

A Literary Study of Swedavaha Srotas

Dr. Satyveer Singh Mukker¹, Dr. Saurabh Chandra Rohila², Dr. Rakesh Kumar Sharma³

¹MD Scholar (3rd Year), P.G. Department of Rachana Sharir,
Post Graduate Institute of Ayurveda, Jodhpur (Rajasthan)

²PhD Scholar, Department of Rachana Sharir, Post Graduate Institute of Ayurveda, Jodhpur (Rajasthan)

³Associate Professor, P.G. Department of Rachana Sharir,
Post Graduate Institute of Ayurveda, Jodhpur (Rajasthan)

I. INTRODUCTION

Srotas is a unique concept of Ayurvedic Rachana Sharira. Srotas refers to the channels or pathways that transport the Poshya Dhatus (those Dhatus that are in the process of digestion) & other substances from one place to another place inside the body. Both the Acharyas, Sushruta and Charaka, have different approaches regarding the Srotas. Charaka mainly focused on the physio-pathological aspects of Srotas, while Sushruta focused on the anatomo-pathological aspects. For this reason, both Acharyas have considered the numbers of Srotas to be different. According to Acharya Charaka, there are 13 types of Srotas, whereas Acharya Sushruta has described 11 types. Swedavaha Srotas is one among the Srotas that is accepted only by Acharya Charaka. "Sweda" means sweat, "Vaha" means carrying, and "Srotas" means channels via which transportation takes place. Swedavaha Srotas is the transportation of sweat, which appears to be the sweat apparatus, including the sweat glands and sweat pores present in the skin.

II. AIM AND OBJECTIVES

- To explore relevant and detailed literature regarding Swedavaha Srotas, its Moola, and Dushti Lakshana.
- To study the anatomical, physiological, and pathological characteristics of Swedavaha Srotas from a contemporary standpoint.

III. MATERIALS AND METHODS

Materials: The study combined traditional Ayurvedic texts (Charak Samhita and Sushrut Samhita) with modern anatomical books. Data were also collected

from offline libraries, internet databases, and peer-reviewed sources.

Method: Literary research

IV. DISCUSSION

Ayurveda states that Sharir is formed and maintained by the balance of Doshas, Dhatus, & Malas. Malas are regarded as vital metabolic waste products. Sweda is one of the three main Malas of the body.

'Sweda' Nirukti: The term 'Sweda' is derived from the 'Swida' Dhatu. 'Gharma' is a synonym for 'Sweda'. The word 'Sweda' denotes 'Ushma' or 'Taapa' (hot temperature or heat).

Formation of Sweda – Sweda is known as the Mala of Meda Dhatu. During the Dhatu Parinaman process, Meda Dhatavagni works on Meda Poshak Ansh to form Prasad Bhaga and Kitta Bhaga. The Sthoola Bhaga gives rise to Meda Dhatu, whereas the Kitta Bhaga gives rise to Sweda.

Sweda contributes significantly to maintaining Sharir's equilibrium by removing waste and controlling Sharir Aushnya (body temperature). Acharya Charak has placed so much emphasis on Sweda that he has mentioned separate Srotas for Sweda, called Swedavaha Srotas.

Swedavaha Srotas

Moolasthanas of Swedavaha Srotas

Losnogkuka lzksrlka esnksewya ykxedwik'pAA p- fo-5/7

The Moolasthanas of Swedavaha Srotas are Meda Dhatu and Lomakoopa.

- Meda – Fat tissues
- Lomakoopa – Small pores of skin

Acharya Chakrapani has described Moola of Srotas as the anatomical seat of the respective Srotas where the Srotas start.

Swedavaha Srotas Dushti Hetu (Causes of Sweadvaha Sroto Dushti)

Ok; keknfrlarkikPNhrks".kkØelsoukrA

Losnokfguh nq"; fUr Øks/k'kksdHk;SLrFkkAA p- fo- 5/22

In Charaka Vimana Sthana, 5th Adhyaya, Acharya had explained the Sroto Dushti Lakshanas along with their specific causes.

- Vyayamata – Excessive and vigorous exercise
- Ati-Santapata – Excess exposure to sun/heat
- Shitoshna Akrama Sevanata – Disorderly intake of cold and hot eatables/beverages at a time
- Krodha – Anger
- Shoka – Grief
- Bhaya – Fear

Swedavaha Srotas Dushti Lakshanas (Signs and symptoms of vitiation of Swedavaha Srotas)

çnq"Vkuka rq [kYos"kkfena fo'ks"koKkua Hkofr r|Fkk& vLosnuefrLosnua ik#";efr'y{.krke~xL; ifjnkga ykse"KZ p -"V~ok LosnogkU;L; lzksrkafI çnq"Vkuhfr fo|kr~ || p- fo- 5/8

The Dushti Lakshanas of Swedavaha Srotas are as follows:

- Aswedanam – Lack of sweating
- Atiswedanam – Excessive sweating
- Parushata – Roughness/Dryness of the skin
- Atishlakshana – Excessive smoothness of skin
- Anga Paridaha – Burning sensation in the body
- Lomaharsha – Horripilation/Goosebumps

Analysis of Dushti Lakshanas of Swedavaha Srotas

Both a lack and an excess of sweating were included in the signs and symptoms of vitiation of Swedavaha Srotas. This occurs due to less or excessive stimulation of sweating, which results in increased or decreased system functioning.

Sweating properly in the body is a natural mechanism that helps to maintain good and healthy skin. This healthy skin is destroyed owing to an imbalance in the sweating process, resulting in a loss of immunity.

Pitta Dosha, particularly Bhrajaka Pitta, which is present in the skin, is also vitiated by Swedavaha

Srotas. Excessive exposure to Krodha, Shoka, and Bhaya also vitiates Pitta Dosha.

Disorders of Swedavaha Srotodushiti

Dushti of Swedovaha Srotas causes abnormal and excessive perspiration; skin diseases like Psoriasis, Eczema, Dermatitis, Acne, Vitiligo and fever.

General treatment for disorders of Swedavaha Srotas

ew=foV~Losnogkuka fpfdRlk ew=—fPN³dh A rFkk·frlrfjdh dk;kZ rFkk TojfpfdRldh AA p- fo- 5/28
When the Swedavaha Srotas become vitiated, the treatment procedure given in Jwara Chikitsa (fever therapy) should be followed.

Modern view of Swedavaha Srotas –

Swedavaha Srotas can be correlated to the sweat apparatus in modern science. The sweat apparatus includes the sweat glands and sweat pores present in the skin.

Sweat Glands:

The sweat glands are simple, coiled tubular glands that are responsible for the production of sweat/perspiration. Sweat glands are exocrine glands whose ducts open at the skin surface.

Development of Sweat Gland

A sweat gland emerges from the epidermis as a downward growth. The down growth is initially solid but later canalized. The lower end of the down growth becomes coiled and forms the secretory part of the gland.

Types and location of sweat glands

Sweat glands are present in the skin over most of the body.

There are two main types of sweat glands

1. Eccrine Sweat Glands
2. Apocrine Sweat Glands

1. Eccrine Sweat Glands—Found almost everywhere on the skin, but most densely on the palms, soles, and forehead.

2. Apocrine Sweat Glands – These glands are mostly limited to the axillae (armpits) and perineal or groin area.

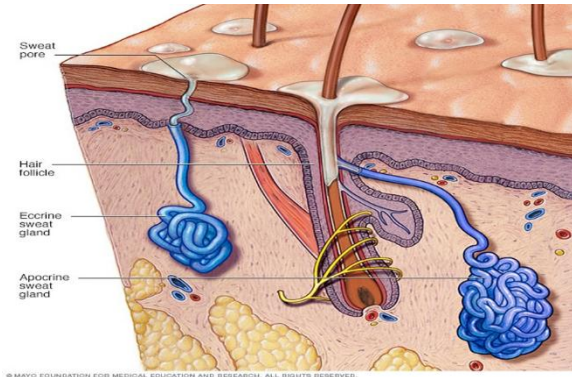


Fig 1. Sweat Gland

Structure of sweat glands: -

Generally, sweat glands are made up of two parts: a secretory unit that produces sweat and a duct that transports it away. The entire sweat gland is surrounded by adipose tissue. Sweat glands are simple, coiled tubular glands with ducts that open at the skin's surface. The gland's body/fundus/secretory part is formed by tightly coiling the lower end of the tube on itself.

The secretory part is located in the reticular layer of the dermis. The secretory part is lined by cuboidal to low columnar cells. Sometimes the epithelium may appear to be pseudostratified.

The duct connects the secretory element to the skin surface. It runs upwards through the dermis to the epidermis. The duct travels in a spiral pattern within the epidermis to reach the skin surface. The duct is lined with stratified cuboidal epithelium. The distal or apical part of the duct that opens to the skin's surface is known as the acrosyringium. The orifice is shaped like a funnel. The openings of sweat glands are found in rows on epidermal ridges on the palms, soles, and digits.

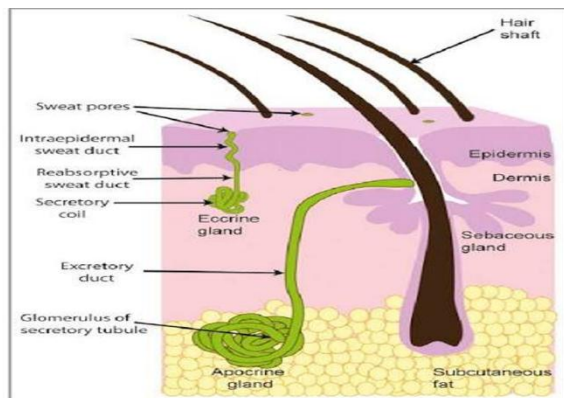


Fig 2. Basic Structure of Sweat Gland

In larger sweat glands, flattened contractile myoepithelial cells are present between the epithelial cells and their basal lamina. Sweat glands (including the myoepithelial cells) are innervated by cholinergic nerves.

Cells two types of cells are seen in the secretory part:

(1) Dark cells they are pyramidal in shape and contain secretory granules. Their secretion is mucoid.

(2) Clear cells they are present without any granules. Their secretion is watery.

V. CONCLUSION

Swedavaha Srotas is an important concept in Ayurveda that is responsible for the formation, transportation, and regulation of Sweda (sweat), one of the body's primary Malas. According to Acharya Charaka, its Moolasthanas are Meda Dhatu and Lomakoopa, emphasizing the close relationship between adipose tissue, skin pores, and sweat production. Swedavaha Srotas must work properly in order to maintain thermoregulation, skin health, and metabolic balance. Vitiating of this Srotas causes irregularities such as excessive or absent sweating, roughness or excessive smoothness of the skin, burning sensations, and horripilation, all of which may contribute to a variety of dermatological problems.

From a contemporary perspective, Swedavaha Srotas can be correlated with the sweat apparatus, which includes eccrine and apocrine sweat glands, their ducts, and skin pores. Thus, the Ayurvedic description of Swedavaha Srotas bears striking similarities to modern anatomical and physiological concepts of sweat production and regulation, emphasizing the scientific importance of classical Ayurvedic knowledge in understanding skin physiology and associated disorders.

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