



A STUDY ON MAMSAVAHA SROTAS W.S.R TO THE MOOLA STHANA

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ABSTRACT

The term Srotas refers to the micro-channels in the body that facilitate the transportation of bio-materials and excretions of waste products according Acharya Charaka "Srawanat Srotamsi" Srotas are the structures through which process of Sraavanam takes place. These channels play a vital role in the movement of bodily substances from one location to another and are essential for the nourishment of tissues .among the various Srotas in the body the Mamsavaha Srotas which can be correlated with the muscular channels hold significant importance their origin is traced to the Snayu (ligaments and tendons) and Twacha (skin) when these channels become vitiated it can lead to several pathological conditions such as Arbuda, Adhijihva, Upakusha, Arsha, Galashundika, Galaganda, Gandamala, and Alaji and also diseases related to the Mamsa peshi and also Twacha vikaras.

KEY WORDS: Mamsavaha, Moolasthanana, Srotas

INTRODUCTION

Although the concept of Srotas (channels or pathway) theoretically innumerable, a specific number is accepted based on their distinct functions. According to Charaka, there are 13 number of Srotas¹, while Sushruta identifies 11 pairs (22 in total) among them Mamsavaha Srotas it was mentioned by both the Acharyas and also its Moola sthana. Instead of that Acharya Charaka also mentioned Srotodushti karana and also Srotodushti chikitsa. Sushruta mentioned Srotodushti vidhha lakshanas.²

Thus group of organs which are responsible to maintain the functions and production of Mamsa dhatu or channels carrying nutrients to the muscular tissue are collectively known as Mamsavaha Srotas (muscular system). These channels are also represented by blood vessels; lymphatic's and nerve supply of muscle because these carry nutrients to the muscular tissues (Mamsa dhatu).

Detailed and clear knowledge of Srotas are very much necessary as it is responsible for carrying and transforming tissue elements, thereby maintaining health.

The study of mamsavaha Srotas moolasthanana is crucial because the functioning of the Srotas entirely depends on the condition of its moolasthanana this is based on the principle "moolamiti prabhavasthanam" which means the Moola sthana is regarded as the controlling or governing site of Srotas

Although there is no direct explanation regarding the significance of knowing moola sthana of the Srotas its importance can be inferred just as a tree is severely affected by damage to its roots similarly the channels of circulation in the human body are seriously affected when their moolasthanana is affected.

Mamsavaha Srotas

The Srotas that supply nutrition to the Mamsadhatu or the vessels that carry nutritive material to the site of Mamsadhatu can be regarded as Mamsavaha Srotas.

Acharya charaka has described the Twacha and Snayu (skin and ligaments) are the moolasthanana of mamsavaha Srotas³. According to the modern medical science Snayu (ligaments) is a band of fibrous connective tissue connecting bones cartilage and other structures and serving to support or attach fascia or muscles.

Concept of moolasthanana

Chakrapani has explained that the moola (root) of a Srotas to its anatomical location which serve as the primary site for both the origin and manifestation of diseases related to that channel. He also discusses the causes of morbidity in the srotamsi (channels). These channels are considered as the major sites where pathological conditions arise and they can be clinically assessed by physician for diagnostic purpose our acharyas have explained various Srotas with their moolasthanana. The importance of moolasthanana is directly not diseased but the injury occurs to the sroto moola cause the disturbance of Srotas. So that acharya chakrapani commenting on the word srotomoolana has used the word "prabhava sthana".

As per **Sushruta** Moola sthana of mamsavaha Srotas are Snayu, Twacha, and Raktavahi dhamani.³

As per **Charaka** Moola sthana of mamsavaha Srotas are Snayu, Twacha.⁴

Twacha (skin): Sushruta mentioned 7 layers of twacha in the body⁵ according to Acharya Charaka and there are six layers⁶ and. The outer most layer of of skin is known as Udakadahra (that which holds up water) the second is that which holds up blood (Asrigdhara), the third is the seat of origin of Sidhma and kilasa , the fourth is the seat of origin of dadru and Kushta the fifth is the seat of Alaji and Vidradhi, the sixth layer is that



which, if cut, causes loss of consciousness and is the seat of origin of boils being manifested as the as blackish red and deep rooted on joints and are hardly curable³ Thus six layers of the skin covers the entire body.

Origin of Twacha (Skin) in Ayurveda:

In Ayurveda, the origin of Twacha (skin) is deeply rooted in embryological concepts as well as doshic, dhatu, and Srotas theories. The understanding is mainly described in the classical texts like Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya.

Twacha Utpatti (Origin of Skin)

From Garbha (Embryo): According to Acharya Charaka and Acharya Vagbhata, skin develops during embryogenesis from Rakta (blood) and Mamsa (muscle) dhatus.

Charaka Sharira Sthana : “Raktamamsaprabhava tvacha” – Twacha is formed from the essence of Rakta and Mamsa dhatus during fetal development.

According to Sushruta Sharira Sthana: “Twacha cha raktamamsajam” – Twacha is a product of both Rakta and Mamsa dhatus. He also elaborates 7 layers of Twacha and their origin, naming each with specific pathological relevance like Avabhasini, Lohita, Shweta etc.

In embryology, the **ectoderm (which forms skin)** and **mesoderm (which forms muscle)** interact during development. Signals from developing skin (ectoderm) helps **pattern the underlying muscle tissues**, guiding proper positioning and organization.

The **dermis (from mesoderm)** sends **signals (molecular cues)** to the developing muscle precursor cells (myoblasts) in the **somites**. This interaction helps guide:

- Muscle **patterning**
- Muscle **fiber alignment**
- Formation of **muscle groups** in specific body regions

Collagen, a key protein in skin, also plays a role in connective tissues like tendons and ligaments that support muscles. By supporting these tissues, collagen indirectly helps the body function optimally for muscle growth and repair. While not directly building muscle, collagen helps maintain the integrity of the muscle

All the internal organs (Koshtangas) are, made up of Mamsa Dhatu, which is group of external, muscles situated beneath the skin. Therefore the skin (Twacha) is considered as mula of Mamsavaha Srotas.

Snayu: Accordign to Acharya Charaka Snayu is also one of the chief organs of Mamsavaha Srotas

Snayu is rope like structure (Shanakara) belongs to Upadhatu category; ligament is also fibrous band which resemble the shana.

In Sharangadhara samhita prathama khanda Acharya Sharangadhara mentioned that Snayu is the binding agent which binds the Mamsa, Asthi, and Medas.⁷

In Ashtanga sangraha shaereera sthana Acharya Vriddha vagbhata mentioned that the subtle form of Sira is known as Snayu⁸

Utpatti (Formation) of Snayu

From Mamsa Dhatu (Muscle Tissue): Snayu is said to originate as an Upadhatu (secondary product) of Mamsa Dhatu.

“Mamsa dhatwatah snayavo jayante” (Charaka Samhita / Sushruta Samhita): Snayu is formed during the metabolism of Mamsa Dhatu.

Emerging research shows tendons can **influence muscle patterning** during embryonic development by releasing growth factors (e.g., FGF, TGF- β) that affect nearby muscle cell development and differentiation.

Tendon development is closely linked to muscle and skeletal development. Signals from differentiating muscle and cartilage cells are thought to play a role in recruiting tendon progenitor cells and establishing connections between these tissues.

Raktavaha dhamanis: the blood vessels that carry blood and from the muscles, are also considered an important part of the Mamsavaha Srotas

Raktavahini (blood vessels) Acharya sushruta has mentioned the raktavahinis (blood vessels) as the mula sthana (chief organs) of the mamsavaha Srotas along with Twacha and Snayu.

Raktavahinis represent all type of veins, arteries and capillaries in the body which supply blood to each and every part and all muscles of the body. As a result of various groups of muscles of body perform various activities.

In the discussion of this topic, it is mentioned that the only interpretation that can be derived is that the minute vessels within the muscles, which allow the flow and nourishment of flesh components, are referred to as Mamsavaha Srotas. Therefore this term is applied to both Aicchika and Anaicchika (voluntary and involuntary) muscle fibers.

Snayus are developed from the Kharapaka of Mamsakhanda so that Snayu are the moola of Mamsavaha Srotas. Since Mamsa peshi are mostly attached inside the Twacha. Hence due to being close, both can have the same deformity simultaneously. In vimana sthana of charaka samhita Acharya charaka explained that Snayu Twachaa is stated to be the moolas of the Mamsavaha Srotas. Chakrapani has not explained the rationality of Twachaa as the moola here. Twacha is an upadhatu developed from Mamsadhatu.

According to Sushruta Twacha (skin) has seven layers and the deepest layer is known as Mamsadhara.

Probably based on these points, Twacha is considered as the Moola of Mamsavaha Srotas. Regarding the moolas of Mamsavaha Srotas, Sushruta added raktavahini dhamanis.

Acharya Sushruta has described the Mamsadharakala which covers all the muscle of the body externally and this covering layer consist of branches of Sira, Dhamani, and Snayu etc. the distribution of these Sira, Snayu and Dhamani look like “Bisamrunalas”: the term lotus flowers growing from the mud



under the water and expanding as a flowers and lotus leaves on the surface this kala (covering layer) can be correlated with the intramuscular septum is a fibrous membrane, usually part of deep fascia.

Sroto dushti bheda (features of vitiation of Srotas)⁹

- Atipravrutti – increase/ enhanced flow of contents of channels
- Sangha – obstruction of the channels
- Grandhi – formation of nodules in channels
- Vimarga gamana– diversion or flow of contents in wrong direction

Mamsavaha sroto dushti karana¹⁰

AcharyaCharaka has described two types of etiological factors responsible for srotodushti. In the context of mamsavaha Srotas these causes are

Specific causes: Acharya Charaka has mentioned some specific main causes of vitiation of Mamsavaha Srotas are

- Excessive intake of Abhishyandhi ahara
- Excessive intake of Sthula bhojana
- Excessive intake of Guru bhojanas
- Swapata diva (Sleeping after consuming meals during day time)

Mamsa sara purusha lakhsana¹¹

According to Acharya Charaka Sara pariksha is an important tool to examine a patient. He has mentioned the following features of Mamsasara purusha

The person endowed with the Mamsasara have strong, clearly defined bulged out fair looking musculature all over the body, especially over temples, forehead Ganda (nape of the neck), around eyeballs, cheeks, neck, jaws, shoulders, axillae, chest and limbs. These persons have good resistance for bearance, self control, wealth, high education, sound heath and longevity of life.

Various associated manifestations of Mamasvaha srotodushti (muscular system disorders) are

Disorders causing muscular weakness included can be either intermittent or persistent.

Myasthenia gravies, Periodic paralysis, metabolic energy deficiency of glycolysis, Fatty acid utilization

Most of the muscular disorder cause persistent muscle weakness:

1. Muscular dystrophy
2. Polimyositis
3. Dermatomyositis
4. Muscle fatigue
5. Muscular pain
6. Myalgia
7. Muscle cramp
8. Muscle stiffness

Mamsavaha sroto pariksha

At the time of examination of Mamsavhya Srotas examiner should examine Mamsa peshi carefully along with examination of Twacha and Snayu etc.

Examination of masma peshi

In ayurvedic classic no detailed examination regarding Mamsa peshi examination is available. Only symptoms of different diseases of Mamsavha Srotas seems to be the only method to diagnose patient

Clinical exam identifies weakness pattern, help narrow diagnosis

- Blood tests detects muscle enzyme elevations and auto antibodies
- EMG/NCS distinguishes myopathy from neuropathy
- MRI visualizes affected muscles, guides
- Biopsy: muscle biopsy confirms diagnosis, defines pathology type
- Genetic testing identifies hereditary myopathies

Examination of skin disorders

Examination of skin is to be carried out mainly by inspection. Examiner should carefully observe the skin on the whole body surface for any changes in color, complexion, dryness, roughness or any other abnormal feature over the skin.

Examiner should also look for any scars (Śhalyaja or Vranaja), any abnormal structures like Nodes under the skin, its mobility or pain, any patches or maculae etc. over the skin

Examiner should also conduct Praśna Parikṣa to rule out Kandu (Itching), Vedana (Pain), Sparsha Asahyata (Tenderness), Familial tendency or rashes due to same allergens etc.

Chikitsa

Ayurveda, Abhyanga (oil massage) plays a vital role in supporting the Mamsavaha Srotas, which are the channels responsible for muscle tissue. **Abhyanga**, particularly when applied to the skin (**Twacha**) and ligaments (**Snayu**), directly nourishes and strengthens these tissues, contributing to overall muscle health and joint stability. It also indirectly benefits the Raktavahini (blood vessels) that are also part of the Mamsavaha Srotas, improving circulation and nutrient delivery.

Importance of Mamsavaha Srotas

According to the Ayurvedic principles Srotomoola refers to the site of origin of primary source that nourishes a particular Srotas (body channel). In the case of Mamsavaha Srotas its vitiation can lead to diseases such as Arbuda, Keela, Alaji which primarily affect the skin (Twachaa) - one of the Moolasthanas (root locations) of this Srotas. Another key Moolasthanana is Snayu (ligaments or tendons). In addition like Mamsakshaya (muscle depletion), the function Snayu is also compromised, resulting in symptoms such as joint pain (Sandhi vedana) and joint cracking sounds (Sandhi sputana) so that one has to protect the Moola sthana of Mamsavaha Srotas.

DISCUSSION

Discussion on Mamsavaha Srotas and its Moola sthana

Snayu (ligaments and tendons) are seen as the roots of Mamsavaha Srotas. Ligaments are strong tissues that hold and support the ends of muscles, helping the stay in place. Tendons are strong, rope like structures that connect muscles to bones. They help muscles attach to the bone and are important parts of the muscle-carrying channels. Snayus are developed from the



Kharapaka of Mamsakhanda so that Snayu are the moola of Mamsavaha Srotas.

Twacha is considered as Moola of the Mamsavaha Srotas because it is very close to the muscle and covers and protects them. Since it supports and surrounds the muscles, it plays a role in transporting nutrients to them. Skin is considered as the channels of transportation of muscle tissue.

Dhamani are also important root of Masmavaha Srotas. If these arteries are damaged the muscles may become weak or shrink. That's why arteries are also considered essential for carrying nourishment to the muscles.

CONCLUSION

Mamavaha Srotas are vital channels of the body responsible for transportation and nourishment of Mamsa dhatu. The main origins (Moola sthana) of Mamsavaha Srotas are the Snayu (ligaments and tendons) and Twacha (skin), and raktavahini dhamanis as well. These structures together play a crucial role in the formation, maintenance, and functional integrity of muscle tissue.

Any obstruction, injury, or vitiation in these Srotas can leads to disorders. A deep understanding of MamsavahSrotas, and Moola sthana (root locations) of the Srotas is therefore essential for both the diagnosis and management of musculoskeletal and systemic disorders in Ayurvedic perspective.

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