



A CRITICAL INTERPRETATION OF *RAKTA DHATU* IN AYURVEDA

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ABSTRACT

There are seven *Dhatu* in our ayurvedic classic like *Rasa*, *Rakta*, *Mamsa*, *Meda*, *Asthi*, *Majja*, *Sukra*. *Raktadhatu* is the second *Dhatu*. *Teja & Jala Mahabhuta* is predominant in *Rakta Dhatu*. The importance of *Rakta* is as equal as *Tridosha* for maintenance of the body. *Rakta dhatu* give *Prana* to every *Dhatu*. The air inhaled during the process of inspiration becomes the vital *Prana* for the human body. *Rakta dhatu* is the base of a living body which maintains life. It is considered as one among the *Pranayatana*.

Key Words- Rakta, Dhatu, Ayurveda, Prana

INTRODUCTION

Dosha, *Dhatu* and *Mala* are considered as three basic elements of body. Among these, *Dhatu* does *Dharana Karma*. The *Prakruta karma* of *Raktadhatu* is *Jeevana*, *Varna Prasadana*, and *Mamsapusti*¹. *Maharshi Sushruta* states in "*Dehashya Rudhiram Mulam*" that the quantity and quality of *Rakta* determine if life exists². Furthermore, it is emphasized that, just as *Tridosha* is regarded a pillar for the body, *Rakta* is similarly responsible for *Shareera's* existence and destruction³. *Acharya Charaka* mentioned *Rakta* in *Dashavidha Pranayatana* and provided a full explanation in *Vidhishonita Adhyay*⁴. *Acharya Sushruta* clarified that *Rakta dhatu* is the fourth *Dosha*⁵. *Arunadatta*, an *Ashtanga Hridaya* commentator, addressed how *Rakta*, like *Tridosha*, has *Sthana*, *Guna*, *Karma*, *Vridhi*, and *Kshaya* but is not regarded a *Dosha*⁶. Later, *Vagbhatta* formed the *Ashrayaashrayee* (shelter and shielded) relationship between *Pitta* and *Rakta*⁷.

Arunadatta has given an extended discussion of why *Rakta* cannot be termed the fourth *Dosha*. Despite possessing slimy behaviors such as *Dosha* (*Mulasthana*, *Guna*, *Karma*, *Vruddhi*, *Kshaya*, *Dustikarana*, *Lakshana*, *Chikitsa*). There is still nothing named *Raktaja Prakriti* or *Raktaja Jwara*. *Rakta* does not have a specific time for *Prakopa* in the day, like *Tridosha* does. *Rakta* can't trigger disease without the involvement of *Tridosha*. The phrase *Raktaja Vikara* refers to "*Ghrita dagdha nyaya*" (burning caused by the *Ushnaguna* of *Agni* present in *Ghrita*, rather than by *Ghrita* itself).

Synonyms of Rakta

Rudhira-The phrase "*Runadhi Rudhyate Iti Va*" is the source of the word *Rudhira*. *Rudhira* signifies both *Sanrakshan* and *Dharana*. The *Charaka Samhita* mentions *Rudhira* as the element that makes up *Prana*, according to *Acharya*.

Kshataja: *Rakta* is the first ingredient to become evident upon damage, thus the name *kshataja*.

Rakta- When colourless *Rasa Dhatu* changes into red coloured liquid element, it is called *Rakta*.

Asra- By adding *Rak Pratayaya* "to *Asra Dhatu*" this word derives.

Shonita- It is derived from "*Shonah Sanjata Asya Iti Sonitam*". This indicates red colored liquid element.

Lohita- The term *Lohita* comes from "*Ruh Rohini*" or "*Rudhyate*," and it is also derived from "*Loha Sanjayate Asyam*," which means that since it includes *Loha*, it is called *Lohita*. *Loha* is necessary for blood production.

Formation Of Rakta Dhatu

The formation of *Rakta Dhatu* is described in *Raktavaha Srotas*. It emerges throughout intrauterine life. Advancement and sustenance are obtained by nutrition, just like any other *Dhatu*. *Rasa dhatu* takes root in *Rasavaha Srotas*, and *Rasadhatwagni* follows up on its supplements from *Ahara rasa*⁸. *Raktadhatwagni* follows up on supplements derived from *Ahara Rasa* and *Rasavaha Srotas*, offering ascension to *Rakta Dhatu* when suitable. *Teja* transmits this red shade to *Rasa Dhatu* in the living organism, and when provided solidly and in physiological quantities, it is crisp and known as *Rakta*. This *Rasa Dhatu*, however, *Apya* when reaching *Yakrit* and *Pleeha*, gets red coloring due of the activity of *Ranjaka*. *Charaka* stated that when *Teja* bit of *Ahararasa* and *Pitta* (*Ranjaka Pitta*) with *Ushma* follow up on *Rasa*, it causes redness. This is finally *Rakta Dhatu*. According to *Chakrapani*, there are two types of *Rasa Dhatu* that circulate through the body: *Sthayi* and *Poshaka*⁹. The *Poshaka Dhatu* runs throughout *Dhamani's* body. The *Poshaka Dhatu* provides sustenance to the *Sthayi Dhatu*. *Rasa* arrives in *Hridaya* with the help of *Samana Vata*, as *Sharangdhara* had stated. There, it captures *Pachita* and *Ranjita* with the *Pitta* and completes *Rakta*.

Circulation Of Rakta Dhatu

Rakta, which contains *Sara guna* and *Drava guna*, circulates throughout the body with the assistance of *Vyana vata*. *Maharshi Sushruta* defined *Mamsadhara Kala* and *Raktadhara Kala* as the first and second *kala*, respectively. All of the *Sira* and *Dhamani* structures are set in the *Mamsa Dhara Kala*, much like lotus roots in mud. *Raktadhara kala* (blood sustaining) carries mostly *Sira* of *Yakrit* and *Pleeha*¹⁰. *Maharshi Sushruta* has stated that blood exits the body in the same way that *Ksheeravriksha* (a latex-containing tree) does, immediately after plugging¹¹.

Location of Rakta Dhatu

Because it is one among the seven *Dhatus*, it is accessible throughout the body. It is abundant in various areas and has specific functions in the setup of certain organs. Such locations are part of this *Dhatu*. The liver (*Yakrit*) and spleen (*Pleeha*) are the pillars of *Raktavaha Srotas*. According to *Sushruta*, the veins that provide *Rakta* to the body's smallest structures serve as the foundation for *Raktavaha Srotas*. *Rakta Dhatu's* arrangement and vitiation take place in the liver and spleen. *Raktadhara Kala* is present in the liver, spleen, and veins. It is concerned on the layout and capability of *Rakta Dhatu*. The liver and spleen are called *Raktashaya* (blood-storing organs) or regulating organs in this framework¹².

Qualities of Rakta Dhatu

The amount of *Rakta* is 8 Anjali. *Vagbhata* stated in *Ashtanga Hridaya* that *Shuddha Rakta* is *Madhura*, *Lavana*, *Sama Shitoshna*, *Asamhata* (*Drava*), a shade of *Padma*, *Indragopa*, *Hema* (Gold), and *Rakta* of *Avi* (Sheep) and *Shasha* (Hare). *Vridhdha Vagbhata* had comparable traits to *Shuddha Rakta*. He explained that *Shuddha Rakta* does not recolor fabrics after washing them. The temperament is like *Pitta* and *Saumya-Agneya*. In terms of color, pure blood is like gold cleansed with

discharge, *Indragopa*, red lotus, lac, and *Gunja* product (*Abrus precatorius*). These are varying hues depending on the particular constitution. Rakta Dhatu is *Anushnashita Dhatu*. Rakta Dhatu is neither hot nor too chilly. It is Sweet, unctuous, and scarlet in color, overpowering, and smells familiar. It responds to chemicals that affect *Pitta*.

Metabolism of Rakta Dhatu

Raktadhatu is provided through its own channels, such as *Raktavaha Strotas*. The liver and spleen are the typical organs that play a crucial role in *Raktadhatu*. *Susruta* then on stating that the *Rasa* is made from *Aahararasa*, and when it reaches the liver and spleen from *Kostha*, it becomes vibrant red. *Tej* carries this red coloring to fluids in the living body, and when provided in physiological amounts, it is sharp and known as *Rakta*. *Pitta* is released as *Mala* (discharged component) known as *Vaikruta Dosha* during the digestion of *Raktadhatu*, and *Updhatu* (Optional tissue) is formed as *Kandara* (ligament) and *Sira* (veins). Every material in the cosmos is comprised of *Panchamahabhuta*; yet *Raktadhatu* is *Tej* and *Jala* transcendent in nature.

Function of Rakta Dhatu

Ayurvedic elements of Rakta “*Raktam varna prasaadanam mamsa pushtim jeevayathicha*” As one of the seven *Dhatus*, its primary function is to sustain and nourish the body. *Sushruta* stated that *Rakta Dhatu* is the foundation of the living body; it watches after life, hence one should take proper care of *Rakta Dhatu* by following an adequate eating regimen that provides nourishment to *Rakta*. It is also in responsible of the sensation of touch. Coursing blood for the *Dhatvah*.

Characteristics of Rakta Dhatu Sara

People with *Uttama Rakta Dhatu Sarata* have the following highlights: ears, eyes, oral pit, tongue, hands, soles, nails, brow, and penis; each of these organs are unctuous and red. These organs shimmer and sparkle. Such individuals are captivating and delightful. They are unable to withstand vigorous activity or high temperatures. They are given insight, happiness, and glory. *Dhatusarta* (excellence of tissue) denotes the prominent quality of *Dhatu* (tissue), while *Sara* represents the bright beneficial outlook.

Symptoms of Raktakshaya

In decrease of blood, roughness in skin, craving for sour and cold and looseness of blood vessels are seen. In the case of diminution of *Rakta* symptoms seen are roughness, dryness and cracks in the skin and loss of its lusture. Sensation of touch gets hampered if there is *Rakta Kshaya*. The *Kshaya* of *Rakta Dhatu* creates a desire of *Amla* and cold, loosening in the vessels and *Rukshata*.

Amla Rasa Dravya predominantly have *Amla Vipaka* and *Ushna Virya*, they are *Laghu* and *Kledha* in nature, *Pitta Slekshmakara* and *Vatahara*. In general, *Amla Vipaka Dravya* are *Pitta Vardhaka*. So that *Rakta Kshaya* person having desire of *Amla rasa*.

When *Rakta Dhatu* is depleted, the qualities of *Pitta Dosha* and fire diminish. A person feels cold, the skin loses its luster becoming pale or dusty gray, and coldness causes the body to hold on to heat by becoming constipated and by reducing urination and sweat. In the mind, depletion of the *Rakta Dhatu* leads to dullness, and difficulty processing and understanding new information. This often leads to confusion and misunderstandings.

Symptoms of Raktavridhi

Increase in *Rakta Dhatu* can lead to diseases like *Khushta*, *Vatasra*, *Pittasra*, *Visarpa*, *Pleeha*, *Vidradhi*, *Gulma*, *Upakusha*, *Kamala* and *Vyanga*. It also hampers the *agni* of the individual. Skin, eyes and urine of such person appears red in colour.

Excessively increased blood causes flushed body particularly eyes and fullness of blood vessels.

Discussion

Rakta plays an important role in life, sustenance of viz. acute blood loss of more than 10% leads to conditions like hypovolemic shock, which may be fatal. It is also responsible for increase *Dhatu*s or decrease in other because blood supplies nutrition to all the tissues and if it is itself deficient, it will lead to improper nutrition to other tissues, ischemia and hypoxia which ultimately leads to tissue death. *Rakta Dhatu* has been considered to be most vital amongst the seven tissues, since it is mentioned as *Pranayatana* (seats of life) among the ten seats of life). Considering such a great physiological importance of *Rakta*, *Sushruta* designated it as fourth *Dosha*. The scholars of ancient Greek medicine have also considered that the regulators of all physiological processes in body are the four humors-1) blood, 2) phlegm, 3) yellow bile and 4) black Unani medicine has also accepted blood as a humor.

In Modern aspect *Rasa* is clear and colourless, so it refers to plasma; *Rakta* can be taken as Red Blood Cells (RBCs), as it is said to be of red color like *Gunjaphala* (fruits of *Abrus precatorius*) and *Padma* (*Nelumbo nucifera*), whereas the White blood cells (WBCs) can be considered as *Shonitarupi Oja*.

Conclusion

The importance of *Rakta* is as equal as *Tridosha* for maintenance of the body. *Rakta dhatu* give *Prana* to every *Dhatu*. The air inhaled during the process of inspiration becomes the vital *Prana* for human body. *Rakta dhatu* is the base of living body which maintains life. It is considered as one among the *Pranayatana* (vital spot). *Rakta* circulates throughout the body with the help of *Vyanavata* with the help of *Rakta dahara Kala*. The normal physiological function of the *Rakta* is colour complexion, *Mamsapusti* and *Jeevana* (existence of life). *Vikrit Dosha* mixed with *Rakta* results into *Raktapradoshaja Vikara*. The diseases which are not subsiding by *Shadupakrama Chikitsa* are to be considered under *Raktaja vikara*. *Raktapitta chikitsa*, *Virechana*, *Upavasa* and *Raktamokshana* are the line of treatment for that. It justifies that *Dosha* are responsible for diseases not alone *Rakta* or any other *Dhatu*. These *Dhatu*s are became shelter and guides us in understanding *Srotas* as well as *Uttana* (early stage)) and *Gambheerata* (chronicity) of diseases.

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