

PHYSIOLOGICAL ASPECT OF SWEDAVAHA SROTAS WITH SAMANA VATA AND ITS CLINICAL IMPORTANCE

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ABSTRACT

The concept of *srotas* broadly described in *ayurveda samhitas* in both anato-physiological aspect. The word *srotas* is derived from the Sanskrit root *shu- gata dhatu*, which means to exude, to flow, to filtrate. *Srotas* is nothing but the *akash mahabhuta* (space). The concept of *srotas* indicates all macro, micro level description applicable to exchange, transportation and excretion. The *swedavahasrotas* and *samana vata* perform many functions in body but when it get disturbed may convey some pathological manifestation, therefore it is essential to understand physiological concept of *swedavahasrotas* and *samana vata*. This article presenting *Ayurveda* concept of *swedavahasrotas* in systemic manner, to understand functions of *swedavahasrotas* and *samana vata* in physiological condition and its clinical importance.

KEYWODRS

Ayurveda, Swedavahasrotas, ambuvaha srotas, samana vata, agni, kleda.

INTRODUCTION

The concept of *srotas* of both the *Acharyas* has been mentioned differently in their views, *charka* broadly considered the concept of *srotas* on physiopathological (i.e. on functional abnormalities), whereas *sushruta* considered on anatomicopathological (i.e. on structural abnormality).¹ Due to this discrepancy in their outlook it is sure that there must be diversification between two *acharyas*. That can be clearly understood in relation to the *sweda vaha srotas*. *Moolasthanas* of *swedavahasrotas* are *medas* and *romakupa*. Mainly *moolastha* of *srotas* maintains and regulates the flow of *dhatu* and *mala*. The existence of *srotas* can be proved with the help of *pramanas* as *Aptopadesh* (Authoritative statement), *Prathyaksha* (direct perception), *Anuman* (inference), *Yukti* (Rational-logical reasoning).

AIM

1. To study the physiological and clinical significance of *swedavahasrotas* and *samana vata*.

OBJECTIVES

To understand the concept of *swedavahasrotas* in detail by review of literature.

To get knowledge about functions of *swedavahasrotas* with *samana vata*.

To understand clinical significance of *srotas* and *samana vata* in diseases.

MATERIAL METHODS

Classical *Ayurveda* texts like *charaka samhita*, *ashtang hrudya*, *sharangdhara*.

Sweda –

In *Ayurveda* *sweda* is one of the waste product of body. *Ayurveda* explains *sweda* is *mala* of *meda*.

Properties of *sweda*- *drava*, *singdha*, *ushna*, *visragandhi*.

***Panchabhautika* constitution**

Sweda has dominance of *jala* and *teja mahabhuta*. Some scholars consider it as *jala mahabhuta* dominant.²It is listed among the watery components in body.³

Formation of *sweda* - as waste product (*mala*) of *meda* dhatu.⁴

Sweda and *dosha* – *dosha* which are functionally active in *sweda*

Acc. To *ashryaashrayee bhava* ssssss is present in *sweda*.⁵

sweda is *ushna* and in vapor form so it is considered as site of *pitta dosha*.⁶

Samana vata and *vyana vata* are helps in transport and excretion of *sweda* respectively.

Functions of *sweda* – holding of *kleda* in body.⁶, softness of skin, gives moisture to skin, kept skin soft and *singdha*.⁷

***Swedavahasrotas* –⁸**

Moolasthanas of *swedavahasrotas* – The *moolasthanas* of *swedavahasrotas* are *meda* (adipose tissue) and *lomakupa* (hair follicles). Mainly *moolasthanas* of *srotas* maintains and regulates the flow of *dhatu* or *mala*.

Vitiating factors of *swedavahasrotas* are *ativyayama* (heavy exercise), *atisantap* (exposed to heat condition), *sheetaoshnakrama sevana* (improper use of hot and cold substances), *krodha*(anger), *shoka*(grief) and *bhaya*(fear).

Swedavahasrotas dushti lakshana- symptoms of *swedavahasroto dushti*

SwedavahaSrotas are affected due to *Ati-Vyayama* (excess of exercise), *Atisantapa* (exposure to excessive heat), *Shita-ushna karma sevana* (indulgence of cold and hot things without following the prescribed order or alternatively), *Krodha* (anger), *Shoka* (grief) and *Bhaya* (fear) ⁹ and following symptoms appear-

- 1). *Atiswedana*- *Atiswedana* also known as *Sveda-abadha*. It is condition where sweating (hyperhidrosis) becomes clinically noticeable. Generalized hyperhidrosis may present in *Jwara*¹⁰, *Prameha*, *Vatarakta* etc.
- 2). *Aswedana*- *Aswedana* or *Sweda apravartana* or *Sweda avarodha* means absence or reduction of sweat. This implies either to complete absence of sweat or partial absence of sweat. *Aswedanam* can be assessed by the features of *Swedakshaya* like *Romachyuti*, *Sphutan Twacha*. It may be found in various diseases such as *Ekakustha*, *Kustha* etc. while in modern it may be present in *Eczema*, *Atopic dermatitis*, *Psoriasis*, *Lichen planus* etc.
- 3). *Parushya*- *Parushya* generally means roughness or hardness. Various synonyms of *Parushya* are described in classics like *Karkash*, *Kathinyam*, *Rukshatvam*.
- 4). *Atishlakshana*- It means excessive smoothness and glossiness in the skin.
- 5). *Paridaha*-*Paridaha* means burning sensation or conflagration. Other terminologies which can be included under *Paridaha* are *Osha*: Burning sensation pertaining to an area. (*eka deshiko daha*) *Chosha*: Pain produced when something getting sucked out of the body. (*aachushana samatvadityeke*)
- 6). *Lomaharsha*- Temporary local change in the skin when it becomes rougher due to erection of arrectors pilorum, also known as *horipilation* and *goose lumps*. It occurs due to cold, excitement or fear.

Samana vata-

One of the important type of *vata dosha*. Which helps in digestion and separation of essence and wastes and eliminates from the body.

Location and function of *samana vata* – *samana vata* remains situated near digestive fire, moves in *koshta* according to *vagbhatacharya*.¹⁰

Sharangdhra describes naval as the prime location of *smana vata*.

Charkacharya has described the special location of *samana vayu* is *swedavahasrotas*, *ambuvaha srotas* and *doshavaha srotas*. It also remain near the *jatharagni* and provides strength and helps the digestive system. ¹¹

Sharangadhar finds *samana vayu* helpful in the circulation of blood. The main diseases produced by the aggravation of *samana vayu* are *gulma*, *agnisada*, *atisara*.¹²

Action of *smana vayu* can be summarized as-

1. *Annaghrana*
2. *Agni sandhukshna*

3. *Annapachana*
4. *Sarakittavibhajna*
5. Control over the *swedavaha*, *doshavaha* and *ambuvaha srotas*.
6. Facilitating the absorption of digestive food and helping in blood circulation.
7. Excretion of the waste products.¹³

Functions of *vata dosha* in *swedavahasrotas* –

1. *Vyana vata* – opening and closing of *swedavahasrotomukha* is done by the *vyana vata*.
2. *Samana vata* –to bring *agni* in *swedavahasrotas* from *koshta* and brought back to the *koshta* is the important function of *samana vata*. *Sarakitta vibhajana* and *vikshepan* means transport of *sara* and *kitta* to their respected *srotas* is also the main function of *samana vata*¹⁴. Because all body entities are *pangu* (handicapped), only *vata* can move and moves other body entities also.

Relation between *kleda* and *sweda*

Sweda is also have character of *kleda*. In *Ayurveda* watery fluids in body is also known as *jala*, *ambu*, *ap dhatu* and *kelada*. *Kleda* is also *drava mala*. Functions of *kleda* is transport of *malas* of *sapta dhatu*. *Sweda* and *kleda* are same that's why "*swedasya kledavidhruti*".

DISCUSSION

Dosha dhatu malanam ushma iti agni |

Iti aangeya anushasanam || vagbhata

What *vagbhatcharya* want to say from this quote. All taken food in our body is digested by the *pachakagni*, *panchabhutagni* and *saptadhatvagni* and all *dhatu malas* are produced.

But also there is generation of heat energy also at every step of chemical reaction of the body and all chemical and enzymatic reaction of the body are carried out under the cover of this heat energy. But in this way body heat energy is going to increase only. On other hand release and control of body heat energy is also important and is done by the *samana vata*

Samana vata is responsible for the generation of heat energy through *pachakagni* and *dhatvagni* and regulation of heat energy through *swedavahasrotas* and *ambuvaha srotas*. Protection of the body from external weather by regulating body heat energy.

Functions of *swedavahasrotas* through *samana vata* –

- A. In different seasons *grishma* and *sharad rutu*
- B. In different diseases like *jwara*, *medoroga*.
1. *Grishma rutu* - During *grishma rutu* external environmental heat increases continuously s similarly body heat energy is also increases.

On that time *samana vata* carries body heat energy through *swedavahasrotas* and releases heat through *sweda*. Heat energy is thrown away from the body by conduction radiation and evaporation.

Samana vata carries *agni* towards skin and *swedavahasrotas*. That's why *rasaraktasamvahana* increase at the level of skin then body sweats and body heat get controlled.

Also because of *agni* carried in *swedavahasrotas* by *samanavata*, *dourbalya* and *agnimandya* is occurs in summer season.^{14s}

2. *Sharad rutu*- During *sharad rutu samana vata* shows opposite functions. *Samana vata* carries *agni* from *srotas* to *koshta*.reference

Mukha (openings) of *swedavahasrotas* are closed and *rasarakta samvahana* is decreased at the level of skin results in no sweating and *agni* at his own place (*koshta*) that's why appetite is increases means *koshtagni* increases.¹⁵

In this way we can understand the functions of *swedavahasrotas* with the help of *saman vata*.

3. *Jwara*¹⁶ – *Aamavstha* – In *sama jawara agni* is present in the *rasaraktasamvahana* not in *koshta* and *mukha* (opnings) of *swedavahasrotas* are closed due to *aama*.
For that *aama pachan samana vata* carries *agni* from *koshta* to *shakah*. That's why *jwara* patient shows signs of *agnimandya* and increased body temperature.
After proper *pachan* of *aama*, *mukha* of *swedavaha srotas* gets opened and body sweats. After sweating body temp decreases automatically.
4. *Medoroga* –In *medoroga samana vata* and *agni* both obstructed *koshta* due to *meda*.¹⁷
That's why *samana vata* not able to carry *agni* towards skin and in *swedavahasrotas*. *Medorogi* patients feels hungry always *Agni* get obstructed in *koshta* and *samana vata* does *sandhukshan* continuously.
But also fatty person sweats a lot¹⁸ and his body touch is always cold.
How does this happen? The answer is hidden in functions of *vata*.
As we see the transport of *Agni* is the function of *samana vata* and opening and closing of *srotomukha* is the function of *vyana vata*. And in *meda roga* opening of *swedavahasroto mukha* done by the *vyana vayu*. That's why sweating in *medoroga* happens and *sweda* is the mala of *meda*. When *meda dhatu* increases its mala *sweda* also increases but in *medorogi* this formed *swedaas pachan* is not done because *samana vata* get obstructed in *koshta*. For *sweda pachan* there is no *agni* in *swedavahasrotas* and sweat of *medorogi* have *visragandha*.¹⁹

Swedavahasroto dushi lakshane includes *aswedana*, *atiswedan*, *parushya*, *paridaha*, *lomaharsh*.

Aswedana and *atiswedanam* is both done by the *samana vata*²⁰ and *vyana vata dosha*. Reference only of *vyana*²¹ *vata-su.ni.1*

Swedana karma –

Ayurveda swedana karma is important as a purva karma and Pradhan karma also.

In *swedana* karma bahya ushma opens the *swedavahasrotomukha* and excrete the mala *sweda*.

Swedana karma mainly done in the *vatakapthamaka* vyadhi. In this type of vyadhi sthambhan of *vata* is occurs due to kapha. That sthambhan released by the ushna, laghu, sukshma srotogami *swedan* drugs. Then *samana vata* comes with *agni* in *swedavahasrotas* does pachan of *sweda* mala and then body sweats properly.

CONCLUSION

Swedavahasrotas not only plays a vital role in the manifestation of the disease but also are the prerequisite for maintaining the basic physiological function of the human body.

Swedavahasrotas are pathologically important because any deformity in this *srotas* causes excessive perspiration or no perspiration and other symptoms related to this *srotas*. In various diseases, for example- *Kustha* and *Ekkustha*, *Pandu*, *Sthaulya*, *Prameha* and *Madhumeha*, *Vatarakta*, *Jwara* etc, vitiation in *swedavahasrotas* causes different *rupa* and *purvaru*. Obstruction in *swedavahasrotas* causes *Udara roga*.

Pathophysiologically *Swedavahasrotas* and *samana vata* plays important role to maintain homeostasis of human being, because any disturbance in this *srotas* rises many symptoms and diseases.

In all Functions of *swedavahasrotas* and its pathophysiological condition there is main role of *samana vata* and *vyana vata*.

In various diseases of *swedavahasrotas* for *samprapti vighatan* (breakdown of pathogenesis) we should think about condition of *samana vata* and *vyana vata* also.

Samana vata location is near digestive fire so in the treatment of *swedavahasrotas jatharagni* should be treated first.

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