



# Classical Ayurvedic Interpretation of *Raktavaha Srotas* Impairment: Etiological Factors, Pathogenesis and Manifestation in *Tvak Vikaras*

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## **ABSTRACT**

**Background:** Skin diseases are becoming more common in today's world, and many of these problems are connected to blood quality and circulation. *Ayurveda* has always taught that our blood channels, called *Raktavaha Srotas*, play a crucial role in keeping our skin healthy.

**Objective:** This review article aims to bring together classical Ayurvedic knowledge about how problems in blood channels (*Raktavaha Srotas*) lead to skin diseases. We examine what causes these problems, how they develop in the body, what symptoms appear, and what treatments work best.

**Materials and Methods:** Information was gathered from classical Ayurvedic texts (*Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*), modern medical books, and research databases like PubMed and Google Scholar. All relevant sources were carefully reviewed and analyzed.

**Results:** The study found that *Raktavaha Srotas* (blood channels) have their roots in the liver (*Yakrit*) and spleen (*Pleeha*). These channels get damaged when we eat too much spicy, hot, and oily food, or expose ourselves too much to sunlight and wind. When these channels are disturbed, the blood cannot properly nourish the skin, leading to various skin problems like rashes, infections, pigmentation disorders, and chronic skin conditions. Modern science now confirms what *Ayurveda* taught thousands of years ago that liver and spleen function is directly connected to skin health.

**Conclusion:** Blood channels (*Raktavaha Srotas*) and skin health are closely connected. When these channels work properly, the skin remains healthy. When they get damaged, skin diseases appear. The ancient *Ayurvedic* treatments focusing on blood purification including purgation therapy (*Virechana*), bloodletting (*Raktamokshana*), and blood cleansing herbs remain relevant and effective even today. Understanding this connection helps doctors treat skin diseases more effectively by addressing the root cause rather than just the surface symptoms.

**Keywords:** *Raktavaha Srotas*, Skin diseases, *Tvak Vikaras*, Liver, Spleen.

## **INTRODUCTION:**

*Ayurveda* explains that our body works through a network of channels called *Srotas*. These channels are like pathways that carry nutrients, blood, and other important substances throughout our body. Among all these channels, *Raktavaha Srotas* is especially important because it handles everything related to blood like how it is made, how it moves through the body, and how it nourishes our tissues. When these blood channels get disturbed or damaged, it shows up as various health problems, especially skin diseases.

Today, we see more and more people suffering from skin problems. Modern research is now finding that many skin diseases happen because something goes wrong with our metabolism and blood circulation. *Ayurveda* has been saying this for thousands of years that our skin is like a mirror showing what is happening inside our body. When our blood quality is poor or when the first tissue layer *Rasa Dhatu* is not healthy, it directly affects our skin.

The three main *Ayurvedic* texts *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya* give us detailed information about *Raktavaha Srotas*. They tell us where these channels originate called as *Mulasthanas*, how diseases develop in them, and what symptoms appear when they are damaged. According to *Charaka* and *Vagbhata*, the liver (*Yakrit*) and spleen (*Pleeha*) are the root organs of these blood channels. *Sushruta* adds that blood vessels (*Raktavahini Dhamani*) are also part of this system. This complete picture helps us understand how problems starting in the liver and spleen can eventually cause skin diseases.

*Ayurvedic* texts clearly describe what causes damage to *Raktavaha Srotas*. The main culprits are eating spicy and burning foods that is *Vidahi Ahara*, drinking too much oily and hot liquids, and exposing ourselves too much to sunlight and wind. These factors disturb the quality of our blood and affect how it circulates in the body. Interestingly, modern science also recognizes these same factors as harmful, they cause oxidative stress, inflammation, and sun damage, which are all major causes of skin problems today.

Modern medical research is now proving what *Ayurveda* has always taught about the liver and spleen's role in skin health. Scientists now know that the liver plays an important role in making blood during pregnancy, continues to remove toxins throughout life, and the spleen destroys old blood cells and helps our immune system. These functions are exactly what *Ayurveda* describes as the roles of *Yakrit* and *Pleeha* in the *Raktavaha Srotas* system. Similarly, modern doctors now understand how the digestive system, liver, and skin are connected, how stress affects skin through nerves and immune system, and how eating too much sugar can cause inflammatory skin problems. All these findings support what *Ayurveda* has been saying about diet and lifestyle in managing blood-related skin diseases.

This review article brings together all the classical *Ayurvedic* knowledge about how *Raktavaha Srotas* problems cause skin diseases.

## **MATERIAL AND METHOD:**

All accessible references pertaining to *raktavaha srotas* impairment and its manifestation in *tvak vikar* have been gathered from literature sources, *Ayurvedic Samhitas*, *Ayurvedic* textbooks and contemporary medical textbooks, various websites including PubMed, Google Scholar, and the AYUSH Research Portal have been critically analyzed.

Pertinent classical and modern references were identified utilizing a systematic review methodology, prioritizing sources that establish the theoretical and clinical significance of *raktavaha srotas dhushti* in *tvak vikar*.

## **LITERATURE REVIEW:**

### **Concept of *Srotas* in *Ayurveda***

*Ayurveda* describes the human body as a complex network of channels called *Srotas*. The word *Srotas* comes from the Sanskrit root '*Sru-gatau*' which means moving, flowing, filtering or secreting.<sup>[1]</sup> *Acharya Charaka* defined *Srotas* as '*Sravanatsrotamsi*', meaning the structures through which flowing or oozing takes place.<sup>[2]</sup> These channels are responsible for transporting nutrients, removing waste products, and maintaining the overall balance of body functions.

Different *Ayurvedic* scholars have described different numbers of *Srotas* based on their perspective. *Acharya Charaka* mentioned 13 types of internal *Srotas* which include *Pranavaha*, *Udakavaha*, *Annavaaha*, *Rasavaaha*,

*Raktavaha, Mamsavaha, Medavaha, Asthivaha, Majjavaha, Sukravaha, Mutravaha, Purisavaha and Swedavaha Srotas*.<sup>[3]</sup> *Sushruta Samhita* describes 11 pairs of *Srotas*, which are more surgical and anatomical in nature.<sup>[4]</sup> The difference in numbers shows that *Charaka* focused more on physiological aspects while *Sushruta* emphasized anatomical structures.

According to *Acharya Vagbhata*, *Srotas* are divided into two main categories - *Bahya Srotas* (external channels) and *Abhyantara Srotas* (internal channels). The external channels are nine in number in males and twelve in females, representing the body openings. The internal channels are thirteen in number and are essential for life processes.<sup>[5]</sup>

### Concept of Moolasthanana

The term '*Moola*' has been used with different meanings in ancient Indian texts. In *Rigveda* it means wealth, in *Mahabharata* it means origin or beginning, and in *Ayurvedic* texts, *Acharya Charaka* used this word to mean the base or foundation.<sup>[6]</sup> *Chakrapani*, the famous commentator, explained *Moolasthanana* as '*Prabhavasthanana*', which means the place of origin or the source.

The concept of *Moolasthanana* can be understood in five different ways: *Utpattisthana* (place where the tissue is formed), *Sangrahashtana* (place where it is stored), *Vahasthanana* (place through which it flows), *Naidaniksthanana* (place having diagnostic importance), and *Chikitsatmaksthanana* (place important for treatment).<sup>[7]</sup> This multi-dimensional understanding helps in both diagnosis and treatment of diseases.

### Raktavaha Srotas

*Raktavaha Srotas* are the channels that carry blood throughout the body system. These channels are responsible for the formation, transportation and distribution of *Rakta Dhatu* to all parts of the body.<sup>[8]</sup>

According to *Charaka Samhita* and *Ashtanga Hridaya*, the *Moolasthanana* of *Raktavaha Srotas* are *Yakrit* and *Pleeha*.<sup>[9]</sup> However, *Sushruta Samhita* adds *Raktavahini Dhamani* as the third root of this system.<sup>[10]</sup> The liver and spleen act as the main organs for blood formation, storage, and purification, while blood vessels serve as the pathways for blood circulation.

### Modern Understanding of Liver and Spleen Functions

Modern physiology validates the Ayurvedic concept of *Yakrit* and *Pleeha* as *Moolasthanana* of *Raktavaha Srotas*. The liver performs multiple functions including storage of glycogen, amino acids, iron, folic acid and vitamins; synthesis of plasma proteins, blood clotting factors and heparin; secretion of bile; metabolism of carbohydrates, proteins, lipids and hormones; and excretion of toxins and waste materials.<sup>[11]</sup> During fetal development, the liver acts as the main site for blood cell formation, which corresponds to the Ayurvedic concept of *Yakrit* as *Utpattisthana*.

The liver also plays a crucial role in destroying old red blood cells after their lifespan of 120 days through reticuloendothelial cells. This haemolytic function supports the *Ayurvedic* understanding of *Yakrit* as both a site of blood formation and destruction.<sup>[12]</sup> The spleen functions as part of the circulatory system, filters blood, removes old and damaged cells, and participates in immune responses against blood-borne antigens. The spleen serves as a major storage site for blood cells, which aligns with the concept of *Sangrahashtana*.<sup>[13]</sup>

### Etiological Factors of Raktavaha Srotas Dushti

*Charaka Samhita* clearly describes the causes that lead to vitiation of *Raktavaha Srotas*. The main factors include consumption of *Vidahi Ahara* and *Pana*, excessive intake of *Snigdha* substances, consumption of *Ushna Drava*, and prolonged exposure to *Atapa* and *Anila*.<sup>[14]</sup> These dietary and lifestyle factors disturb the normal quality and function of blood, leading to various pathological conditions.

In general, *Acharya Charaka* mentioned that when food and lifestyle habits are similar in qualities to the *Doshas*, they increase those *Doshas*. Similarly, when they have opposite qualities to the *Dhatu*s, they vitiate those *Dhatu*s.<sup>[15]</sup> This principle explains how inappropriate diet and regimen can damage the *Srotas* system. *Sushruta Samhita* particularly emphasized physical injury to the *Moolasthanana* as another important cause of *Srotas* vitiation, which is especially relevant from a surgical perspective.<sup>[16]</sup>

## Signs of *Raktavaha Srotas* Vitiation

The general signs of any *Srotas* vitiation were described by *Acharya Charaka* as *Atipravritti*, *Sanga*, *Siragranthi*, and *Vimargagamana*.<sup>[17]</sup> These four signs help in identifying the pathological state of any *Srotas* in the body.

When there is injury or damage to the *Moolasthanas* of *Raktavaha Srotas*, specific symptoms appear. *Sushruta* described that such injury causes *Shyavata*, *Jwara*, *Daha*, *Raktasrava*, and *Raktanetra*.<sup>[18]</sup> These symptoms clearly indicate the involvement of blood and circulation in the disease process.

## Diseases of *Raktavaha Srotas*

The classical texts describe a wide range of diseases that occur due to *Raktavaha Srotas* dysfunction. *Charaka Samhita* lists major conditions including *Kustha*, *Visarpa*, *Pidika*, *Raktapitta*, *Gulma*, *Kamala*, *Pleeharoga*, *Vyanga*, *Vidradhi*, and *Asrigdara*.<sup>[19]</sup>

*Sushruta Samhita* adds several more conditions to this list, including *Masaka*, *Mukhapaka*, *Vatarakta*, *Indralupta*, *Arsha*, and *Arbuda*.<sup>[20]</sup> *Vagbhata* further includes symptoms like *Daha* in various body parts, *Agninasha*, *Murcha*, and *Lalima* in skin, eyes and urine.<sup>[21]</sup> This extensive list shows that *Raktavaha Srotas* vitiation affects multiple systems in the body, particularly the skin, liver, spleen, and reproductive system.

## Relationship Between *Raktavaha Srotas* and *Tvak Vikaras*

There is a special connection between *Rakta Dhatu* and skin health in *Ayurveda*. The skin (*Tvak*) receives its nourishment from *Rasa Dhatu*, which then transforms into *Rakta Dhatu*. Therefore, the quality of *Rakta* directly affects the health and appearance of the skin.<sup>[22]</sup> Most skin diseases listed in *Ayurvedic* texts like *Kustha*, *Visarpa*, *Pidika*, *Vyanga*, *Dadru*, *Pama*, and *Kotha* are considered as manifestations of *Raktavaha Srotas* disorders.

The classical texts also recognize that mental factors play an important role in skin diseases. Excessive worry, fear, and sadness can cause *Vata-Kapha* type skin disorders by depleting *Ojas* (vital essence), which weakens immunity and makes the body susceptible to diseases.<sup>[23]</sup> This psychosomatic understanding of skin disorders was recognized thousands of years ago in *Ayurveda* and is now being validated by modern psycho-neuro-immunology research.

The vitiation originates in the *Mulasthanas* of the channels, namely the *Yakrit* and *Pleeha*. When these channels are impaired, the "transport" of nutrition to the skin is disrupted, leading to the manifestation of *Tvak Vikara*. The contaminated *Rakta Dhatu* circulates throughout the body and gets lodged in the *Tvak*, leading to various inflammatory conditions like *Kushtha*, *Visarpa*, and *Nilika*.

This process is characterized by *Sanga* or *Vimarga Gamana* which results in clinical signs such as *Syava* and *Raktatva*. Ultimately, the skin acts as the mirror reflecting the internal health of the *Raktavaha Srotas*,

## Treatment Principles for *Raktavaha Srotas* Disorders

*Charaka Samhita* states that the treatment given for *Raktapitta* should also be applied for all diseases arising from blood vitiation. The main therapies recommended are *Virechana*, *Langhana*, and *Raktamokshana*.<sup>[24]</sup> These treatments work on the principle of removing the vitiated *Doshas* and purifying the blood.

*Virechana* involves using purgative medicines that are hot, sharp, and penetrating in nature. These medicines reach the heart through circulation, liquefy the accumulated *Doshas*, and expel them through the downward passage.<sup>[25]</sup> *Langhana* therapy includes fasting, digestive stimulation, and physical exercise to reduce excess accumulation in the body. *Raktamokshana* can be performed using various methods like leech therapy, venesection, or other traditional techniques to remove impure blood.<sup>[26]</sup>

For internal medication, herbs that purify blood and stop bleeding are recommended. Common single herbs include *Manjistha*, *Haridra*, *Khadira*, *Sariva*, *Neem*, *Chandan*, *Ushira*, *Durva*, *Lodhra*, and *Raktachandan*. Compound formulations like *Arogyavardhini Vati*, *Manjishthadi Kwatha*, *Panchatikta Guggulu*, *Mahatikta Ghrita*, and various iron-based preparations are also used based on the specific condition.<sup>[27]</sup>

## **CONCLUSION:**

The available literature clearly establishes that *Raktavaha Srotas* represents the complete blood formation and circulatory system in *Ayurveda*. The *Moolasthan* liver and spleen correspond to modern hematopoietic organs and blood reservoirs. The causes described in classical texts align well with modern understanding of factors affecting blood quality and circulation. The wide range of diseases, particularly skin disorders, demonstrates the systemic importance of *Raktavaha Srotas* in maintaining health. The treatment principles based on purification and elimination remain relevant even today in managing blood-related disorders.

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