

International Journal of Indian Medicine

Alesson

NDEXED

www.ijim.co.in ISSN: 2582-7634

Feb 2025



Conceptual study of Shweta Twacha Sharir wsr to Mashaka (Moles) Milmile S.¹, Kukudkar S.²

- 1. Associate Professor, Department of Rachana Shareer, Jupiter Ayurveda Medical College, Nagpur.
- 2. Assistant Professor, Department of Kriya Shareer, Jupiter Ayurveda Medical College, Nagpur.

Abstract:

In Ayurveda 'the science of life' Acharya Sushruta mentions five sense organs called Gyanendriyas. Sparshanendriya is largest of them, with twacha as its adhishtana. Twacha is given as updhatu of Mamsa dhatu as well as moolsthanas of Mansavaha srtotas. Twaka generates anticipated response against the stimuli like sparsh (touch), twak covers the whole body thus protect the body from shock and performs functioning thermostat through sweat channels (swedvaha Srotasa). Acharya Sushruta has explained 44 kshudra roga . Out of them one is Mashaka. It is a disease caused due to the vitiation of doshas Vata & Kapha, which may appear anywhere on the body involving twaka & Meda. Mashak as an eruptive skin disorder. According to Modern perspective Mashaka can be compared with Moles. For the management of mashaka, knowledge of Skin is very important. The aim of the study to explore Shweta twacha as a site for Mashaka vyadhi (Moles). In present study with the help of various classical and modern literature it can be conclude that stratum granulosum deepest layer of epidermis is most common site of mole (nevus) which can be correlate with Shweta twacha. **Keywords:** *Twaka sharir, Skin, Shweta twacha, Mashaka, Moles, Ayurveda.*

Corresponding Author:

Dr. Sharda Milmile Jupiter Ayurveda Medical College, Shankarpur, Tah & Dist: Nagpur, Maharashtra, India Email: <u>sharda.urmale@gmail.com</u>

How to cite this article:

Milmile S., Kukudkar S. Conceptual study of Shweta Twacha Sharir wsr to Mashaka (Moles). Int J Ind Med 2025;6(2):17-23 DOI: <u>http://doi.org/10.55552/IJIM.2025.6204</u>

INTRODUCTION:

Rachana sharir is one of the branches of Ayurveda, described importance and compositions and different parts of the body. In ayurved the Twak word is referred for Skin. Skin is one of the five Gyanendriyas as described in Ayurvedic texts ⁽¹⁾. It is responsible for 'Sparsh Gyan' or touch sensation. It is the largest organ of body the body which is exposed to external environment. It protects the internal organs from physical, chemical, mechanical and biological injurie.

Sushrutacharya mentioned the sapta twacha, it's utpatti, thickness and sapta twacha related diseases. Each layer has its own significance as it is a site of of respective disease. Out of seven layers shweta twacha belongs to third layer with associated diseases Charmadal, Ajgallika and Mashaka. According to Sushrutachrya when life is induced by union of Shukra and Shonit in Garbhashaya, it undergoes through rapid formation and transformations and form the Twak just like as santanika (cream) forms on the surface of milk ⁽²⁾. According to modern science skin develops during embryonic period in 3rd and 4th month of foetal life ⁽³⁾. Acharya Ghanekar has compared this shweta layer with granular layer of skin⁽⁴⁾.

Skin is having dominance of vavu Mahabhuta⁽⁵⁾ and related to touch sensation ⁽⁶⁾. It is the updhatu of Mamsa ⁽⁷⁾ and covers all the body and protects inner organs of the body from external factors like heat, cold, radiations and chemicals. Twaka and lomas are parthivansh, prabha, varna are related to tejansh, lomkupas (hair pits) and sweat opening of glands are Akashiyansh, rasa and Lymph etc related to Jaliyansh *. Sushrutachrya described as twacha is also moolsthan of Mansavahasrotas ⁽⁸⁾.

Ayurvedic classic described various skin disorders under the heading of

Mahakushtha, Kshudrakushtha and Kshudra roga. Acharya Sushruta has explained 44 Kshudra roga. Out of them one is Mashaka. Kshudra means small, trivial, mediocre or less important ⁽⁹⁾. The paryaya of this is swalpa (small,minor), adham (low, unholy), krura (cruel, unbearable).

Improper ahar and vihar cause imbalance in doshas of body which in turns gives rise to many diseases. Out of which some may be life- threatening and some may not. Mashak is a disease caused due to vitiation of doshas (Vata and Kapha) which may appear anywhere on the body involving Twaka and Meda ⁽¹⁰⁾.

A common Mole is a growth on the skin that develops when pigment cells (melanocytes) grow in cluster. Although common moles maybe present at birth, they usually appear in later childhood. Most people continue to develop new Moles until about age 40. Most adults have between 10 to 40 common moles. A common mole is usually smaller than about 5mm wide. It round or oval has a smooth surface with a distinct edge and is often dome- shaped. A common mole has an even color of pink, tan or brown ⁽¹¹⁾.

Aims: To explore Shweta twacha as a site for Mashaka vyadhi.

Objectives: 1. to review the twacha and Skin according to Ayurveda and modern science. 2. To review the mashak and Moles according to Ayurveda and modern.

Material and method:

A literature study for twaka shareer, Skin, Mashaka and Moles is done referring to Ayurvedic classics, modern texts, research journals, databased information.

Int J Ind Med 2025;6(2):17-23

Literature Review:

According to Sushrutachrya when life is induced by union of Shukra and Shonit in Garbhashaya, it undergoes through rapid formation and transformations and form the Twak just like as Santanika (cream layer) forms on the surface of milk, when we boiled $It^{(2)}$. Acharya Vagbhat described the utpatti of Twacha as, Rakt dhatu go through pachan (process) with the help of Dhatvagni, thus the genesis of twacha takes place like the creamy layer over the surface of boiled milk ⁽¹²⁾.

Acharya Vagbhat has mentioned in Ashtanga Samgraha Sharir Sthanam that, Twacha (Skin) as a Matruj Avayava (maternal in origin) ⁽¹³⁾. Skin is having dominance of vayu Mahabhuta ⁽⁵⁾ and related to touch sensation ⁽⁶⁾. It is the updhatu of Mamsa ⁽⁷⁾ and covers all the body and protects inner organs of the body from external factors like heat, cold, radiations and chemicals. Twaka and lomas are parthivansh, prabha, varna are related to tejansh, lomkupas (hair pits) and opening of sweat glands are Akashiyansh, rasa and Lymph etc related to Jaliyansh. Sushrutachrya described as twacha is also moolsthan of Mansavahasrotas ⁽⁸⁾.

In Ayurveda there is variation in number of twacha according to different Acharyas.

Sushruta Samhita _ 7, Charak -6, Ashtanga Samgraha-6, Ashtanga Hrudaya-7, Sharangadhara-7, Modern science _7

Characters	Name of the	Name of	Thickness	Disease
	layer	Acharya		
1 st layer	Avbhasini	Sushruta	1/18 th of Vrihi	It reflects varna and 5 types of
		Samhita		Chavas, sidhma, Padmakantaka
	Udakdhara	Charak Samhita		-
	Udakdhara	Ashtang		-
		Sangraha		
	Avbhasini	Sharangdhar		-
		Samhita		
2 nd layer	Lohita	Sushruta	1/16 th of Vrihi	Tilkalak, Nyachchha, Vyanga
		Samhita		
	Asrukdhara	Charak Samhita		-
	Asrukdhara	Ashtang		-
		Sangraha		
	Lohita	Sharangdhar		-
		Samhita		
3 rd layer	Shweta	Sushruta	1/12 th of Vrihi	Charmadala, Ajagallika, Mashak
		Samhita		
	Tritiya	Charak Samhita		Sidhma, Kilas
	Tritiya	Ashtang		Sidhma, Kilas
		Sangraha		
	Shweta	Sharangdhar		-
		Samhita		
4 th layer	Tamra	Sushruta	1/8 th of Vrihi	Mahakushtha, Kilasa
		Samhita		
	Chaturthi	Charak Samhita		Dadru, Kushtha

Int J Ind Me	ed 2025;6(2):17	-23		ISSN: 2583-36	
	Chaturthi	Ashtang Sangraha		Sarva Kushtha	
	Tamra	Sharangdhar Samhita		-	
5 th layer	Vedini	Sushruta Samhita	1/5 th of Vrihi	Mahakushtha, Visarpa	
	Panchami	Charak Samhita		Alaji, Vidradhi	
	Panchami	Ashtang Sangraha		Alaji, Vodradhi	
	Vedini	Sharangdhar Samhita		-	
6 th layer	Rohini	Sushruta Samhita	1 Vrihi	Granthi, Apachi, Arbud, Shlipada and Galaganda	
	Shashdhi	Charak Samhita		Tamha Pravesh, Arunshika	
	Prandhara	Ashtang Sangraha		Tamha Pravesh, Arunshika	
	Rohini	Sharangdhar Samhita		-	
7 th layer	Mansadhara	Sushruta Samhita	2 Vrihi	Bhagandara, Arsha, Vidradhi	
		Charak Samhita		-	
	Not	Ashtang		-	
	mentioned	Sangraha			
	Sthoola	Sharangdhar Samhita		-	

Twacha according to Acharya Ghanekar⁽¹⁵⁾

Sr. No.	Name of twacha	Name of twacha Modern corelation	
1	Avbhasini	Horney layers	
2	Lohita	Stratum Lucidium	
3	Shweta	Stratum granulosum	
4	Tamra	Malpighian layer	
5	Vedini	Papillary layer	
6	Rohini	Reticular layer	
7	Mamsadhara	Subcutaneous tissue and muscle	

Mashak vyadhi

Ayurvedic classic described various skin disorders under the heading of Mahakushtha, Kshudrakushtha and Kshudra roga. Acharya Sushruta has explained 44 Kshudra roga. Out of them one is Mashaka. Mashaka is a disease caused due to vitiation of doshas (Vata and Kapha) which may appear anywhere on the body involving Twaka and Meda 10. Mashaka is an eruptive skin disorder.

Nidan of Mashaka (16)

The causative factors responsible for Mashaka are Nija karnas. Nija karnas includes all those factors which are responsible for the vitiation of tridoshas. These factors caused dushti of Vata and

Int J Ind Med 2025;6(2):17-23

Kapha doshas which are responsible for Mashaka formation.

Symptoms of Mashaka⁽¹⁶⁾

Skin eruptions having following characteristics

- 1. Painless
- 2. Fixed
- 3. Raised
- 4. Blackish like Masa (black gram)

Chikitsa of Mashaka (17)

Acharya Sushruta and Vagbhat described mainly 2 treatment modalities for Mashaka vyadhi.

- 1. Ksharkarma
- 2. Agnikarma

Modern aspect of Skin: Skin is the largest protective covering of the body. It covers the entire external surface of the body, including the external auditory meat used the lateral aspect of tympanic membrane and vestibule of the nose. Skin is made up of two layers mainly epidermis and dermis.

1. Epidermis ⁽¹⁸⁾ –It is ectodermal in origin. It is the thinnest outermost Avascular layer of squamous epithelium that is populated by 4 types of cells Melanocytes, Langerhans cells, Merkel cells and keratinocytes. Appendages of skin are glands, hairs and nails. Structurally it is made up of germinative zone which includes

A) Stratum basale – It is deepest single layer of cuboidal or low columnar cells. Pigment cells are present between these layers are melanocytes.

B) Stratum spinosum – It contains several layers of polyhedral cells called keratinocytes as the produce cytokeratin the protein required for formation of keratin.

C)Stratum granulosum - 2 or 3 layers of fusiform cells called keratinocytes containing keratohyalin granules that form the protein keratin that protects the skin. Keratinocytes

are usually light in color due to presence of granules.

D) Stratum Lucidium - this layer is seen in thick skin only. It is an amorphous homogeneous layer composed of packed cells in which traces of flattened nuclei may be found.

E) Stratum corneum- This layer is prominent in palm of hand and sole of foot. It consists of several layers of horn or dead cells that appear flat and without nuclei.

2. Dermis ⁽¹⁹⁾ – It is mesodermal in origin. Deep and vascular layer are made up of connective tissue Blood vessels, lymphatics, nerves are present in this skin layer.

A). Papillary layer (Upper dermis)-this is immediately deep to the epidermis. This layer gives housing rich networks of sensory nerve endings and blood vessels. Its superficial surface is marked by numerous papillae which interdigitate with recesses. That's why it is having papillary name. Fingertips are due to Papillary layer.

B). Reticular layer (lower dermis)- It is the lower layer of dermis, found just underneath the papillary layer. This layer is made up of white fibrous tissue ranged chiefly in parallel bundles. Cleavage or Flexure lines (Langers line) on the skin are the results of direction of bundles. In the neck and trunk, it is horizontal and in the limb it is longitudinal. When dermis dried it form green hide and when tanned it form leather, so the real skin is dermis.

Moles (Melanocytic naevi) (11)

Moles are localised benign proliferation of Melanocytes. The cause is unknown but often they are familial. Although common moles maybe present at birth, they usually appear in later childhood. Most people continue to develop new Moles until about age 40.

Int J Ind Med 2025;6(2):17-23

Clinal features-

Acquired Melanocytic naevi are classified according to microscopic location of clumps of the melanocytes in the skin. Junctional naevi are usually circular and macular; their color may range from mid to dark brown and may vary within a single lesion. Compound and intradermal naevi are similar to one another in appearance, both are nodules of up to 1 cm in diameter, though intradermal naevi are usually less pigmented than compound naevi. Their surface may be smooth, cerebriform or even hyperkeratotic or papillomatous and often they are hairy. Treatment- excision

DISCUSSION:

According to Acharya Ghanekar sapta twacha Avabhasini, Lohita, Shweta, tamra, vedini, rohini, Mamsadhara these are seven layers of the skin. According to the modern anatomy these layers can be corelate with Stratum corneum, stratum Lucidium, stratum granulosum, malpighian layer, papillary layer, Reticular layer, Subcutaneous tissue and muscle respectively. Out of these sevenlaver Shweta twacha associated with diseases like Charmadal, Ajgallika and Mashaka. Acharya Ghanekar has explained third layer of skin as Shweta. In between the first two layer and fourth layer, third layer resemble lighter in colour that's why it has been named as Shweta. Acharya Ghanekar has been considered third laver as a Stratum granulosum which contains keratinocytes. Keratinocytes usually lighter in colour due to presence of granules called keratohyalin granules.

A "melanocytic nevus," commonly known as a mole, is a benign skin growth composed of clusters of melanocytes (pigment-producing cells) that are typically located within the basal layer of the epidermis, while the "stratum granulosum" is a specific layer of the epidermis where cells begin to produce keratin and develop

IJIM Volume 6 Issue 2 (Feb 2025)

granules, meaning that in a typical melanocytic nevus, the melanocytes would not extend into the stratum granulosum layer, though occasionally, in certain types of nevi, some melanocytes may reach this level There are three types of melanocytic naevi that are Junctional, compound and intradermal. Junctional naevi are usually circular and macular, their color ranges from mid to dark brown and may vary within a single lesion.

So commonly junctional melanocytic naevi are more relate with the mashak formed in third Shweta layer.

CONCLUSION:

According to the ancient and modern classics third Shweta layer are related with stratum granulosum. This layer begins to produce keratin and develop granules which is responsible factor of melanocytic naevi. So, it can be said that Shweta or stratum granulosum is the site of mashak or melanocytic naevi.

REFERENCES:

- Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, sharirsthan chapter 1, verse 8, page no.3.
- 2. Dr. Ghanekar Bhaskar Govind, Ayurved Rahasya Deepika Commentary on Sushtuta Samhita sharir Sthanam, Meherchand Lachmandas Publications New Delhi 2013 Chapter 4 verse 3, page no.104.
- 3. Dr. Mahender singh Textbook of Embryology, Jaypee Brothers Medical Publishers page.no.244.
- 4. Dr. Ghanekar Bhaskar Govind, Ayurved Rahasya Deepika Commentary on Sushtuta Samhita sharir Sthanam, Meherchand Lachmandas Publications New Delhi 2013 Chapter 4 verse, page no.107.
- 5. Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta

Int J Ind Med 2025;6(2):17-23

Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, sharirsthan chapter 1, verse 26, page no.9.

- Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, sharirsthan chapter 1, verse 6, page no.2.
- 7. Dr. Shastri Kashinath, Vidyotini Commentary on Charak Samhita part II Chaukhamba Visvabharati Academy 1996, Charak Chikitsasthanam Chapter 15 verse 16-17, page no. 456.
- 8. Dr. Ghanekar Bhaskar Govind, Ayurved Rahasya Deepika Commentary on Sushtuta Samhita sharir Sthanam, Meherchand Lachmandas Publications New Delhi 2013 Chapter 9 verse 12, page no.
- 9. Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, Nidan sthan chapter 13 verse 3, page no.281.
- Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, Nidan sthan chapter 13, verse 41, page no.287.
- 11. Davidson's, Principles and Practice of Medicine, Churchil Livingstone Publication 1999, page no. 111.

- Dr. Bramhananda Tripathi Ashtang Hridayam, Sharirsthanam Chapter 3 verse 8-9, page. No. 367.
- Acharya B.J. Thakkar, Ashtang Samgraha Sharirsthanam Chapter 3 verse 8-9, page no. 476.
- Damodar Sharma Gound, Parishadya Shabdarth Shariram 2nd Edition, Nagpur Baidyanath Ayurved Limited. Page no. 166
- 15. Dr. Ghanekar Bhaskar Govind, Ayurved Rahasya Deepika Commentary on Sushtuta Samhita sharir Sthanam, Meherchand Lachmandas Publications New Delhi 2013 Chapter 4, page no.107.
- Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, Nidan sthan chapter 13, verse 41, page no.287.
- 17. Shastri Ambikadatta, Ayurveda Tattva Sandipani Hindi commentatary on Sushruta Samhita part 1, Chaukhamba Sanskrit Sansthan 2007, Chikitsasthan chapter 20, verse 32, page no.94.
- 18. Subhadra Devi, Textbook of General Anatomy, 2nd Edition page no. 32.
- Peter Williams Mary Dyson, Gray's Anatomy, Churchill Livingstone Publication, 38thEdition, page no. 397.

Authors Contribution: All authors have contributed equally.

Financial Support and Sponsorship: None declared

Conflict of Interest: There are no conflicts of interest.

Declaration of Generative AI and AI Assisted Technologies in the writing process:

The author has not used generative AI/AI assisted technologies in the writing process.

© 2025 IJIM (International Journal of Indian Medicine) An Official Publication of ARCA- AYURVEDA RESEARCH & CAREER ACADEMY Website: https://www.ijim.co.in Email: ijimjournal1@gmail.com IIFS Impact Factor: 4.125 Frequency of Publication: Monthly