra, Jamunpatra. Lepas of animal products like Goats milk, cows bone etc.

## Ushna lepas

Above medicines + Kshir of Kshiri Vruksh + Godughda cook together and apply Siddha Ghruta Lepas,

- ❖ Raktachandana, Manjishta, Kosht, Lodhra, Raal, Masoor lepa.<sup>[9]</sup>

- ❖ Nasya with Brungaraj Swaras or milk + water.
- ❖ Treatments for melasma include topical, oral, procedural, and combination treatments. These are aimed at various aspects of the pathogenesis of melasma including photodamage, inflammation, vascularity, and pigmentation.

## DISCUSSION

The beauty and attraction of individual is reflected in the skin's health (including general health). Vyanga (Melasma) is one of the commonest pigmentary disorders in advancing society. The aetiopathogenesis of melasma includes genetic factor, UV light exposure, hormonal imbalance, etc. Acharyas mentioned this disorder occurs due to vitiation of Vata, Pitta Dosha which results in Neeruja (painless), Shyam (brown or grey brown), Mandalavart (circular patches), Tanu (thin) on nose, forehead, cheeks and chin, decreasing complexion and luster of skin. Due to cosmetic reason, it has got more importance. Ayurvedic medicine and formulations were proved effective without any side effect to treat skin diseases like Vyanga. Although Vyanga is a painless condition of body, it is painful for mind as having psychosocial impact.

## CONCLUSION

After scrutinizing compile data from different Samhitas and modern books we can understand structure of tvaka (skin) and Sushrutokta lohita tvaka along with the aetiopathogenesis of Vyanga and different treatment methods according to Ayurveda. Vyanga (Melasma) continues to be a frustrating condition to treat and one with significant psychosocial implications. Treatment efficacy can vary due to several factors including variability in clinical presentation and response to treatment amongst different genders, skin phototypes, and ethnicities. Given the multifactorial aetiology of melasma, it is important to have a multimodal therapeutic approach that addresses factors such as photoprotection, inflammation, vascularity, pigmentation, and hormonal influences. New research continues to increase our understanding of melasma and how it can be best treated.

## REFERENCES

1. Kaviraj Shastri Ambikadatta, Sushrut Samhita, Chaukhamba Sanskrit Sansthan, Varanasi, Sharirasthan, Garbhavyakarn Adhyay, 2008; 4(3): 28.
2. Acharya Yadavaji Trikamaji Suśrta Samhitā with Dallaṇa Tīkā, (ed), Chaukhamba Prakashana, Varanasi, 2004; 13: 43-45.

3. Dr. Garde Ganesh Krushna, Sarth Vagbhat, Proficient Publishing House, Pune, Sutrasthan, Doshbhedhiya Adhyay, 2010; 12(1): 62.
4. Dr. Ghanekar Bhaskar Govind, Sushruta Samhita, Meharchand Lachamadas Publication, Nayi Delhi, Garbhvyakaran Sharir, 2015; 106-107.
5. Brown TM, Krishnamurthy K. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL), 2021; 10. Histology, Dermis. [PubMed]
6. Sanchez NP, Pathak MA, Sato S, Fitzpatrick TB, Sanchez JL, Mihm MC Jr. Melasma: a clinical, light microscopic, ultrastructural, and immunofluorescence study. *J Am Acad Dermatol*, 1981; 4(6): 698–710. (PubMed PMID: 6787100).
7. Kaviraj Gupta Atridev, Ashtang Sangrah, Krushnadas Academy, Varanasi, Uttarsthan, Kshudraroga Pratisahedh, 2002; 37(23): 327.
8. Acharya Yadavaji Trikamaji Suśrta Samhitā with Dallaṇa Tīkā, (ed), Chaukhamba Prakashana, Varanasi, 2004; 20: 33-36.
9. Dr. Garde Ganesh Krishna, Sarth Vagbhat, Proficient Publication House, Pune, Uttarsthan, Kshudraroga Pratishedh Adhyay, 2010; 32(18): 514.