Critical review of Rakta Kshaya and its Symptomology.

Teli N¹, Jadhav U²,

1. MD Scholar Dept. Kriya Sharir Shree Saptashrungi Ayurved Mahavidyalaya, Nashik, Maharashtra
2. Asso. Professor, Dept. Kriya Sharir Shree Saptashrungi Ayurved Mahavidyalaya, Nashik, Maharashtra

Abstract:
Rakta Dhatu is base of living body; it maintains life, so one should knows the importance of Rakta Dhatu by proper diet that gives nutrition to Rakta. There will be no existence of the body without Kapha, Pitta, Vata and even Rakta as per susruta. He described that Rakta Dhatu is extremely important for sustenance of life. It is therefore needed to protect this Dhatu by every possible measure. As Vata-Pitta-Kapha are responsible for the creation of living body, fourth entity named Rakta is also responsible for the existence, support and maintenance of body. He told that Rakta itself is life. Malnutrition and improper diet cause decrease in Rakta Dhatu. Rakta Kshaya produces roughness of skin, craving or desire for sour and cold things, looseness of the veins (emptiness of blood vessels) and Vata prakopa.

Keywords: Rakta, Shonita, Rakta Kshaya

Corresponding Author:
Dr Neha Teli. MD Scholar Dept. Kriya Sharir Shree Saptashrungi Ayurved Mahavidyalaya, Nashik, Maharashtra
Email: nehateli95@gmail.com

INTRODUCTION:
The disease should be the one which is associated with the Kshaya of Dhatu so that the effect of drug can be assessed on the Dhatu Kshaya. Rakta is the vital Dhatu of the body. It has been quoted under the “Das - Pranayatana” and is well known with the names of Jeeva, Oja et al thus; its Kshaya or diminution poses a great threat to the happy survival of the human being. So, an effort has been made here to study the Rakta-Kshaya as per Ayurvedic principles and derive a possible solution to the malady. Therefore, “Rakta-Kshaya” has been chosen for the clinical assessment of the principle “Purvah purvoativrdhatvat vardhayedhdi param param” The Rakta is considered as the “Jeeva”, or the vital entity of the body.[1] The Rakta is the accepted to be the cause of survival. It is considered to be the cause of the origin, maintenance and the destruction of the body. Acharya Cakrapani in the Bhanumati commentary specifies that the Rakta is the cause of its successive Dhatu, Mamsa and is the cause of the survival.

**Rakta Pramana:** Anjali Pramana of Rakta Dhatu is eight Anjali. [2]

**Upadhatu of Rakta:** Upadhatu of Rakta are Kandara (tendons) and Sira. [3]

**Mala of Rakta:** The Mala of Rakta is Pitta. [4]

**Sthana (Site) of Rakta:** As it is one of seven Dhatu, it is present in the entire body. It is present in large quantity in some places and functions specifically in context of some organs. Liver (Yakrit) and spleen (Pleeha) are roots of Raktavaha Srota.[5]

**Rakta Formation:** The theories regarding Rakta Dhatu formation appears to have changed from time to time as will be evident from the studies of Ayurvedic classics. In Charaka Samhita, it is clearly mentioned that Rakta is formed by the Usma of the Pitta which renders the Rasa into a coloured state. He said the nourishment fluid formed, known as rasa, undergoes transformation by the ushma (heat) of pitta and gets converted into the red colored tissue known as Rakta.[6] This is a general view put forward for the Rakta formation. After the period of Charaka, Sushruta mulled that Rakta is formed in Yakrit and Pleeha with the help of Ranjakagni.[7] He again writes that Apya Rasa when circulates through the Yakrit and Pleeha it becomes coloured there and thus Rakta is formed. [8] Two organs viz the Yakrit and the Pleeha are described as primary organs playing their role in Rakta formation. After the period of Sushruta, Astanga Hridayakara Sri Vagbhatta
has mentioned that Rakta forming factor i.e. Ranjaka Pitta is also formed in Amashaya. [9] This shows that theory of Rakta formation evolved from time to time. From above it is inferred that Usma of the Pitta and Rasa are the main factors by which Rakta is formed and secondary Yakrit, Pleeha and Amashaya are the organs in which this process is taking place.

**Causes of the Rakta-Kshaya:**

There are no direct references available specifying the causes of Rakta-Ksaya, as per our hypothesis and a review of various treatises leads us to ponder over the possible causes of Rakta-Ksaya which are as specified below:

1) **Rasa Kshaya:** The Rakta is formed from the Rasa as seen in the previous sections. The Rasa is precursor of all the dhatus. The immediate dhatu to be nourished by the Rasa is the Rakta. All the Nyayas of Dhatu Posana have accepted the fact that the Rasa is the cause of Rakta. In the case of Pandu, Chakrapani clearly mentions the role of Rasa in the nourishment of the Rakta. [10] He comments that the Rakta-Kshaya is due to the diminution of the Rasa by the increased Pitta or the failure of the Rasa to produce the Rakta poṣaka part. Dalhana also attributes the formation of Rakta to the Rasa. [11]

2) **Shukra Kshaya:** [12] In the case of the Pratiloma Kshaya, i.e. Kshaya from the Shukra to the preceding dhatus, the Shukra Kshaya will be the cause of the all dhatu Kshaya. This is clearly evidenced in the case of Rajyaksma. As seen in the various Nyayas of Dhatu Posana, the diminution in the Shukra dhatu will lead to the movement of all the nourishing material to the depleted dhatu thereby leading less nutrient material available for the previous dhatus resulting in their diminution.

3) **Ativriddhi Of The Dhatavagni:** [13] The Dhatavagni is the portion of the Kayagni that resides in the dhatu and the increase or decrease in the intensity of these dhatavagnis produce the decrease or increase in the dhatus respectively. Thus, the intensified Raktadhavagni will lead to the diminution of the Rakta Dhatu. Similarly, the increase in the Rasadhatavagni will also lead to the Rakta-Ksaya as it will lead to the diminution of the Rakta posakamsa.

4) **Srotorodha:** The Srotas is the site of the transformation and transportation of the Dhatus. These Srotasas are the channels that carry the nutrient material to the required
dhatu. Thus, the obstruction of the Srotas leads to the non supply of the Rakta Posakamsa and results in Rakta Kshaya. The obstruction of the Rasavaha Srotas will hamper the nourishment of the successive dhatu, Rakta leading to the Rakta Kshaya.  

5) Atisrava: Acharya Sushruta and others have clearly mentioned the Rakta-Kshaya due to the Atisrava i.e. excessive flow in the case of any blood letting procedure or due to faulty Shalya karma. Similarly, several Marmas, the vital spots, have also been quoted which when injured produce the Rakta-Kshaya leading to several major complications. These Marmas are: Indravasti, Urvi, Lohitaksa, and the Siramarma. These causes produce the Rakta-Kshaya immediately and do not depend on the diminution of other Dhatus. [14] 

This variety of Rakta-Kshaya needs immediate Rakta which is infused through the Blood Transfusion. The Rakta-Kshaya due to these causes is excluded under this study as it may be not ethical to endanger the life of the individual.  

**SYMPTOMS OF RAKTA-KSHAYA** [15-17] 

The Rakta-Kshaya has been quoted under different contexts with varied symptoms. Majority of these symptoms are subjective and only a few are objective ones. The major symptoms of the Rakta-Kshaya as quoted by the Acharyas are:  

**Twak Parusya (Roughness of the skin):** It means the skin loses its softness and becomes coarse and rough. The other associated symptoms are the abnormal appearance of the skin. It may be due to the Rasa Kshaya as well as the Vata Vridhdi that occur with the Rakta-Kshaya.  

**Dourbalya (Weakness):** This is very clear that the Rakta is accepted as the Bala of the body as visible from the terms like Jeeva and Oja. Thus, the Rakta-Kshaya is always associated with the Dourbalya. This may be attributed ultimately to the Vata Vridhdi and Dhatu Kshaya.  

**Amlasheeta Prarthana (Craving for the Sour and Cold):** This is a special symptom of the Rakta-Kshaya. There is a desire to consume the Sour and Cold substances. Dalhana clarifies that this crave for the Amla Dravyas is due to the Vata Vridhdi which renders the desire for the opposite taste, Amla. While, the desire for the SHEeta is due to the increased Teja due to the diminution of the Rakta which is Drava in nature. Cakrapani attributes these crave for the Amla and
Sheeta to the Agnisomiya nature of the Rakta. Thus, the Rakta-Kshaya leads to crave for both the Agni in the form of Amla and the Soumya in the form of Sheeta.

**Sira Shaithilya (Loss of the tone of the Sira):** This means the loss of normal tone of the Sira. The Sira carries the Rakta and thus the Rakta Vahana makes them look normal. But in the case of the Rakta-Ksaya the Rakta is diminished. So, the Sira appear very feeble which may be taken as the Shaithilya.

**Agnimandya (Diminished fire):** In the context of Arsha, Acharya Sushruta clearly specifies the Agnimandya in the Rakta-Kshaya.

**Heena Varna (loss of natural complexion & luster):** This is the subjective as well as the objective parameter of the Rakta-Kshaya. The Patient complains of the loss of natural complexion i.e. appears pale which is prominent in the sclera and the nails. In Ayurveda the Varna or the complexion is attributed to the Agni mahabhuta. The Rakta has Agneya swabhava ands thus; diminution of the Varna is an important manifestation of Rakta-Kshaya. Majority of Acharyas have accepted the Pandu varna as the vikrit varna in Rakta-Kshaya.

**Other Associated Symptoms:**

**Tamodarshana (fainting):** This means the feeling of transient darkness. The Patient complains of fainting for a short duration. This has been clearly quoted under the Rasa pradoshaja vikara and also the Majja Kshaya. Thus, in some Patients the complaint of Tamodarshana indicates the seriousness of the problem as this means the involvement of other Dhatus also. Among the Trigunas, Satva, Raja and Tama; the Tama guna is said to be the one responsible for ignorance and diminished activity. Thus, the Tamodarshana in Rakta-Kshaya can be the manifestation of the Daurbalya and Agnimandya.

**Bhrama (Giddiness):** Bhrama is usually associated with the Rakta-Ksaya as there is Rasa Kshaya involved which leads to Vata Vriddhi leading to daurbalya. Also, due to the involvement of the Pitta the bhrama is produced as the latter is caused by the Raja, Pitta and Anila.

**Shwasakasta (Dyspnoea):** This may be due to the daurbalya. The SHwasakasta is attributed to the increased demand for Prana i.e. Oxygen as the diminished haemoglobin leads to the decreased oxygen perfusion.

**Khalitya (Hair fall):** This may be understood in two ways. Either the diminished Rasa leads
to decreased nourishment to the Hair or may be the diminution of Asthi dhatu as the Roma are said to be the mala of the latter.

**Discussion**

Rakta Dhatu is the base of living body which maintains life. Rakta nourishes the Mamsa Dhatu, brings luster to the skin and keeps an individual alive. Rakta has dominance of Tej Mahabhuta which is also present in amla Rasa hence in Kshaya the person desires for Amla Rasa. Rakta Kshaya “Sheeta Preeti” is also seen. Desire for Sheeta things suggests the diminishing of Sheeta Dravyas that ultimately cures the decreased level of Aap Mahabhuta. Aap content in the body resulting in more desire for Sheeta Dravyas having Aap mahabhit Pradhnya. Rasa Dhatu helps in nutrition for body tissue. Rakta and Pitta are linked. Pitta dosha increase or decrease has a direct effect on blood tissue.

**Physiological effect of various tastes on blood:** The substances with predominant tastes (rasa) produce physiological effects on Rakta dhatu as shown below. [18]

<table>
<thead>
<tr>
<th>Rasa (taste)</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sour (amla rasa)</td>
<td>Vitiates blood (Raktam dushayati)</td>
</tr>
<tr>
<td>Salty (lavana rasa)</td>
<td>Increases volume (Raktam vardhayati)</td>
</tr>
<tr>
<td>Pungent (katurasa)</td>
<td>Breaks the blood clots/anti-coagulant (shonitasanghatam bhinatti)</td>
</tr>
<tr>
<td>Bitter (tiktarasa)</td>
<td>Depletes the quantity of blood by absorbing fluid portion (Raktam shoshayati)</td>
</tr>
<tr>
<td>Astringent (kashaya rasa)</td>
<td>Pacifies vitiated blood (Raktaprashamana)</td>
</tr>
</tbody>
</table>

**Conclusion:** Rakta is responsible for the existence, support and maintenance of body Malnutrition and improper diet cause decrease in Rakta Dhatu. The physician should diagnose the quantitative and qualitative imbalance of Rakta by observing various features manifested due to decrease (kshaya) and increase (vridhi).

**References**

1. Prof. K. R. Shrikantha Murthy; Sushruta Samhita english translation; Sutra sthana chapter 14, verse no. 44, Chaukhambha orientalia, Varanasi. p145
2. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash; Charaka Samhita english translation; Chikitsa sthana, chapter 15, verse no.17, Chaukhambha Sanskrit series office, Varanasi, 1996. P 251
3. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash; Charaka Samhita english translation; Chikitsa sthana, chapter 15, verse no.18, Chaukhambha Sanskrit series office, Varanasi, 1996. P251
4. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash; Charaka Samhita english translation; Viman sthana, chapter 8, verse no. 104, Chaukhambha Sanskrit series office, Varanasi, 1996.p267
5. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash; Charaka Samhita english translation; Viman sthana, chapter 5, verse no.8, Chaukhambha Sanskrit series office, Varanasi, 1996.p245
8. Prof. K. R. Shrikantha Murthy; Sushruta Samhita english translation; Sutra sthana chapter 14, verse no. 4, Chaukhambha orientalia,Varanasi.p143
11. Prof. K. R. Shrikantha Murthy; Sushruta Samhita english translation; Sutra sthana chapter 14, verse no. 4, Chaukhambha orientalia,Varanasi.p143
Chowkhamba Sanskrit Series Office; 2009. pp. 352


15. Prof. K. R. Shrikantha Murthy; Sushruta Samhita English translation; Sutra sthana chapter 15, verse no. 9, Chaukhambha orientalia, Varanasi. p149


17. Vagbhata, Ashtanga Hridayam, edited with Vidyotini Hindi Commentary by Kaviraja Atrideva Gupta, Edited by Vaidya Yadunandana Upadhyaya,


Source of Support: None declared
Conflict of interest: Nil

© 2022 IJIM (International Journal of Indian Medicine) | An Official Publication of Ayurveda Research & Career Academy (ARCA) www.ijim.co.in Email: ijimjournal1@gmail.com