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# CRITICAL REVIEW OF CONCEPT OF RAKTAASHAYA(BLOOD RESERVOIRS)

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#### **ABSTRACT**

Ayurveda is an Ancient Medicine system which gives prime importance to health promotion and disease management. [1] Knowledge about structural and functional aspect of shareera is very important in attaining these goals. In Ayurveda Aacharya describe the complete knowledge about shareera (body) and its pratyanga. In human body various vital element stored in hallow viscera called as ashaya. Aashaya refers to the pratyanga (organs or sub part of body), which serves as main seat of any constituent pertaining to the body. [2] Raktaashya is place which provides shelter to the Rakta. Concept of Raktaashaya is more than its literary meaning it has vital importance in the prakruta (normal) and vikruta (Altered) karma of Rakta (blood) and disease where the Rakta involved also have control over the regulation of Raktadhatu. In modern & Ayurvedic point view liver & spleen are the main organs for blood formation. This article focuses on the Concept of Raktaashaya.

KEYWORDS: Raktaashaya, Yakrut, Pleeha.

### INTRODUCTION

Ayurveda is treasured of traditional knowledge. In Ayurveda Acharya gives the brief descriptions of body and its anatomical structures under the heading of 'Sharira.'

**Aashaya** - According to acharya Aashaya is place which gives shelter or abode to the Dosha, Dhatu, mala. Or place where the different constituents of body resides. By the virtue of repeatedly staying at a place vayu creates aashaya. <sup>[3]</sup> There are seven numbers of aashaya in male and female: 1.Vataashaya.

- 2. Pittaashava.
- 3. Shleshmaashaya.
- 4. Raktashaya.
- 5. Aamashaya.
- 6. Pkwaashaya.
- 7. Mutraashaya.
- 8. Garbhaashaya Extra Aashya in females. [4]

One of them is Raktaashaya - Place, space, or abode of Rakta or blood. In present article, effort has been made to explore the concept of Raktaashaya and its role in causation of disease related to Rakta Dhatu. In this way it will be said that the present article conclude the concept of Raktaashaya.

### **DISCUSSION**

Aashaya is place which gives shelter to the dosha, Dhatu, mala or any other constituents pertaining to the body. [5]

Raktaashaya is place which provides abode or shelter to Rakta or Blood. Acharyas told that the Yakruta(liver) and Pleeha(spleen) are the Raktaashaya. [6] Adhdhamalla commenting on this says that the seat of Rakta is Raktaashaya (Blood reservoirs) and Pleeha (spleen) is very popularly known as Raktaashaya. [7] Acharya have opined about the genesis of Yakrut and Pleeha from Rakta Dhatu (blood tissue.) [8] Also considered as the Raktaashaya as it adhishtana of Rakta as well as the place where rasa converted in to Rakta. A parallel opinion in conventional Anatomy states that an abundant quantity of blood is responsible for the formation of sinusoids of liver. [9]

Many Acharyas have stated that the main function of Yakrut and Pleeha is to offer Red color to Rasa Dhatu, i.e. ranjana of Rasa Dhatu. Acharya Sushruta states, Yakruta and Pleeha are the seat of Rnjakaagni. The Rasa formed out of digested essence of food is changed in to Rakta in Yakrut & Pleeha. [10] Ranjakagni or Ranjakpitta are located in liver and spleen which meaning id told by Acharya Prashar that substance which converts rasa to Rakta. [11] Acharya Sharangadhara also has a similar opinion about the formation of blood. Liver & Spleen as they play vital role in haemopoesis. Rasa formed in Hrudaya(heart) is carry to the Yakrut(liver) and Pleeha(spleen) with the help of saman vayu where it converted to Rakta by the process of ranjakagni. [12] Raktaashaya is located in liver & spleen because they are haemopoeitic organs taking part in the formation &

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maturation of blood cells. The responsibility is greater on them when the child is in mother's womb. Later the responsibility transfer to bone marrow, but the liver & spleen will have their hold & effect on the process throughout the life. Therefore they considered as Raktaashaya as they carry memories of blood production. The formation of various blood components such as plasma proteins which are formed in liver which is further confirms about place of liver as Raktaashaya.

**Formation of the blood:** In fetal life, the haemopoiesis or haematopoiesis occur in three stages. 1. Mesoblastic Stages.

- 2. Hepatic Stage.
- 3. Myeloid stage.

Hepatic stage:-From third month of intrauterine life, Liver is the main that produces RBCs. Spleen and lymphoid organs are also involved.

Myeloid stage:-During last three month of intrauterine life, the RBCs are produced from liver & spleen along with red bone marrow. In Adults, liver spleen may produce RBCs when the bone marrow is destroyed. [15]

**Destruction of blood:** The destruction of older RBCs occurs mostly in the capillaries of spleen because the spleenic capillaries have a thin lumen. So, the spleen knows as Grave yard of RBCs. [16]

**Blood reservoir function:** - Spleen store large amount of blood. Numbers of RBCs are stored in spleen. The RBCs released from spleen in to circulation during the emergency conditions like hypoxia and hemorrhage. [17]

#### Raktadushti as nidan for Ashaydushti and vice-versa

- 1. Anaemia, though the Rasavaha strotogaya vyadhi, rasakshaya leading to improper formation of Rakta manifest in the form of Pandu. If pandu is not treated and person take pittakar ahar vihara persons land with kamla. Long standing kamla(jaundice) cause kharatwa. Kharatwa-hardening of the organ involved. Organ involved in the pathogenesis of Kamla is Yakrut. [18]
- 2. Malaria is mosquito borne blood infectious disease it also spleenomegaly.
- 3. Hodgkin's disease is blood cancer in which on later stage spleenomegaly is found. [19]
- 4. In Liver cirrhosis healthy liver tissue replace by fibrous scar tissue. It may develop jaundice and further it causes gastrointestinal bleeding.
- 5. Hepatitis is blood borne infection it damages liver and leads to liver cirrhosis.

### CONCLUSION

Even though many organs like Yakrut, Pleeha, hridya, twak, sira are documented as Raktaashaya by different Acharyas. Yakrut (liver) and Pleeha (spleen) are involved in genesis of Rakta. Also both organs have their

genesis from Rakta Dhatu. So, Acharya give prime importance to liver and spleen. [20]

According to modern science, the raw material for the formation of blood cells and liver (septum tranversum) is the same, being parenchymal cells from the mesoderm. Spleen also develops from parenchymal cells.<sup>[21]</sup>

Yakrut & Pleeha are the organ concerned with regulation & control of Rakta too.

The two organs are significantly involved in the pathological event of Rakta also.

After screening texts of Ayurveda as well as the modern science, safely it can be concluded that Yakrut & Pleeha are the Raktaashaya (blood reservoirs).

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