



CONCEPTS OF RAKTA DHATU W.S.R.KRIYA SHARIR REVIEW ARTICLE

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ABSTRACT Dhatu gives ashraya, which does dharana & poshana i.e. supports & nourishes the body by its prakruta karmas. There are seven dhatu in our ayurvedic classic like as Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Sukra. Raktadhatu is second dhatu. Teja & jala mahabhuta is predominant in rakta dhatu. The moola sthanas of Raktavaha srotas are yakrut (liver) and pleeha (spleen). Rudhirm, Astrak, Lositam, Sonitam are the synonyms of the raktadhatu. Jivan is the main function of raka dhatu. According to Acharya charak, Raktadhatu has 8 anjali pramana. Sira and kandara are the upadhatu of rakta. Raktadhatu mala is piita when raktadhatu pramana produced in uttam,avar, madhyama avastha individuals known as rakta sara purusha. Any kind of derivation in raktadhatu leads to pathogenesis.

KEYWORDS : Rakta Dhatu, Raktavahasrotas, Vishudha Rakta Dhatu.

INTRODUCTION

"Sharir dushanad dosha dhatvo dehadharanat " Vayu,pitta,kapha are considered as dosha, dhatu,and mala in different contexts. Because they vitiate the body, they supports the body and produce waste in the body respectively [1]. "Raja rajane ten ranjana ragvranayukta ragkruta cha dhatu "Root Raja Rajene means to stain since this dhatu is red colour It is called as Rakta [2].

Raja Ranjene Means to stain since this dhatu is red colored. It is called as "rakta" essence of rakta dhatu is rakta.

Rakta dhatus are alternatives names such as Rudhira,Asruk ,Shonit,Kshataj,Lohit and asru[3]. Rakta means the bright constituent of the body fluids. It is because 8 action of Ranjaka pitta on Rasa dhatu [4].

According to sharanghara acharya sayas that Rasa dhatu is transferred into heart with influence of saman vayu .Then is metabolized as Ranjak pitta [5].

RAKTA VAHASROTAS -

The moola sthanas of Rakta vaha srotas are yakrut (liver) and pleeha (spleen) .The formation of Rakta in the body takes place at bone marrow as per modern science but as per Ayurveda rakta dhatu is formed from rasa dhatu by ranjaka pitta in yakruta .The Function of these moola sthana have main role in maintain the quality of rakta rather than its quality. Spleen acts as graveyard of RBC i.e.it annihilates the fragile RBC which have crossed 120 days but this function will also carried out in other parts of the body like bone marrow etc., but it has one distinct function that it store the blood in it and drains it into systematic circulation in emergency conditions .The liver has multifarious functions which help in maintain the quality of the blood .liver produces the clotting factors, heparin, Vitamin-k etc. Which are essential in regulating the quality of blood [6].

METABOLISM OF RAKTADHATU

According to acharya shushurta says that raktadhatu is formed from the ahara rasa, which is colourless .When it reaches to yakrit and pleeha by the help of ushna guna converts this rasa dhatu into rakta dhatu. Normally Human body contains vishuddha teja and when this comes in contact with rasa dhatu it helps to transfer rasadhatu into raktadhatu in the body [7]. According to acharya vagbhata sayas that ranjaka pitta is situated in amashaya

While sushurta has mentioned the site of ranjaka pitta is yakrit & pleeha.Its main function is rasa ranjana i.e. giving coloration to the

rasadhatu [8].

RAKTASWARUPA

According to charak acharya says that pure blood can be resembled with color of gold purified with fire , indragopa (firefly), padma (red lotus), alaktaka (lac), gunja phala (fruits of gunja), depending upon the individual constitution . A part from this its thickness is slightly more than that of liquid (asamhata), and single colored (avivarnata) are the characteristic feature of blood [9].

According to acharya vagbhata pure rakta dhatu is slightly sweet and salty in taste. It is neither cold or warm , asamhata (not coagulated), little thicker than that of liquid .Its colour resembles with the colour of lotus ,indragopa insects,gold,blood of sheep ,and rabbit etc. are characteristic features of pure blood .It is the cause of origin of the body and by determining the condition (healthy or unhealthy) of the body [10].

FUNCTIONS OF RAKTA DHATU BY AYURVEDA

The main function of rakta dhatu is described as "jivana" Which means the indication and sustenance of life force. The prana vayu which circulates along with blood inhabits life into all the living cells. The prana vayu from the external atmosphere is transformed into its bodily assumable form and then circulated with the blood in the entire body, and the rakta dhatu there by performs its function of jivana, It therefore occurs that, on stoppage of blood flow to any of the bodily organs or limbs, the particular parts dies and withers off.

The health and care of complexion and pleasant expressions regards of physical health are also the function of the rakta dhatu [11].

The raktadhatu, which is present all over the body and travels through their respective veins and arteries where it fills the dhatus, and gives nutrition to them. It also gives complexion, and helping for sensation of touch to the body [12].

According to sushruta and charaka have also mentioned that raktadhatu is the main for living body. It is responsible for giving support, for promotion of strength, complexion, and happiness, nutrition to the succeeding dhatu and long life to the body .Apart from this it also plays a vital role in sustenance of lean vital. There are ten factors which help in sustaining the vital organs such as hearts, head, and bladder, throat, purified blood, semen, ojas, and rectum [13].

FUNCTION OF THE BLOOD (MODERN POINT OF VIEW)

1. NUTRITIVE FUNCTION

Nutritive substances like glucose, amino acids, lipids and vitamins

derived from digested food are absorbed from gastrointestinal tract and carried by blood to different parts of the body for growth and production of energy.

2. RESPIRATORY FUNCTION

Transport of respiratory gases is done by the blood. It carries oxygen from alveoli of lungs to different tissues and carbon dioxide from tissues to alveoli.

3. EXCRETORY FUNCTION

Waste products formed in the tissues during various metabolic activities are removed by blood and carried to the excretory organs like kidney, skin, liver, etc. for excretion.

4. TRANSPORT OF HORMONES AND ENZYMES

Hormones which are secreted by ductless (endocrine) glands are released directly into the blood. The blood transports these hormones to their target organs/tissues. Blood also transports enzymes.

5. REGULATION OF WATER BALANCE

Water content of the blood is freely interchangeable with interstitial fluid. This helps in the regulation of water content of the body.

6. REGULATION OF ACID-BASE BALANCE

Plasma proteins and hemoglobin act as buffers and help in the regulation of acid-base balance.

7. REGULATION OF BODY TEMPERATURE

Because of the high specific heat of blood, it is responsible for maintaining the thermoregulatory mechanism in the body, i.e. the balance between heat loss and heat gain in the body [14].

RAKTA KSHAYA & VRIDDHI LAKSHANA

INCREASED STATE OF RAKTADHATU (VRIDDHI LAKSHANA)

Excess intake of hot and pungent food, exposure to hot climate are the important. It is due to causes of rakta vriddhi.

According to **Sushrut Acharyas**

1. Skin rashes
2. Redness of eyes and engorged blood vessels[15]

According to **Vagbhata (Astang Hridaya)**

1. Visarpa (erysipelas)
2. Pleeha vidradhi (splenic abscess)[16]
3. Kushtha (All types of skin diseases including leprosy)
4. Vataarsha (vatarakta / gout)
5. Pittarsha (Hemorrhagic disorders)
6. Gulma (Abdominal tumor)
7. Upakusha (gingivitis)
8. Kamala (Jaundice)
9. Vyanga (Hypopigmentation of skin)
10. Agninasha
11. Sammoha (Syncope)
12. Raktatwak-netra-mutrata (Reddish Coloration of skin, Conjunctiva and urine)[14].

RAKTA KSHAYALAKSHANA

According to **Acharyas Vagbhata**

1. Likeness towards sour and cold
2. loss of stiffness of blood vessels[17]
3. Dryness.

According to **Acharyas Sushrut**

1. Craving for sour and cold
2. Looseness of blood vessels.

According to **Dalhana commentary's**

1. Decreased state of rakta leads to vata vriddhi which results in craving for sour food.
2. Decreased state of rakta also enhance heat production due to depletion of water of rakta dhatu. This condition results in craving for cold food so that heat can be reduced [18].

VISHUDHA RAKTASARA PURUSHA LAKSHANA

The signs and symptoms of person endowed/ having pure blood in their body are clarity in complexion normal functioning of the sense organ, natural urge for the objects of sense organs, avyahaata, paktivegam, sukhanwita, pushti and strength.

DISCUSSION

Rakta or the blood has been considered as an important dhatu after

Rasa, Just like rasa dhatu is accepted as the root or the base of other dhatus. So the rakta dhatu is accepted as the basis of living beings.

“Dehasaya Rudhiram Mulam Rudhirenev Dharvate” [19]

Jeevanam & pranuvartana are two most important functions of rakta dhatu. Jeevan means life. Life of every human beings depend upon proper blood circulation. According to Acharyas Dalhan says that life of every person depends on prana supplied by rakta dhatu. prana-dravya is nothing but oxygen present in air.

CONCLUSION

Rakta dhatu is one of the pranayantan. Raktadhatu is having panchamahabuta composition due to this it has different quality. It is formed in Yakruta and Phleeha and circulated throughout the body with rasa dhatu.

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