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The role of *Rakta Dhatu* in human body: The birds eye view

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Abstract

Rakta dhatu (Blood) is a significant dhatu among seven dhatus in Ayurveda. "Rakta" is gotten from Devanagari word "Raj Ranjane" which determine red shading. The job of Rakta dhatus are clarified in different angles like, kala, matrujabhav twacha, avayavautpatti in garbhavastha, strotas, ashaya, marmasambandha. Rakta utapatti, its panchbautikatva, upadhatu, praman, gunas, mala have been clarified.

Keywords: Rakta, Strotas, twacha

1. Introduction

Ayurveda is the Conventional Indian Medicinal arrangement of restorative and supports to individual in which Sharira physiology is an excessive amount of underlined to perceive the etiology and pathology of a malady (Roga), with the goal that the best treatment can be profited for Person. In Ayurveda there is Dosha, Dhatu, Mala are crucial columns. Rakta (Blood) is the second dhatu in each of the seven dhatus. It has assumed the key job in progress of different organs and their working just as in Pathogenesis and treatment of numerous Infections (vyadhis). Raktavaha Strotas is the center site of Rakta dhatu. The Specific organs of this Strotas are Yakruta and Pleea. Acharya Sushruta included the Raktavahi Dhamini. Acharya Sushruta clarified, Rakta dhatu as fourth Dosha ^[1].

2. Objectives

To Re-evaluate the diverse Ayurvedic speculations identified with Rakta Dhatu. - To think about the different variables of Rakta Dhatu (Blood).

3. Materials

This article material collected from Ancient books/ Teeka like Charaka Samhita, Sushruta Samhita and Ashtanga Hrdayam and Various articles, web, Authentic books, inquire about papers and courses are the Essential Sources.

4. Methodology

- Selection of topic/ Background of topic
- Review of Literature study
- Rakta dhatu Discussion
- Conclusion ^[2]

5. Review of literature

5.1 According to the Veda ^[3]

As indicated by Atharva Veda, seven dhatus are known as the architect of the body.

5.2 Synonyms of rakta

Lohita-The word Lohita is gotten from "Rohini". The word Lohita is gotten from "Loha Sanjayate" which implies that as it contains Loha (iron), it is named Lohita. Loha is fundamental for Rakta (blood) development. Rudhira-As indicated by Acharya Charaka the word Rudhira is gotten from "Runadhi Rudhyate". The word Rudhira speaks to Dharana (To hold). Rakta-When dry Rasa Dhatu changes into red shading liquid, it is called Rakta (Blood). Shonita-It got from "Iti Shonitam". This shows red shading liquid. Kshataja - Utpatti of Rakta Dhatu is framed in Raktavaha Strotas. It gets produced in (IUL) intra-uterine life. Advancement and sustenance is by nourishment simply like other dhatu. At the point when

Rasa dhatu takes its root in Rasavaha Srotas, Rasadhatwagni follows up on its supplements originating from Ahara rasa ^[4]. Supplements originating from ahara rasa and from rasavaha srotas are followed up on, by Raktadhatwagni and offer ascent to rakta dhatu appropriate. In living body, Teja carries this red shading to Rasa Dhatu and when delivered in solid way and in physiological amount; it is crisp and called Rakta. This Rasa Dhatu however Apya (fluid, having and activities of water), subsequent to coming to Yakrit and Pleeha achieves red shading because of the activity of Ranjaka Pitta. Charka said that when Teja bit of Ahararasa and Pitta (Ranjaka Pitta) with Ushma follows up on Rasa, it procures redness. This is at long last Rakta Dhatu. Chakrapani states that the Rasa Dhatu flowing in the body is of two sorts: Sthayi and Poshaka ^[5] It is the Poshaka Dhatu which flows everywhere throughout the body in Dhamani. The Poshaka Dhatu is the one which gives sustenance to the Sthayi Dhatu. As indicated by Sharangdhara, Rasa comes to Hridaya with the assistance of Samana Vata. There it gets Pachita and Ranjita by the Pitta and accomplishes Rakta.

5.3 Location of Rakta Dhatu

As it is one of seven Dhatu, it is available in the whole body. It is available in huge amount in certain spots and capacities explicitly in setting of certain organs. Such places are areas of this Dhatu. Liver (Yakrit) and spleen (Pleeha) are underlying foundations of Raktavaha Srotas. As per Sushruta, veins providing Rakta to each littlest structure of the body is additionally a base of Raktavaha Srotas. Liver and spleen are locales of arrangement and vitiation of Rakta Dhatu. Raktadhara Kala is available inside liver, spleen and veins. It is worried about arrangement and capacity of Rakta Dhatu. Liver and spleen are considered as Raktashaya (Organ where blood is put away) or controlling organs of this framework ^[6].

5.4 Qualities of Rakta Dhatu ^[7]

In Ashtanga Hridaya, Vagbhata said about Shuddha Rakta that it is Madhura, Lavana, Sama Shitoshna, Asamhata (Drava), like shade of Padma, Indragopa, Hema (Gold) and Rakta of Avi (Sheep) and Shasha (Hare). Vriddha Vagbhata likewise portrayed similar characteristics of Shuddha Rakta. He told that Shuddha Rakta doesn't recolor materials subsequent to washing it. It is like characteristics of Pitta and Saumya-Agneya by its temperament. Unadulterated blood can be compared to gold cleaned with discharge, Indragopa, red lotus, lac, and product of Gunja (*Abrus precatorius*) in shading. These are different shades relying on individual constitution. Rakta Dhatu is Anushnashita Dhatu. Rakta Dhatu is neither hot nor excessively cold. It is sweet, unctuous, and red in shading, overwhelming, smells commonly. It responds to substances which influence Pitta. Sharangdhara has informed that Rakta Dhatu which supports the life is Snigdha, Master (overwhelming), Chala and sweet in taste.

5.5 Metabolism of Rakta Dhatu

Raktadhatu (Blood) is delivered in his own Srotas (channels) for example Raktavaha Srotas. Liver and Spleen are the standard organ assumes a significant job underway of Raktadhatu (Blood). Sushruta further clarified that the Rasa is framed from Ahararasa (pith part) in the wake of arriving at liver and spleen from Kostha it winds up red. In living body, Tej carry this red shading to liquid and when delivered in sound design & in physiological amount it is crisp and is called as Rakta (Blood). In the digestion of Raktadhatu

(Blood) Pitta is delivered as Mala (discharged part) which is known as Vaikruta Dosha and Updhatu (Optional tissue) are created called as Kandara (ligament) and Sira (veins) ^[8]. Every one of the substances of this universe is made out of Panchamahabhuta, anyway Raktadhatu is Tej and Jala transcendent in nature.

5.6 Physical & Chemical Properties of Raktadhatu

Amount of Rakta is 8 Anjali. It is neither too cold nor excessively hot, sweet and salty in taste, unctuous, red shaded, and substantial. Raktadhatu (Blood) in unadulterated or healthy status looks like warmed gold which turns red in the wake of placing in shoot; creepy crawly (Indragopa) red lotus or like *AbrusPrecatorius* (Gunja). Sushruta additionally portrayed attributes of unadulterated Raktadhatu (Blood). Raktadhatu (Blood) looks like creepy crawly (Indragopa), is of appropriate thickness and doesn't bear some other shading than implied of unadulterated blood Raktadhatu (Blood) is neither cool nor exceptionally warm. Responds to things which influence the pitta ^[9].

5.7 Function of Rakta Dhatu ^[10]

Elements of Rakta or blood as per Ayurveda "Raktam varna prasaadanam mamsa pushtim jeevayathicha" As it is one of the seven Dhatu (tissue), its prime capacity is to sustenance and sustenance of the body. Sushruta said that Rakta Dhatu is base of living body; it looks after life, so one should take legitimate consideration of Rakta Dhatu by appropriate eating regimen that offers sustenance to Rakta. It is likewise in charge of the impression of touch. Coursing blood work for supporting the Dhatvah.

5.8 Characteristics of Rakta Dhatu Sara

People who have Uttama Rakta Dhatu Sarata are invested with following highlights: - ears, eyes, oral pit, tongue, palms, soles, nails, brow, and penis; every one of these organs are of red shading. These organs are glistening, gleaming. Such people are appealing, attractive. They can't support strenuous occupation or hot atmosphere. They are supplied with insight, bliss and magnificence. Dhatusarta (excellence of tissue) implies preeminent nature of Dhatu (tissue) and radiant useful viewpoint is Sara. People having the brilliance of Rakta (Blood), their body stays hot.

5.9 Pathological Aspect of Rakta dhatu ^[11]

Obsessive part of Raktadhatu incorporate the Vriddhi (hyper state/augmentation of Raktadhatu) and Kshya (hypo/disappearing of Raktadhatu). Some another manifestations likewise depicted by Sushruta for example redness of eyes, skin and engorgement of veins. Because of lack of healthy sustenance and ill-advised eating regimen causes inadequacy of Raktadhatu (Blood). Because of melting away of Raktadhatu (Blood) people shows harsh, broke, drab dry skin. Vagbhat included a few manifestations for example needing for sharp, cool nourishment and crumbling of veins. Rakta Pramana: - Anjali Pramana of Rakta Dhatu is eight Anjali. Upadhatu of Rakta: - Upadhatu of Rakta are Kandara (ligaments) and Sira. Sira supplies Raktadhatu to all tissues. Mala of Rakta: - The Mala of Rakta is Pitta. Rakta Dhatu Sarata People who have Uttama Rakta Dhatu Sarata are blessed with following highlights: - ears, eyes, oral pit, tongue, palms, soles, nails, temple, and penis; every one of these organs are of red shading.

These organs are extremely radiant, lustrous. Such people are exceptionally alluring, attractive. They can't continue

strenuous occupation or hot atmosphere. They are supplied with knowledge, satisfaction and magnificence. Rakta Vriddhi Due to over guilty pleasure of slick, sharp sustenance, because of hot atmosphere, Rakta Dhatu increments and following indications can be seen-Increment of Rakta produces red colouration of skin and eyes, engorgement of veins. Because of increment in Rakta Dhatu Visarpa, Pleeha Vidradhi, Kushtha, Vatarakta, Raktapitta, Gulma, Upakusha, Kamla, Vyanga, Agninasha, Sammoha, red eyes, skin and pee with drain some of the time occurs. Rakta Ksaya: Because of winding down Raktadhatu, individual shows unpleasant, split, drab, and dry skin and an individual worships acrid taste, adores cool season. He additionally gains free and dry vessels. Sharp rasa is dominating in Teja Mahabhuta. It is required for wound down rakta to recapture its physiological status. This is the reason harsh such individual wants taste. In cool season likewise Agni increments ^[12].

6. Discussion and Conclusion

The tissue frameworks of the body comprise of seven sorts of fundamental tissues or Sapta-Dhatu. One among those is Rakta. It is framed by the catalysation of its past Dhatu for example Rasa Dhatu by the Raktagni. Rasa adds to the arrangement of Rakta by moving supplement substances which are the homologous of Rakta Dhatu. These homologous substances get red hued under the Ushma of Pitta. Rakta Sthana implies either the site where Rakta is shaped or put away or both. Yakrit and Pleeha have been perceived by Charka and Sushruta as the Rakta Sthana. Yakrit and Pleeha have likewise been perceived by these experts as the Moola of Raktavaha Srotas. Rakta supports the Mamsa Dhatu, carries shine to the skin and keeps an individual alive ^[13, 14]. Rakta Dhatu circles in the body and supplies supplements to all Dhatu and is in charge of the presence, backing and upkeep of body.

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