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Ayurvedic concept of *Hridaya* and its Embryological Development

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ABSTRACT

According to *Ayurveda*, the heart, or *Hridaya*, is one of the body's essential organs. Any harm done to the *Hridaya* can lead to serious illnesses, serious problems, or even death because it is one of the *Trimarmas* and *Dasha Pranaayatana*. According to *Ayurvedic* texts, the heart is an organ with a broad range of functions in addition to being a blood pump. According to *Ayurvedic* classics, *Hridaya* is the seat of intellect and life and governs the body, mind, and senses. The essence of *Rakta* and *Kapha* makes up the heart. Thus, vitiated *Rakta* and *Kapha* are crucial to understanding the pathophysiology of many cardiac conditions. In this article we mainly emphasis on *Hridaya Nirukti*, *Hridaya Utpatti*, and disorders related to deformity in structures in embryological development in *Ayurvedic* perspective.

Key words: *Ayurveda*, *Hridaya*, *Heart*, *Trimarmas*, *Dasha Pranaayatana*, *Rakta*, *Utpatti*.

INTRODUCTION

Term *Hridaya* was well explained in *vedas* and consider it as vital organ since that time. *Vedas* are the ancient most written treatises of knowledge. *Ayurveda* being considered as *upveda* of *Atharveda*. *Acharya Kashyap* considers *Ayurveda* is the 5th *Veda*. The term *Hridaya*, it was thought to refer to an organ system that included the *Shirasthahridaya* i.e. brain (cranial *hridaya*) and *Urasthahridaya* (thoracic *hridaya*), or the heart.^[1] *Yogvashishtha* makes it quite evident that there are two *Hridayas*: a thoracic and a head one. According to *Satpathbrahman* and *Brihadaranyak*, the word *Hridaya* comes from three verbs: *HRU* means *Harati* (to receive from) or "abduct", "*DA*" means "to

give" or "donate," "*YA*" denotes self-generated rhythmicity for contraction and relaxation, or "*in Gatou*," which means to control.^[2]

Therefore, the term "*Hridaya*" itself describes its function: *Hri*-the suction activity of *Hridaya* (i.e., venous return), *Da*-the pumping activity of *Hridaya* (i.e., supply of oxygenated blood) and *Ya*-controls these two activities. As a result, *Hridaya* is the bodily organ that receives, releases, and moves; the heart is the organ in question. Both when awake and when sleeping, the *Hridaya* is constantly contracting and relaxing. Even when we are sleeping, this activity still goes on, albeit more slowly.

Marmas are essential because they are the locations throughout the human body where each of the twelve *Pranas* resides in a different concentration (*Prana Sthana*) which is essential for the continuance of biological functions. *Trimarmas* are *Shir* (head), *Hridaya* (heart), and *Basti* (urinary bladder). Even now, the final causes of death include cardiac arrest, brain death, and renal failure. *Acharya Shushrut* identified *Hridaya* as a *Marma sthana* of the *Sadhyapranhar* variety^[3] (based on prognosis of injury, i.e., vital organ and if disturbed, may cause instantaneous death) and *Acharya Charak* also identified *Hridaya* as one of *Trimarma* and *Dasavishshaayatana*.^[4] This region has

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been classified as *Pranayatan*. *Prana* (life) and *Ayatana* combine to form the word *Pranayatana* (Seat in *Ashrayasthana*). Because *Pranayatana* is the seat of life and an essential component of the body, any trauma or complications therefrom result in death. *Acharya Kashyapa* also identified *Hridaya* as *Pranayatan* and *Mahamarma*.^[5] *Charaka* refers to it as *Mahamarma* because it is the location of *Chetana*, *Manas*, and all the other *Pranas*. This *Urastha hridaya* was seen by the *Samhitas* as a hollow organ, an *Aashaya*,^[6] a *Kostha*^[7] according to *Sushruta*, and a *Kosthanga*^[8] according to *Charaka and Vagbhata*.

According to the constitution, the *Hridaya* is a form of *Sira Marma*^[9] since it provides *Rasa*, *Rakta*, and *Oja* to all of the body's *Srotas* through *Siras* like the one that the mountain ranges that, through their rivers, supply the entire planet with water, food, and life.^[10] According to *Vagbhata*, *Hridaya* is the *Moola* of the *Siras*^[11], and the *Siras* are *Rakta-Updhatu*. It is *Sira Marma* because the heart has an abundance of vessels resulting from the interplay between *Rakta* and *Medas*. As to *Ayurveda*, the *Hridaya* begins with the essence of *Shonita*, which includes *Rakta* and *Kapha*, and grows into a muscular organ, similar to the myometrium.^[12]

Definition of Hridaya

The *Marma* located in thorax in between two breast and near to esophageal orifice, where resides the *Sattva*, *Raja* and *Tamas Guna*, is known as *Hridaya*.^[13]

Synonyms

As per *Amarkosh*: *Cheta*, *Swantam*, *Hrit* and *Manas*.^[14]

As per *Charak*: *Mahaphala*, *Mahat* and *Artha*.^[15]

Location

According to *Acharya Sushruta*, *Hridaya* is located in the chest region or thorax, above the esophageal orifice, between the two breasts.^[13] Additionally, he says that *Pleeha* (spleen) and *Phuphus* (lung) are positioned below the left side of the *Hridaya*, while *Yakrut* (liver) and *Klome* (mediastinum) are positioned below the right side of the *Hridaya* while describing *Garbh Vyakarana Sharir* (embryology).^[16]

Acharya Sharangdhara further claimed that *Hridaya* is situated in the space between the breasts in the thorax.

Size

The dimensions are about 4 *Anguli* or about the size of individual's fist.

Shape

It is shaped like an inverted lotus with a downward-facing apex, or *Adhomukha Pundrika*.^[17] It is associated with ten *Mahadhamanias*, or pulsating vessels that provide blood, nourishment, oxygen, and immunity to the body as a whole.

Marma

Hridaya is type of *Sira Marma*,^[9] *Sadyo-Pranahara Marma*^[3], considered in *Trimarma* and *Dashvishesha Ayatana*.^[4]

Embryological development

As per *Ayurveda*, the *Hridaya* develops from essence of *Shonita* and *Kapha Dhatu* or tissues and develops into muscular organ.^[16] Genetically, originates from *Matraj Bhava* as *Mriduni Matrajani* as per *Acharya Sushruta* which clearly indicates maternal dominance in formation of *Hridaya*.^[18] *Garbhotpadakabhava* described by *Acharya Charaka* and *Sushruta* clearly stated that soft organs present in body are considered to be formed from maternal source (*Matraj Bhava*).

According to some, *Hridaya* is composed primarily of *Rakta* and *Kapha*. The organogenesis will proceed normally if the *Doshas* are in their natural state, which is in *Prakrut Avastha*. The *Sara Bhaga* of *Kapha*, or *Shuddha Kapha*, and the *Sara Bhaga* of *Rakta*, or *Mansa*, combine during the *Hridayotpatti*. It indicates that the *Hridaya* is made up of *Mansa*, *Suddha Kapha*, and *Sarvadhatu Sara*, or *Oja* with mother *Rasa* and *Chetna Dhatu*. In addition to *Kapha* and *Rakta*, *Saptadhatu Sara* and *Saptadhatu* are also required for the formation of *Hridaya*.

As the formation occurs, the *Vayu Mahabhoot* assists the *Kriya* in moving blood, the *Akash Mahabhoot* forms the *Srotas* of the *Hridaya*, or all the chambers, arteries, and veins, and the *Prithvi* part forms the *Sthool Bhaga*,

Jala Bhaga Sandhan all the *Peshi*. *Agni* forms the *Sadhak Pitta*, or the *Spandan* in the SA node, the electricity needed for heartbeat. As it provides *Bala* to the remaining *Kapha* and *Sadhak Pitta* for *Chetna* and *Vayu* for *Vikshepan*, the union of the *Panch Mahabhoot* with *Saptadhatu*sara, that is, *Oja*, *Raktasara*, and *Avlambak Kapha* occurs in heart. Hence in an individual with *Hridroga*, it is particularly important to inquire regarding *Hridroga* on maternal side and disease or deformity in essence of *Rakta* or *Kapha*.

Heart bud is created from clear and pure fraction of *Rakta*, *Mansa* and *Kapha* in the second month of intrauterine life. The mother is referred as *Dvihridaya* means one who has two hearts when full-fledged heart has evolved from bud by fourth month of *Garbhautpatti Karma*.^[19] According to *Acharya Charaka*, it starts functioning in third foetal month.^[20] *Hridaya* being *Sthana* of *Mana*, *Atma* manifest number of desires known as *Dauhrida* that must be fulfilled. If desires are not met, congenital abnormalities such as cardiac disease develop may be developed.

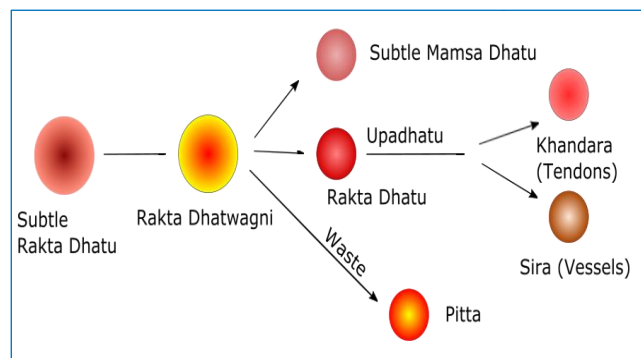
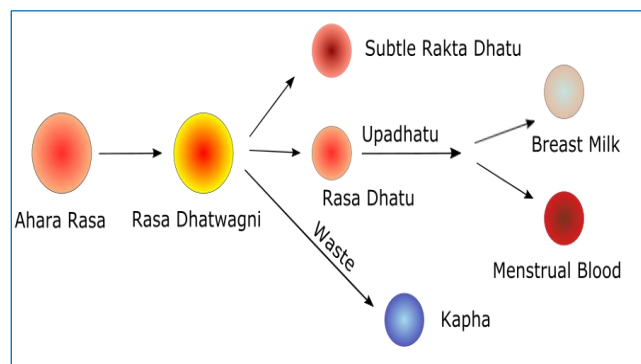
Relation of Hridaya with Dosha - Dhatu - Mala

The functions of *Hridaya* are due to *Vayu*, specially *Prana* and *Vyana* *vayu*.^[21] *Hridaya* is *Sthana* of *Sadhak Pitta*^[22], *Avalambak Kapha*^[23] and *Oja*.^[24]

Basic function of heart is pumping the blood and supplies nourishment to tissues all over the body which is mainly controlled by *Vyana Vayu*. *Vyana Vayu* controls its rhythmicity as well as contraction and relaxation which continues lifelong in a cyclic manner.^[25] *Prana* *vayu* accounts for dilatation of the chamber, valves, generate and carry cardiac impulse (*Praspan*) and diastole of the cardiac cycle. The vitiation of *Prana* *vayu* results in dilated cardiopathies or conduction defects. According to *Acharya Sharangdhar*, *Prana* *vayu* brings *Amberpiyush* means oxygen inside the body by every inspiration and *Udaana* *vayu* gives *Bala* (energy) to cardiac muscles. *Samana* *vayu* has indirect influence on the heart by reaching the first nutritive fluid i.e. *Rasa dhatu* derived from diet. It travels from intestines into blood vessels and then to *Hridaya* via action of *Saman* *vayu*. *Rakta* is

derived from *Rasa*^[26] and it circulates along *Rasa*.^[27] *Rakta* floats in *Rasa* in blood vessels and transports oxygen to tissues.^[28] *Hridaya* pumps *rakta* along with *rasa* in all over body.^[29]

Formation of Rakta Dhatu & its Upadhatu



Pure essence of *Rakta Dhatu* produces subtle *Mansa Dhatu* which further helps in formation of heart as muscular organ. *Upadhatu* of heart forms *Kandara* and *Sira* which furthers forms the chordae tendinae (made of which fibrous tissue), valves, vessels, ligament, tendons and pericardium. Any deformity in *Rakta Dhatu* or its *Upadhatu* can lead to deformity in structure of heart like its walls, valves or septum which leads to abnormal functioning of heart. *Sadhaka Pitta* resides in the heart, derives its nourishment from the *Pachakapitta* and it is responsible for fulfilling the desires of the mind.^[30] It is responsible for the mental faculties like *Buddhi*; *Medha*, ego, courage, fear, anger, rage, excitation, cheerfulness and delusion.^[31,32] Therefore in *Hridroga* mental signs and symptoms are observed. Disorders of *Sadhaka Pitta* result in weak action of *Hridaya* leading to different cardiac disorders owing to defects in conduction system of the heart and ultimately heart failure.^[32] The word *Sleshma* is derived from the verb root, *Slisha*, means to embarrass, thus

uniting, healing etc. are the basic functions of *Kapha*. Unction, binding, to provide firmness, heaviness, virility and strength in the body, patience and absence of greed are the normal function of *Kapha*.

Avalambaka Kapha is situated in the heart and it accounts for smooth functioning of it by maintaining its nourishment level, supporting lubrication provided to *Hridaya* by the pericardial fluid and synovial fluid to the thoracic joints, preventing friction between two cells as well as between *Hridaya* and other organ in the mediastinum and the replenishing fluid to the fluid systems of the body.^[33] To perform this function, it receives the essence of *Aaharasa* and its potency. Pericardial effusion, pleural effusion and pulmonary oedema also result from disorders of *Avalambakakapha*.^[33] The depletion in *Purish* (stool) causes reversal of *Vayu* which leads to pain in cardiac region. Heart also consider as *Sthana* of *Oja* i.e., essence of all seven *Dhatu*s, on which strength (*Bala*) depends. It protects life against various diseases. After *Hridaya* being formed in *Garbha*, *Oja* which is nourishing *Garbha* enters *Hridaya* and then functioning of *Hridaya* begins.^[34] Among any of eight basic elements i.e., *Rasa*, *Rakta*, muscular tissue, *Oja*, *Prana Vayu*, *Vyana Vayu*, *Sadhak Pitta* and *Avalambaka Kapha* gets affected can disturb functioning of *Hridaya* and cause *Hridroga*.

Hridaya and Srotas^[35]

Srotas is a space within internal environment capable of trans-membranous movement of various body constituents across them like accepting the nutrient fluid processing it to yield various products and disposal of the waste. Heart is the only organ that has characteristic feature of being *Srotomoola* of two equally significant *Srotas* i.e., *Pranava* and *Rasava* *Srotas*.

Pathological Aspect On Embryological Development

As embryologically heart is formed by pure essence of *Rakta* and *Kapha*. So heart disease can be classified as *Raktadushtijanya* and *Kaphadushtijanya Hridroga*. Therefore, it is easy to understand the pathology of cardiovascular illnesses based on the degree of vitiation of *Rakta Dhatu* in situations such as thrombosis in the heart, heart failure, high blood

pressure, low blood pressure, and other conditions can be classified as *Rakta Dhatu Dushtijanya Hridroga*. Here, *Avalambaka Kapha* is referred to as *Kapha*. The cardiac muscle's structural stability depends on *Avalambaka Kapha*. Thus, at the time this *Avalambaka Kapha* when the heart is vitiated, it mostly results in structural heart abnormalities such ventricular hypertrophy and valvular heart disease. Comparing these malformations to *Raktadhatudushtijanya Hridroga*, the majority of them are chronic in character. Congenital diseases, or *Janmabal Pravrutta Vyadhi*, were explained by *Acharya Shushruta*. These conditions can be categorised as follows: a) *Rasakrut* b) *Dauruhad Apavharkrut*. One could classify congenital heart disease as a *Raskrut Janmabal Pravrutta Vyadhi*.

DISCUSSION

The word *Hridaya* consists of three words, i.e. *Hri+Da+Ya=Hridaya*.

1. *HRU* for *Harati* i.e., to receive,
2. *DA* for *Dadati* i.e., donate, and
3. *YA* for *Yagati* i.e., control of these above two functions i.e., receiving and donating.

Thus, *Hridaya* refers to an organ that gathers and distributes *Prana* rhythmically to regulate its transit. According to this definition, *Hridaya* is both the brain and the heart. As a result, *Hridaya* can be compared to a heart for receiving and distributing both pure and impure blood (*Urastha hridaya*) and a brain for thinking, remembering, and processing information (*Shirastha hridaya*). *Hridaya* has a lotus resemblance, with a downward-facing apex or mouth. *Hridaya* is *Mool Sthana* for *Pranava* *Srotas* and *Rasava* *Srotas*. As per *Ayurveda*, the *Hridaya* develops from essence of *shonita* and *Kapha Dhatu* or tissues and develops into muscular organ. Genetically, originates from *Matraj Bhava*. Basic elements i.e. *Rasa*, *Rakta*, muscular tissue, *Oja*, *Prana Vayu*, *Vyana Vayu*, *Sadhak Pitta* and *Avalambaka Kapha* responsible for proper functioning. Along with *Vyanavayu* and *Rakta*, *Hridaya* is responsible for *Jeevan Karma*, which keeps the body alive by supplying *Prana* to every part of body. The *Rasa-Rakta* complex is required for life's sustenance

and continuation. *Hridaya* transports the *Rasa*, or nutrients and fluids, and the *Rakta* and *Oja*, or vital fluids, to all of the body's tissues and organs. Thus, life, vitality, consciousness, the operation of the senses, the mind, and the intellect are all dependent on the healthy functioning of the heart, and happiness and sorrow are thereby indirectly influenced by it. The human heart enables waste elimination and supplies tissues with essential nutrients. Cardiac dysfunction therefore has severe physiological repercussions. Any disturbance to any aspect of the heart i.e., the conduction system, myocardium, valves, and coronary vasculature, can negatively affect pumping efficiency, which leads to morbidity and mortality.

REFERENCES

1. Yadavji T. Agnivesha, Charaka, Drudhbala, Charaka Samhita, Siddhi Sthana, Trimarmiya adhyaya, 9/12. 5th ed. Varanasi; Chaukhmbha Sanskrit Sanssthan; 2001:718
2. Sukla Vidyadhar, Ayurveda Ka Itihas Chaukhamba Sanskrit Pratisthan.
3. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sharira Sthana. Ch.6 Ver. 9
4. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Charaka Samhita, Vol II. Chowkhamba Krishnadas Academy, Varanasi. Sharira Sthan Ch. 6
5. P.V.Tiwary - Kashyapa Samhita /Vridha Jeevaka Tantra – text with English translation and commentary- Chaukhamba Vishwa Bharati, Varanasi, 2002; 127.
6. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sharira Sthana. Ch 5 Ver.5
7. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Chikitsa Sthana. Ch. 2 Ver. 12
8. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Caraka Samhita., Vol II. Chowkhamba Krishnadas Academy, Varanasi. Sharira Sthan Ch 7 Ver10
9. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I.. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 6 Ver.7
10. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Charaka Samhita. Vol I. Chowkhamba Krishnadas Academy, Varanasi. Sutra Sthan Ch 30 Ver. 8-12
11. Vagbhata, Ashtanga Hridaya edited with 'Vidyotani' Hindi commentary by Kaviraja Atrideva Gupta, Chaukhamba Prakashan, Varanasi, reprint 2012, page-252
12. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 4 Ver. 30
13. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 6, Ver. 26
14. Srimad Amar Sighn. Prof. Balasashtri Editor. Amara Kosha. Chaukhamba Surbharati Prakashan, Publication: 2015 P 72
15. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Caraka Samhita. Vol I . Chowkhamba Krishnadas Academy, Varanasi. Sutra Sthancha. Su 30/34
16. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 4 Ver. 30
17. Sushruta: Sushruta Samhita with Nibandha Sangraha commentary of Acharya Dalhana, Edited by Vaidya Yadavji Trikamji Acharya and Narayana Ram Acharya 'Kavyatirtha'; Published by Chaukhamba Sanskrit Sansthan, Varanasi; Edition-reprint- 2009; Sarira sthana. 4/31
18. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 5 Ver 11-13
19. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I.. Reprint 2011. Chaukhamba Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 3 Ver. 15
20. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Caraka Samhita. , Vol II . Chowkhamba Krishnadas Academy, Varanasi. Sarira Sthan Ch. 4 Ver. 11
21. Vagbata, Astanga hridaya, Sarvanga sundari commentary of Arunadatta and Ayurveda rasayana commentary of Hemadri, Chowkamba orientalis varanasi, sutrasthana, Chapter 12, Shloka, 6,7: 193
22. Vagbata, Astanga hridaya, Sarvanga sundari commentary of Arunadatta and Ayurveda rasayana

- commentary of Hemadri, Chowkamba orientalis Varanasi, sutrasthana, Chapter 12, Shloka, 13: 194
23. Vagbata, Astanga hridaya, Sarvanga sundari commentary of Arunadatta and Ayurveda rasayana commentary of Hemadri, Chowkamba orientalis, sutrasthana, Chapter 12, Shloka, 15: 194
24. Vagbata, Astanga hridaya, Sarvanga sundari commentary of Arunadatta and Ayurveda rasayana commentary of Hemadri, Chowkamba orientalis, sutrasthana, Chapter 11, Shloka, 37: 189
25. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhambha Sanskrit Sansthan, Varanasi. Sutra Sthana. Chakrapani On Ch. 15 Ver. 99
26. Susruta. Shastri Kaviraja Ambikadutta, Editor. Susruta Samhita. Vol I. Reprint 2011. Chaukhambha Sanskrit Sansthan, Varanasi. Sutra Sthana. Su Su 14
27. Ayu. Su. Prs. 8. P 25, Ayu Su. Prs. 2 P 100
28. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Caraka Samhita. Vol I . Chowkhamba Krishnadas Academy, Varanasi. Sutra Sthan Ch 25 Ver.5
29. Palkapya Varnam. A. Sha. Pu 112
30. Murthy K.R. Srikantha, editor; Sushruta Samhita, Vol-1, Varanasi, Chaukhambha Orientalia, reprint edition 2012, page-155
31. Agnivesha. Dwivedi Lakshmidhar, Dwivedi BK, Goswami Pradip Kumar, Editors. Charaka Samhita. Vol I. Chowkhamba Krishnadas Academy, Varanasi. Sutra Sthan Ch. 12 Ver 26
32. Vagbhata. Tripathi Brahmananda, editor. Reprint 2015. Astanga Hridaya. Chaukhamba Sanskrit prathishthan, Delhi. Sutra Sthana. Sutra Sthana. Ch. 12 Ver 16
33. Vagbhata. Tripathi Brahmananda, editor. Reprint 2015. Astanga Hridaya. Chaukhamba Sanskrit prathishthan, Delhi. Sutra Sthana. Ch. 12 Ver.15- 16
34. Susruta. Shastri Kaviraja Ambikadutta, Editor Susruta Samhita. Vol I. Reprint 2011. Chaukhambha Sanskrit Sansthan, Varanasi. Sarira Sthana. Ch. 3 Ver. 15
35. Vaidya Vilas Nanal Some Cardiotonic Herbs, Nanal Softwares, 606, Sadashiv Peth, Kunte Chowk, Pune 64-65

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