

Concept of Rakta Dhatu

Prashant Rajiv Madankar^{1*}, Sampada S. Sant²

^{1,2}Department of Sharirkriya, Govt. Ayurved College, Nanded, Maharashtra, India

Abstract

The basic physiology of Ayurveda mostly consists of three fundamental things, i.e. three *Doshas*, seven *Dhatu*s and three *Malas*. Out of these, *Dhatu*s mainly perform the function of holding-together the bodily elements. Meanwhile Rakta Dhatu is one of the important *Dhatu* out of seven *Dhatu*'s. As compared to modern science, which merely describes it as blood, the composition, nature and functions described in the functions of Raktadhatu are very broad and any kind of imbalance in it affects the whole body. Ayurveda covers Raktadhatu in much wider aspect. Ayurvedic texts reveal that Rakta dhatu has much broader concept than blood.

Keywords

Ayurveda, Dhatu, Rakta Dhatu, Blood



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INTRODUCTION

Ayurveda is an immortal medical science which is prepared for goodwill of human beings. Though thousands of years, Ayurveda has continued to exist, its basic principle never changed because they were derived from universal laws of nature which are eternally true. This contradicts with modern scientific view, where new theories often render previous understandings completely absolute within a short period of time.

The term *Dhatu* literally means to support or to nourish. It is referred for describing the physiology of basic nutrition and structural architecture of the body. Dhatus promote the growth of body, activates the mind and body both. There are seven *dhatu*s corresponding to seven basic tissues of body i.e. *rasa* (circulating fluid), *Rakta* (blood), *mansa* (muscular tissues), *med* (adipose tissue), *majja* (bone marrow) and *shukra* (semen). These are constantly nourished, destroyed and reformed in the same order. Out of these seven *dhatu*s, *Rakta dhatu* has prime importance. The word *Rakta* means colored or 'reddened'. It is carrier of *agni* that

activates body and mind, as such when *Rakta dhatu* is in healthy condition person feels energized with healthy passion for life. As per modern science blood is connective tissue in fluid form. It is considered as fluid of life because it carries oxygen from lungs to all parts of body and carbon dioxide from all parts of body to lungs. It is also called fluid of health because it protects body against diseases.

COMPOSITION OF RAKTA DHATU

Raktadhatu is formed by a process in which *ushna guna*¹ of *pitta* acts on *rasa dhatu* and it converts *rasa dhatu* into Raktadhatu by *Ranjan karma*. As per Ayurveda, *Rakta dhatu* has

- *Madhur and lawan Ras* (sweet and Salt);
- *Sparsh* is *Anushnasheet* and little *shitoshsamhata*.
- It is also *snigdha, guru, chala, swadu* (sweet);

- Colour i.e. *varna*² is *Indragop* (Like lac insect);
- *Tapnendriya* (as gold is melted in furnace have colour);
- *Padmabh* (like red coloured flower of Lotus);
- *Alaktabh* (like liquid dye of lac);
- *Gunjaphala* (like the fruit of *Abrusprecatorius*);
- *Shashablood* (like the blood of rabbit).

As per Bhanumati commentary of sushruta Rakta dhatu is made up of *Tej and jal mahabhoot*.

In Hemadri, commentary on Astanghruday he described Aashyaashriyatva, in which he explained pitta has aashriyitvaon Rakta dhatu. It means if pitta dushti occurs, it affects the normal Rakta dhatu and vice-versa.

DISCUSSION

Functions of Blood as per Modern Science

- 1) Nutritive function- Substance like glucose, amino acid, lipid and vitamins derived from digested food are absorbed from gastrointestinal tract and carried by blood to different

- parts of body for growth and production of energy
- 2) Respiratory functions- As transport of gases. It carries oxygen from alveoli of lungs to different tissues and carbon dioxide from tissues to alveoli.
- 3) Excretory function- Waste products formed during various metabolic activities are removed by blood and carried to excretory organs.
- 4) Transport of hormones and enzymes are carried by blood to different parts of body from source of secretion.
- 5) Regulation of water balance- Water content of blood is freely interchangeable with interstitial fluid. This helps in regulation of water content of body.
- 6) Regulation of body temperature- Because of high specific heat of blood, it is responsible for maintaining thermoregulatory mechanism in the body.
- 7) Storage functions- Blood serves as a readymade source for protein, glucose, sodium and potassium. These substances are taken from blood during conditions like starvation, fluid loss and electrolyte loss.

Ayurveda

Rakta dhatu performs following functions³:

- *Dhatu* in the body are mainly responsible for constructing and holding the body that is *Dehadharan*, therefore Rakta dhatu is also responsible for *Dehadharan*. Rakta dhatu is mainly responsible for *Jivankarma*. It provides nourishment to every part of body organ, in fact most of organs are made up of *shonit*⁴. With the intake of external *pranas* (air and food) and by nourishing the internal *pranas*, the *Jivan karma* of Rakta dhatu occurs (*Pranasanyojana*), Hence Rakta dhatu is included in *dashapranayatan*.
- Nourishment of successive dhatu i.e. *mansaposhana* is function of *Raktadhatu*.
- In *shushrut sharirshatan*,⁵ it is explained that *Rakta dhatu* while circulating throughout the body gives *Poshakansh* to their respective dhatus and helps in maintaining proper

strength of respective dhatu. (*Dhatunapuranam*)

- *Varna prasadan* is the function of *Raktadhatu*. It is responsible for proper colour and texture of skin, it is seen by when there is hampered blood supply there is formation of cyanosis.
- *Sparshjnanan* is also function of *Raktadhatu*, if there *Rakta dusti* it leads to loss of tactile sensation as in *kustha*
- In *charak.sutrasthan*,⁶ it is explained that *Rakta* is responsible for formation of *Oja* and *Ayurvrudhi*.
- In *shushrut Strasthan*⁷, *Rakta dhatu* is referred as fourth *dosh* of body. As *vata, pitta, kapha* *Rakta dhatu* is also responsible for *Sambhav* (formation), *Sthiti* (holdings), *Pralay* (demolition) of *Deha*.
Kshaya and *Vrudhi* of dhatus are also dependent on *Rakta dhatu*. (Su.su 14/21)
(*Shonitnimittaj*).

In *charak su*⁸. 14/37 it is explained

that if there is loss of *Rakta dhatu*, there is diminished strength of rest of *dhatu*s, *Agni* and *vataprakopa* occurs.

➤ In Charak.sutra⁹.it is explained, if diseases are not cured by *sheet*, *ushna*, *snigdha*, *ruksha* treatment then that diseases are called to be *Raktaj vyadhi*. It indicates importance of *Rakta dhatu*.

➤ According to Yogratnakar, in management of *Amlapitta*, if it is not cured by *doshjanikshodhanchikitsa* then *Raktamokshan* is advised at the end of management.

Rakta dhatu is one of seven *dushya* in etiology of *kustha and visarpa*.

➤ In charak sutra.¹⁰ it is rightly explained that if person has *prasnavarna*, if his organs are proper functioning, as such each of organ performing their respective function as they mean. If his digestion is proper and excretory functions are proper, it indicates that *Raktadhatu* is at his best functions and such individual are known as *VishudhaRaktapurush*. It is unique

feature of *Raktadhatu* over all *saptadhatu*s.

CONCLUSION

After doing systemic review through Ayurvedic samhita, it can be concluded that the concept of *Raktadhatu* as explained in samhita; *Rakta dhatu* is much broader concept than blood. The functions described in Ayurvedic texts of *Rakta dhatu* are much more than that described in modern science. *Rakta dhatu* gives us idea about vital fluid running through body, which connects *Jatharagni* to every other organs of body. These organs get nourishment through *Rakta dhatu* and are responsible for good health.

BIBLIOGRAPHY

1. Charak samhita revised by Charaka and Drudhbala edited by Vd. Ravidatta tripathi, Chaukhamba Sankrit Pratisthan, Delhi.
2. Sushruta Samhita, edited by Vd. Acharya Priyavat Sharma Chaukhamba Surbharti Prakashan, Varanasi.

REFERENCES

1. Charak chikitsa sthan 15/16
2. Sushrut sutrasthan 14/14, charak sutra. 24/22 and astang. Hru.su. 27/1
3. Sushrut sutrasthan 14, charak sutra 24.
4. Sushrut.Sharirsthan.4.
5. Sushrut.Sharirsthan 7/14,
6. Charak.sutrasthan 24/24.
7. Sushrut sutrasthan 21/3.
8. Charak sutrasthan 14/37.
9. Charak sutrasthan 24/11.
10. Charak sutrasthan 24/24