

## UNDERSTANDING TO TWACHA SHARIR: A REVIEW ARTICLE

Dr. Vikash\*<sup>1</sup>, Dr. Sakshi<sup>2</sup> and Dr. Subhash Upadhyay<sup>3</sup><sup>1</sup>PG Scholar Deptt of Rachana Sharir<sup>2</sup>Assistant Professor Deptt of Rachana Sharir<sup>3</sup>Professor & H.O.D. Deptt of Rachana Sharir

Sriganganagar College of Ayurvedic Science &amp; Hospital, Tanta University, Sriganganagar – 335001, India.

**\*Corresponding Author: Dr. Vikash**

PG Scholar Deptt of Rachana Sharir Sriganganagar College of Ayurvedic Science &amp; Hospital, Tanta University, Sriganganagar – 335001, India.

Article Received on 03/08/2020

Article Revised on 24/08/2020

Article Accepted on 14/09/2020

**ABSTRACT**

Ayurveda is real wealth of medical sciences which gives preference to prevention of health in healthy person and provides best treatment to diseased one. It believes in complete elimination of root cause of disorder rather than short-term relief. Skin is the largest and first site visible organ of body which acquires 1.5-2 square meter surface area of the body. It is not merely protecting covering but it is reflection of the internal system of the body. In Ayurveda classical text Twacha is included under “Pancha gyanendriya Adhithana.” Twacha has various opinions regarding its uttapati, Twacha Stara and associated disorders. Several concepts about Twacha are also quite useful in diagnosis and treatment of many disorders. In Ayurveda several views and counterviews regarding concepts of Twacha is existing. So today it is necessary to clarify the visionary of Acharyas. Therefore this study is undertaken to verify and reveals various mysterious concepts about Twacha which will be useful in diagnostic, prognosis and therapeutic purpose of various disorders and craft a pathway for future research work.

**KEYWORDS:** Twacha uttapati, Twacha Stara, Rog Adhithana, diagnostic & prognostic tool.**INTRODUCTION**

Skin is the general covering of entire external surface of body including external auditory meatus & outer surface of tympanic membrane, it also continuous as mucous membrane at the orifices of the body. Skin is thickest on the palms and soles of the feet (1.5 mm thick), while the thinnest skin is found on the eyelids and in the post auricular region (0.05 mm thick). Pigmentation of skin is determined by five pigments i.e. melanin, melanoid, carotene, haemoglobin & oxy haemoglobin present in different layers of skin. Skin is marked by three types of surface irregularities Tension lines, Flexure lines & Papillary or friction ridges. Today whole world is familiar about most of the modern concepts about skin, but still many concepts about Twacha (Skin) mentioned in various Ayurvedic Text is yet to disclose. In this study an attempt is made to explore the hidden concept about Twacha Sharir such as formation and development of skin (Twacha Uttapati), skin layers with associated disorder (Twacha Stara & Roga-adhithana), Physiological aspect of skin (Dosha, Dhatu & Mala Sambandha of Twacha), Relation of skin with soul (Atma) and mind (Mana). Twacha as diagnostic tool in clinical aspects & Twacha serving as prognostic tool. All above mentioned concepts should be enlighten, So that Ayurveda's glory and respect in society will be revitalize

by clarifying doubtful opinions and proving the principles described by our Maharishis.

**AIMS AND OBJECTIVES**

1. To study concepts of Twacha Sharir (Skin) described in various Ayurvedic literatures and Modern sciences.
2. To establish importance of Twacha as diagnostic and prognostic tool in clinical aspect Literary Review Etymology of Twacha In Ayurveda skin is stated as Tvak or Twacha. It is included under “Panch Gyanendriya Adhithana.” It is stated as “Indriya Visheshha” which covers the whole body since birth that encloses all the body component of body like Meda, Shonita...etc. It has great capacity of expansion and stretching. Twacha is adhithana of “Pranadi Panch Vayu” where Vayu resides and bring out its function. Twacha is specialised sense organs which acquire special sensory perception of pain, touch, pressure, heat and cold.

**Synonym For Twacha**

Twacha, Charma, Sparshan, Chavi, Chadani, Asrugdhara, Kruti, Ajin, Dehacharma, Romabhumi, Shariravaranam, Asrugvara, Shariravarakam Shastram.

### Twacha Uttapati

Formation and development of Twacha is took place during the “Garbhanirmati” i.e. Process of formation and development of Garbha. According to Charka Garbha is formed by the amalgamation of Shukra, Shonita and Jiva (soul) in mother’s womb. Along with above three elements Ashta Prakruti and Shodsha Vikara is also involved in Garbhanirmana. Sushruta depicts formation of Twacha from the metabolization of Shukra & Shonita by Tridosha. For better understanding of Twacha Uttapati in Brihatrayee the whole process of formation of Twacha is compare with formation of creamy layer over the surface of milk, when it is boiled and allowed to cooled down, formation of thick layer of skim take place which is explained as “Ksheerat –Santanaika. Indu in his commentary “Shashilekha” explains the appearance and arrangement of skin layers by giving an illustration of Kadalidal i.e. Stem of Banana, which has several layers that are arranged in systematic concentric manner. He states that Twacha is formed from the Sara bhaaga (Prasaad) of Rakta dhatu, shiny and lustrous appearance of skin is due to Rakta dhatu. Hemadri in his commentary “Ayurved Rasayan” depicts that whole body is “Panchmahabhautik” and Twacha is formed by metabolization of Rakta dhatu by its own dhatwagni, several layer of Twacha are formed over outer surface of embryo. According to Bhavaprakash Twacha is formed by Pachan that is metabolization of Shukra and Rasa Dhatu. Twacha Uttapati Kala Charak describes Bala-Varna-Upachaya in sixth month of intrauterine life, As Varna complexion is the attribute of skin it is clear that Twacha is formed in sixth month of intrauterine life. According to Astang Sangraha & Hridya Uttapati of Kesha, Roma, Nakha, Asthi, Snayu, Bala, Varna, Sira and Twacha develops in sixth month of intrauterine of life. As per modern all layers of skin is formed in fourth month of intrauterine life. Twacha Stara (Skin layers) In Ayurveda Samhita several layers of Twacha has been described on the basis of different names, associated skin disorders observed in Twacha Stara (Skin Layers) their variable thickness and functions performed by these layers. These skin layers are described from superficial to deep. Its thickness is measured on the parameter available in that era i.e. “Vrihi” that can be taken as thickness and size of paddy or barley. There is different opinion about numbers of skin layers Twacha Stara is observed among Atreya and Dhanwantri denomination. In Sushruth samhita, Astanga Hridya, Bhavprakash samhita and Sharangdhar samhita seven layers of Twacha Stara is mentioned. whereas in Charaka samhita, Bhel samhita & Astanga Sangraha six layers of Twacha stara is enumerated. this controversial opinion about number of skin layers is due to prospective vision of surgeon and physician. First layer Acharya Sushruta called outermost Twacha stara as “Avabhasini” having thickness about 1/18 th of Vrihi and it is twak roga adhisthana of Sidhma and Padamkantka. Dalhan mentioned that first layer is responsible for the exhibition of Gaur, Shyamadi Varan (complexion) and five types of Prabha (glory) and Chaya (shades) of the body with help

of Bhrajak Agni present in this layer. Maharishi Charak & Vriddha Vagbhat named first and outermost layer of Twacha as “Udakhara” as name itself suggest it holds the Udakdhatu. Indu depicts that this layer carries Udaka dhatu and prevents outflow and maintain ‘Aradrata bhava’ i.e. moisture content of the Twacha on its outer surface. Laghu Vagbhat stated Bhasini as first layer having similar qualities mentioned in Astanga sangrah & Charak. [6a-b-c-d-e-8b]. As per Dr. Ghanekar commentary first Twacha Stara is responsible for exhibition of complexion, glory and different shades of Twacha which depends on melanin pigments produced by melanocytes present in malphigian layer. As the layers above malphigi are opaque, exhibition of complexion is done by Stratum Corneum; hence Avabhasini may be correlated with Stratum Corneum. Second layer Sushruta named second Twacha stara as ‘Lohita’ having thickness of 1/16 th of Vrihi. And it is twak roga adhisthana of Tilkalka, Nyacha & Vyanga. Charak & Vriddha Vagbhat called second Twacha stara as ‘Asrugadhara’. Indu explains that this layer as “Rudhantva Asram” i.e. it holds the blood and prevents outflow of Rakta dhatu from the body. Hemadri describes this layer as ‘Lohini’. Ghanekar stated that as Lohita lies beneath the Avabhasini and it is constituted by transparent layer of three to five clear cells which placed deeply below the stratum corneum. Hence it may be compared with Stratum Lucidium. Third layer Acharya Sushruta called third Twacha stara as “Shweta”, it seems to Shweta varniya in appearance, having thickness of 1/12th of Vrihi and it is twak roga adhisthana of Charmadal, Ajagalika & Mashak. Charak & Vriddha Vagbhata mentioned third Twacha stara as prime location of Sidhma & Kilas. Astanga Hridya describes third Twacha Stara as site of Sidhma Shivtra Adhisthana. Ghanekar explained that Shewta stara lies exactly below the Lohita. So it may be compared with Stratum Granulosum; it is made up of two to three layers of granular cell, these cells are flat and are in transitional state that is lies between Stratum Corneum and Stratum Malphigi layer. Fourth layer Acharya Sushruta describes the fourth layer of Twacha as “Tamra”. It lies beneath the Shweta and having thickness of 1/8th of Vrihi. It is twak roga adhisthana of Kustha and Kilas. Charak mentioned fourth Twacha stara as Dadru kustha adhisthana. In Astang Sangraha and Hridya fourth layer is stated as site for Sarva kustha adhisthana. Sharangdhara and Bhavprakasha state the Tamra as site for Kilas Shivtra. Ghanekar in its commentary state that Tamra may be correlated with Stratum Malphigi, as etiopathogenesis Kilas (leucoderma) is mentioned in Tamra stara, which occur due to cessation of production of melanin that is produced by melanocytes present in Stratum Malphighi layer. Melanin pigment determines the complexion of an individual; hence we may correlate Tamra with Stratum Malphighi. Fifth Layer Sushruth describes fifth Twacha stara as “Vedini”. As name suggest it is concerned with the perception of touch, pain, heat, and cold. It is about 1/5th of Vrihi in thickness & it is twak roga adhisthana of Kustha and

Visarpa. Maharishi Charak & Vagbhat describes fifth Twacha Stara as site for Alaji & Vidradhi adhithana. Hemadri called this Twacha Stara as "Tvagavedini" as well as "Rogkarini". Sharangdhar and Bhavprakash describe these Twacha stara as site for Sarvakustha & Visarpa. Ghanekar explained that Vedini Stara has function of perception of sensation as it is studded with too many corpuscles and nerve ending. In third degree burn injury to these layer leads to severe pain. Kustha and Visarpa mention in this layer also produces histopathological changes in papillary layer of dermis. Hence we may correlate Vedini as Papillary layer of dermis. Sixth Layer Sushruta named sixth layer of Twacha as "Rohini" which is equal to one Vrihi in thickness. It is twak roga adhithana of Granthi, Apachi, Galganda, Arbuda, & Shleepada. As name suggests it is concerned with wound healing process i.e. Vrana Ropana Karma. Charak named these Twacha stara as Arunshi adhithana. Chakrapani describe that sudden injury to this layer leads to "Tamayati andha eva" i.e. "Tama Pravesha" i.e. feeling of darkness in front of eye due to sudden loss of consciousness. Acharya Vagbhat called sixth Twacha stara as "Pranadhara". Indu state that any injury to this layer leads to life threatening condition Tama Pravesha i.e. feeling of blindness for short period, it is prime location of Arunshi i.e. small boils, blackish red in appearance commonly found in small joints and very difficult to treat. Dr Ghanekar correlates Rohini with Reticular layer of dermis as it lies beneath the Vedini. Rohini name given to this layer is due to its function of wound healing process Ropana Karma, it play major role in formation of granulation tissue and helps in wound healing. Seventh layer Acharya Shaushruta named seventh Twacha Stara as "Mansadhara". It is thickest layer measuring about Two Vrihi. It is the twak roga adhithana of Bhagandara, Vidradhi & Arsha. Sharangdhara and Bhavprakash describes seventh layer as "Sthula", having thickness of two Vrihi, it is the abode of Vidradhi. Adhamal mention Sthula along with Vidradhi it is also the site of Bhagandara and Arsha. Dr. Ghanekar denies the inclusion of Mansadhara stara under Twacha. He agreed with six layers theory of Charka. He suggest that Mansadhara stara explain by Sushruta may be correlated with subcutaneous layer of hypodermis as it is comprises of blood vessels, lymphatic and adipose tissue. Dalhana describes the total thickness of Twacha stara is Angust Udara Pramana which is equal to Shada Yava Pramana that is the thickness of six barley together. The parameter of thickness is given for fleshy area not for runny area like Sukshma Anguli (little finger) and lalaat (forehead). The motive behind describing thickness of each Twacha stara is for performing various surgical procedures such as abdominal tapping should be done in Angust Udar Pramana by Vrihimukha Yantra in Ascitis. Gannath Sen describe two layer of Twacha Stara; Outer layer is named as "Tanvi" which give rise to Plosa and Pidika, when it gets burned. Inner layer is called as Sthula, it is thick and provides protection to the body. It is responsible for "Snehaadi Karshnam" i.e.

metabolization of locally applied medicated taila, sneha...etc.

## DISCUSSION

Dosha, Dhatu & Mala Sambandha of Twacha Physiological aspect of Twacha is described in Ayurvediya text as Dosha, Dhatu & Mala Sambandha of Twacha. Twacha & Dosha sambandha: In Ayurveda each and every cell is made up of Panchmahabhuta and Tridosha. But site of Vata, Pitta, & Kapha are mentioned as per unique function exhibits by them throughout the body. Vagabhat describes Pakvashya, Kati, Sakthi, Shotra, Asthi, Sparshanendriya & Pakavadhana as a vata sthanani site of Vata predominance. Nabhi, Amashaya, Sweda, Lasika, Rudhir, Rakta, Druk, Sparshan as a common site of Pitta predominance. Amashaya, Hridya, Urah, Shir, Sandhi, as common site of Kapha predominance. While describing five types of Kapha, Tarpak Kapha resides in Masthiska (Brain), which is responsible for Tarpan i.e. nourishment of all Gyanendriya including Twacha. After considering all above fact it is clear that Sparshanendriya i.e. Twacha is one of the site of Vata & Pitta predominance. Whereas Tarpak Kapha is related with nourishment of Twacha. Doshas Vriddhi & Kshaya lakshana exhibits by Twacha is also quite helpful for diagnosis and treatment of various disorders. Sushrut describes Vata-Vriddhi lakshan as Vaka Parushya (Hoarseness of voice), Karshya (weakness), Karshnya (Hyper pigmentation of skin), Gatra Sphuran (Tremors in the body), Ushna Kamita (desire to eat hot food stuff), Nidranasha (Insomnia), Alpa bala, Gada Varcha (constipation). From above it is clear one can recognize Vata vriddhi by inspection of Twacha. Acharya Sushruta & Vagbhat mentioned Pitta Vriddhi Lakshan as Pittaavabhasta (Pallor), Santap (rise in body temperature), Shita kamitva (willingness of eating cold food stuff), Alpa Nidrata (short span of sleep), Murcha, Indriyadaurbalya, Pitavita-mutra-netra-tvak (Yellowish discoloration of stool, urine, eyes, skin). Pitta Kshaya Lakshan is described as Manda agni (loss of appetite), Shita-Prabha haani (Loss of glory & coldness of skin). Here by simple inspection of Twacha one can access the Pitta Vriddhi & Kshaya Lakshna. Acharya Sushruta & Vagbhat describes Kapha Vriddhi as Shaukyia (whitish appearance of skin, nail, & eyes), Shaitya (Coldness of Twacha), Sthairyia (less movement of body), Gaurvam (Heaviness of body), Avasaad (depression), Tandra-Nidra (excessive sleep), Sandya- asthi vishlesha (looseness of bones & joints). While in Kapha Kshaya there is Rukshata (dryness of skin), Antar -Daha (burning sensation), Shlesmashaya-Shunyata (feeling of emptiness at kapha sthanani), Sandhi Shathilya (joints get easily dislocated), Trushna (excessive thirst), Daurbalya (weakness), Prajagran (insomnia). From above it is clear that Twacha has intimate relation with the Tridoshas, as Kshaya & Vriddhi lakshana of all three Doshas are exhibits by Twacha in terms of various sign and symptoms.

**REFERENCES**

1. Hand book of general anatomy by Chaurasia BD. CBS publishers & distributor 4th edition, 2009; 8: 171-175.
2. Dictionary English & Sanskrit by Sir Monier M. William edition published by Chaukhambha Sanskrit Series Office Varanasi, 1961-1988; 13: 1116/116.
3. Parishadya shabadarth. shariram by Pt.Damodar Sharma Goud published by Baidyanath Ayurved bhavan limited Nagpur; second edition, 1979; 165-167.
4. Charak Samhita. Vidyotini hindi commentary by P. Kashinath shastri & Dr. Goraknath Chaturvedi, published by Chowkhambha Sanskrit sansthan Varanasi Charak Sharirsthana ch., 2007; 4(5): 867.
5. Ghanekar S. commentary on Sushruth Samhita Sharirsthana "Ayurved Rahasya Deepika" by Dr. Bhaskar Govind Ghanekar, published by Meherchand prakashan Delhi reprinted edition, Sushruth.Sharirsthana ch., 2007; 5(2): 146.
6. Ghanekar's commentary on Sushruth Samhita Sharirsthana "Ayurved Rahasya Deepika" by Dr. Bhaskar Govind Ghanekar, published by Meherchand prakashan Delhi reprinted edition, Sushruth. Sharirsthana ch., 2007.