

“APPRAISAL ON TWAKA SHAREERA THEN HIS ANATOMICAL VARIATIONS LINKED TO TWAKA ROGA TO VICHARCHIKA”

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Abstract –

Keywords – Twaka Shareera, Anatomical change, Twaka Roga.

Introduction –

Acharya Sushruta has mentioned in the Shareerasthana about the formation of Twaka at the level of embryogenesis and he has given similarity to the formation of cream on the milk¹.

Sushruta has also described Thickness of each layer & several diseases which manifest in different layers of the Twaka. Human Skin is known as protective covering of the body. It's soft, strong, waterproof and selfrepairing. It is like a large container, without it all our delicate insides would Structurally integumentary system which is most complex structure & highly specialized, hence it is grouped as in the sense organ. Skin is most extensive organ system has included accessory structures, including hair, nails, glands, and specialized nerve receptors for stimuli such as touch, cold, heat, pain, and pressure².

Functions of Skin includes prevention from microorganisms, protection of structures under skin, regulation of temperature, pigmentary protection against ultraviolet sun rays, and production of vitamin D. The body stores about half of its fat in the underlying hypodermis³.

All the skin disorders in Ayurveda classified under Mahakushtha and Kshudrakushtha. Vicharchika is one of the Kshudrakushtha which is commonly found in today's practice. The Lakshanas of Vicharchika includes Kandu, Pidika, Shyava, Bahustrava from the Pidika⁴.

Skin diseases like Eczema having a suitable atmosphere specially in the developing countries, because of hectic schedules, industrial & occupational hazards, repeated use of chemical etc. Eczema which is an commonly known as 'Atopic dermatitis', defined as chronic inflammatory skin condition, typically begins in the first few years of life.

Objectives of the study –

- To review the concept of Twaka Shareera according to Ayurveda.
- To study the anatomical changes related to Twaka Roga w.s.r. to Vicharchika.

Methodology –

Review on Twaka Shareera – Nirukti of Twaka - Twaga + Kwip = Twacha, according to Amarakosha, Twaka Dhatu meaning is covering. Paribhasha of Twaka - ऩ Twaka known as which is completely cover the Meda, Shonita and all Dhatus in the body⁵. ऩ Twaka is explained as Indriya, which is spreaded all over the body which is known as 'Twagendriya' or 'Sparshendriya' ⁷. Paryaya - Twacha, Charma, Chhavi, Sparshana, Asrukdharma, Chhadani.

☞ **Vagbhata** - Twaka is formed by the essence of Rakta Dhatu, which is the creamy layer formed from the boiled milk⁸.

☞ **Sushruta** - explain principles and structures. This application is called as 'Dushtanta'.

☞ **During the paka of Shonita and Shukra**, by the help of Agni or Pitta dosha, then seven types of Twaka appeared on the surface of the body of Garbha.

☞ Charaka has not mentioned any description about the genesis of Twaka¹⁰

Origin of Twaka – Charaka has described that every structure of the body which is developed from the Shadabhavas, in which Twaka is one of the Matruja Bhava¹¹. Number of Twaka¹² –

☞ Sushruta, Bhavaprakasha = 7 types of Twaka.

Classification of Twaka –

Types of Twaka –

- 1 Udakadhara Avabhasini Udakadhara Avabhasini
- 2 Asrukadhara Lohita Asrukadhara Lohita
- 3 Sidhma, Kilasa Shweta Sidhma, Kilasa Shweta
- 4 Dadru Kushtha Tamra Sarva Kushtha Tamra
- 5 Alaji, Vidradhi Vediti Alaji, Vidradhi Vediti
- 6 On cutting one feels blindness Rohini Pranadhara Rohini

Twaka Pramana –

[Vrihi = Rice grain]. So, the Twaka Pramana [thickness] of the layers are as follows ;

According to Dalhana, a commentator of Sushruta Samhita ; 20 parts of 1 rice grain should be done and then thickness of Twaka should be determined.

Ex. Avabhasini Twaka = 18/20 parts of 1 Vrihi¹⁸.

<i>Twak name</i>	<i>Sushruta</i>	<i>Dalhana</i>
<i>Avabhasini</i>	1/18 th	18/20
<i>Lohita</i>	1/16 th	16/20
<i>Shweta</i>	1/12 th	12/20
<i>Tamra</i>	1/8 th	8/20
<i>Vediti</i>	1/5 th	5/20
<i>Rohini</i>	1	1
<i>Mamsadhara</i>	2	2

Showing Comparison of Pramana of Twaka

Review on Skin19 –

Assessment of skin is very valuable in the management of anyone presenting with any medical problem and, conversely, assessment of the other body systems is important when managing primarily skin disease. This chapter concentrates on those skin diseases seen most frequently and those that are important as components of general medical conditions affecting other organ systems along with the skin.

Functions of the skin –

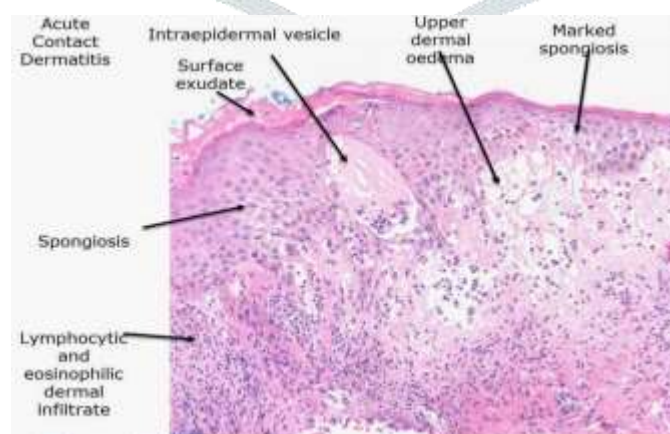
Protection against chemicals, particles, etc. Stratum corneum Maintenance of fluid balance - prevents loss of water, electrolytes and macromolecules Shock absorber Dermis and subcutaneous fat Sensation Specialized nerve endings mediating pain and withdrawal itch leading to scratch and removal of parasite. Vitamin D synthesis Keratinocytes Metabolism Ex. Detoxification of Xenobiotics, etc. Predominantly Keratinocytes Temperature regulation Eccrine sweat glands & blood vessels Protection, and fine manipulation of small objects Nails Hormonal - Testosterone, Steroidogenesis synthesis, etc. Hair follicles, sebaceous glands Psychosocial, grooming Appearance, tactile quality of skin, nails, hairs Pheromonal Apocrine sweat glands.

Now a days Twaka Rogas are commonly found in daily practice. Vicharchika is one of them. It is characterized by Kandu, Vaivarnya, Shyava, Strava from Pidika. Vicharchika is included under Kshudra Kushtha and it can be correlated with Eczema in modern science. Eczema is one of the type of skin disease which has the most of the similar symptoms which can be correlated on the basis of literary, clinical and histopathological observational study of both Ayurveda and modern science.

In skin disease like Vicharchika we can studied the structural changes which can be present and assess from the skin biopsy. Some anatomical changes as well as structural changes are described which are as follows ;

- ♣ Hyperkerotosis – Increased outer layer of the skin i.e. Stratum corneum.
- ♣ Spongiosis – Intracellular epidermal edema
- ♣ Acanthosis – Darkening of the skin.
- ♣ Cellular infiltration – Defined as presence of inflammatory cells without other evidence of inflammatory process i.e. edema, necrosis, etc.

Showing Structural changes of Skin



Therefore this histological study, skin biopsy etc will be helps to diagnosed structural changes present in skin diseases like eczema, etc.

Discussion –

Study of Twaka and its anatomical changes helps to diagnose as well as for management also. Acanthosis, Spongiosis etc structural changes will be helping for the properly diagnosis of the skin disorders. In Ayurveda, Twaka Shareera was described which includes its anatomical and physiological study of Twaka i.e. Skin. In this review included skin types according to the Charaka, Sushruta, Vagbhata, Sharangdhara and Bhavaprakasha Samhita. Twaka Pramana and its modern aspect was mentioned.

Conclusion –

Twaka mentioned as one of the sensory organ which covers the body and protects it from various infection, pathogenesis etc. In this article review on Twaka Shareera according to Ayurveda and modern science. It includes Twaka Shareera, its layers, its thickness etc. Twaka Rogas includes proper diagnosis from which its helpful for its management. Structural changes of the skin helpful in skin diseases like Vicharchika which can be correlated with Eczema.

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