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## Critical review on *Hrudaya* (Heart) and *Hrudroga* (Cardiovascular disorders) and its *Nidana* (Causative factors)

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### ABSTRACT

**Introduction:** The Ayurvedic word *Hrudya* can be correlated with Heart in modern science on the basis of its vital functions, Also, according to some *Acharyas*, Ayurvedic *Hrudya* is a broader term which comprises functions of both heart and brain. Various terms like *Hridyata*, *Hridroga*, *Hridayamaya* and *Hridaya Sula* are mentioned in Ayurveda in accordance to Cardiovascular Disease. **Discussion:** Ayurvedic concept of *Hridroga* is quite primitive as compared to that of western system of medicine and it does not extend beyond ischemic heart disease and to some extent congestive Heart Failure. Five type of *Hridrogas* have been described in Ayurveda, out of which the description of *Vatika Hridroga* is clearly in accordance with that of Ischemic Heart Disease, combined with symptomatology of *Vatika Sotha* and *Swasa* give a vague picture of congestive Heart Failure. **Conclusion:** *Agnimandya*, *Vata Prakopa* (vitiating of *Vata Dosha*) and *Dhatu Kshaya* are the three mechanism involved in *Samprapti* of all the *Hrudya Rogas*.

**Key words:** Cardiovascular Diseases, *Hrudya*, *Hridroga*, *Nidana*

### INTRODUCTION

The word '*Hrudaya*' in Ayurveda is a synonym for Heart in Modern medicine. The name '*Hrudaya*' itself explains its vital function where '*Hru*' means, one which draws fluid or blood from the body forcibly and '*Da*' which means to donate.<sup>[1]</sup> According to Ayurvedic texts, the heart originates from the essence of *Rakta* and *Kapha*, predominantly from maternal side, and develops into a muscular organ.<sup>[2]</sup> Movement of the

heart is controlled by *Vyanavayu* and so is the case of valvular disorders. It can be assumed that the pericardium is developed from *Meda*, myocardium from *Mamasa Dhatu* and endocardium from *Rasa* and *Rakta Dhatu*.

Five type of *Hridrogas* viz. *Vataja*, *Pittaja*, *Kaphaja*, *Sannipataka* and *Krimija* have been described by *Charaka*<sup>[3]</sup> and *Vagbhata*. *Susruta* has omitted *Tridoshaja* variety.<sup>[4]</sup> While referring to 5 types of heart diseases - *Vataja Hrudaroga* have vitiating or aggravated involvement of *Vata Dosha*, *Pittaja Hrudaroga* have *Samanya Lakshana* of *Hrudaroga* and *Vishesha Lakshana* are gastric symptoms. In *Kaphaja Hrudaroga* pain seems to be dull in nature with subacute symptoms, *Sannipataja Hrudaroga* shows severity in pain and stated as difficult to cure, while in *Krimija Hrudaroga* acute pain in various intensities which may threaten the life of patients has been described and this disease stated as *Sighrakari*, so it seems acute painful cardiac disease.

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## AIM AND OBJECTIVES

The aim of study was to understand the concept of *Hrudaya*, *Hrudyaroga* and its *Nidana* (factors which are responsible for various pathologies in the *Hrudya*) so that it may help the Ayurvedic Physicians to take appropriate preventive measure against *Hridyaroga*. It is necessary to throw some light on text to visualize the concept of *Hridayroga Nidana* from modern view.

## MATERIALS AND METHODS

In our current manuscript we have studied reviewed texts books of Charak, Sushrut, Vagbhat and Sharangdhar Samhita. Research articles available on internet, Google Scholar, Pubmed, Science direct were also used to support the Ayurvedic concept of *Hruday* which is quite similar to ancient text.

### *Nidana of Hrudyaroga*

The terms *Hrudyata*, *Hrudroga*, *Hrudayamaya* and *Hrudaya Sula* have been used in *Vedas* for Cardiovascular Disorders.

The Etiological factors of *Hridroga*, according to *Ayurveda* can be categorized into three groups:

1. *Aharaj Nidana: Ati Usna, Guru, Kasaya, Tikta Sevana, Adhyashana.*
2. *Viharaj Nidana: Srama, Vegadharana, Abhigata, Ativerechana.*
3. *Mansik Nidana: Chinta, Bhaya, Trasa, Mada.*<sup>[5]</sup>

***Ati Usna:*** Foods which are *Ushna* (warm in potency), when consumed in excessive amount are responsible for various cardiovascular disorders. E.g., Excessive use of Spices like green and red chilli sauces, Chilli flakes over pizzas, vinegar and spicy pickles. Excessive use of dry nuts like kaju, walnut, peanuts, chicken (*Anupa Desha Prani*).

***Ati Guru Ahara:*** Foods which are *Guru Guna Pradhana* i.e., heavy to digest and metabolise are also a leading cause for cardiovascular disorders. E.g., Deep fried foods, fatty foods, processed foods like chips, Yellow of eggs, Red Meat.

Carb-Dense Foods is the leading cause of Cardiovascular disorders. It can lead to long-term health damage as it causes an increase in inflammation and transforms the gut flora and heart too.

### *Foods containing excessive Kashaya Rasa*

When *Kashaya Rasa Darvyas* are consumed in excess they causes the contraction or shrinkage of tissues and dry up the secretions. These foods are responsible for desiccation of Cardiomyocytes. *Kashaya Rasa Darvyas* (Astringents) are usually classified into three groups according to their mode of action: (1) those that decrease the blood supply by narrowing the small blood vessels (e.g., epinephrine and cocaine), (2) those that abstract water from the tissue (e.g., glycerol and alcohol) and (3) those that coagulate the superficial tissue layers into a crust (e.g., metallic astringents, such as calamine or alum). According to Ayurvedic concept excessive use of *Kashaya Rasa Darvyas* are responsible for contraction, *Shoshana* and *Sthambhana Karma*. These are responsible for *Vata Vriddhi* E.g. of *Kshaya Rasa Darvyas* are Chestnut (*Myrica rubra*), food containing Tannic acids.<sup>[6]</sup>

### *Foods containing excessive Tikta Rasa*

When *Tikta Rasa Dravyas* are consumed in excess they are responsible for exsiccation of all the *Dhatus* of body like *Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra*. It develops dryness in different channels of body and heart. It causes the *Dhatu Kshaya* and ultimately vitiation of *Vata Dosha*.

***Adhyashana:*** (Eating before digestion of previous food) *Adhyashana* causes *Agnimaandya* and *Aama*. *Agni* is said to be *Bala* of the body. Decrease in *Agni* causes decrease in pure *Rasa Dhatu*, which leads to lack of *Prinana* (nutrition) of the *Deha*. This decreases *Dehabala* too. Thus, due to decreased *Agnibala* and *Dehabala*, diseases become difficult to treat.

***Srama:*** In a healthy practice exercise in moderate quantity is beneficial for the body while Sternous exercise for long duration results in exhaustion and production of free radicals, which are responsible for many cardiovascular disorders. All these activities results in vitiation of *Vata Dosha*. According to

Ayurvedic texts *Ativyayam* is responsible for many ailments like dyspnoea, Coagulopathies which are similar to cardiovascular disorders.

**Vegadharana:** when a person suppress the natural urges like *Shwas, Kasa, Kshavathu* they are responsible for vitiation of *Vata Dosha* and brought the pressure changes in the circulation. Results in different *Hrudya Roga*.

**Abhigata:** Direct injury to the thoracic cavity or indirect injury through the blood vessels in the form of high blood pressure or thrombus or embolism or any inflammatory process in the cardiac muscles results in severe cardiovascular pathologies.

**Ativirechana:** *Virechana* is a common term for both *Vamana* and *Virechana*. When performed in excess are responsible for severe dehydration and hypovolemia. This causes *Kshaya* of *Apa Dhatu* and vitiation of *Vata Dosha*, ultimately results in *Hrudya Roga*.

**Ati Chinta:** Excessive stressful activities are also a leading cause for heart diseases. *Chinta* results in *Rasakshaya* and causes *Shoshana* of *Apa Dhatu*. High levels of cortisol from long-term stress can increase blood cholesterol, triglycerides, blood sugar, and blood pressure. These are common risk factors for heart disease. This stress can also cause changes that promote the build-up of plaque deposits in the arteries.

#### Other factors;

**Medo Roga and Prameha:** Adiposity and diabetes are two important risk factors of Ischemic Heart Diseases. Adiposity or *Medo Roga* may be *Sahaja* or it may be cause by over nutrition, sedentary life style, bad sleeping habits like excessive day sleep and due to other psychosocial factors. A large number of diseases have been classified in Ayurveda to be caused by over nutrition (*Santarpanajanya*). Ayurveda has emphasized the conversion of excessive sweet *Amarasa* into *Meda Dhatu* due to it's *Sneha* property and these substances also induced to *Prameha*.<sup>[7]</sup>

**Vitiated Rakta Dhatu:** Blood may be vitiated by taking excessive *Viruddha, Snigdha, Guru*, food and by day sleep, which may give rise to *Agnimandya*.<sup>[8]</sup> Vitiation

of *Raktadhatu* directly results in *Hridyaroga* as its seat for origin of *Hrudya*.

#### Hrudya as a seat of Sadhaka Pitta, Avalambaka Kapha and Vyana Vayu

This 'Hrudaya' is the special seat of *Sadhaka Pitta, Avalambaka Kapha* and *Vyana Vayu*. Concept of *Sadhaka Pitta* appears to be psychophysiological as it enables to achieve one's *Manoarth* like *Dharma, Artha, Kama* and *Moksa*, by dispelling the *Kapha* and *Tamas* of *Hrdaya* and thus, enables *Hrdaya* to perceive things clearly. This may be cytochrome C, a type of haemoprotein which takes part in tissue respiration. A reduction of this substance in heart may lead to anoxia and in consequence the weakening and deterioration of this organ. *Avalambaka Kapha* seems to be the protein content of intracellular and extracellular fluid system of the body, which attributed to support *Hrudaya* when it mixed with *Anna Rasa*. *Vyan Vayu* have similarity with hydrostatic pressure produced by contraction of heart, with the force of *Vyan Vayu Rasa* circulates to entire body (*Rasasamvahanodyatah*).<sup>[7]</sup>

#### Hrudya Roga Lakshana

General symptomatology of *Hridrogas* has been mentioned only by *Caraka*. In the 26th chapter of *Cikitsa* he observes

*Vaivarnya Murcha Jwara Kasa Hikka Swasasya Vairasya Trisha Pramohah*

*Chardhih Kaphotklesha Rujo Arucisca Hridrogajah Syuh Vividhah Thathonye*<sup>[9]</sup>

- *Vaivarnaya* (discolouration; e.g., pallor, cyanosis and flushing)
- *Moorcha* (syncope)
- *Jwara* (increase body temperature)
- *Kasa* (cough), *Shwasa* (difficulty in breathing) and *Hikka* (Hiccoughs), *Vairasya* (distaste), *Trushna* (thirst) and *Pramoha* (drowsiness)
- *Vaman* (vomiting), *Utklesh* (nausea) and *Aruchi* (loss of Appetite)

Commenting on this verse *Cakrapani* has made an interesting observation. The usage 'Hridrogaja'

according to him refers to the signs and symptoms that appear in a person who has already been afflicted by the disease. Hence, he considers them as complications of *Hridroga*.

## DISCUSSION

In *Ayurveda*, *Hrudaya* is considered under *Trimarma* and *Dasha Prana Ayatana* which duly signifies the importance of this organ in causation of grave diseases.<sup>[10]</sup> As per *Satpathbrahman* and *Brihadaranyak* "*Hridaya*" is derived from three verbs. "*Hrun*" which means to abduct, "*Dad*" which means 'to donate' and "in gatou" self-generated rhythmicity for contraction and relaxation.

Among the five types of *Hridroga* described, in *Vatika* variety *Ayurveda* seems to have conceived the disease entity that comes under Ischemic Heart Disease. None of the other Cardiac afflictions seem to have been described under *Hridroga*. It seems that a few of the presenting features based on this Acute/important/predominant nature have been described *Vatika Sotha* and *Swasa*. It looks as though pain dominating heart disease is conceived as *Hridroga*. When oedema is found to be the main presenting feature it is kept under *Vatika Sotha* and when *Dyspnoea* is the main symptom it is described as *Swasa*.<sup>[11]</sup>

Regarding *Samprapti* of disease all the above mentioned *Nidana* causes *Mandagni*, *Mandagni* results in formation of *Ama* (undigested toxic material). This vitiated *Rasa* when mixes with *Vayu* it causes *Ruja* (Pain) and when it mixes with *Pitta* and *Kapha* it causes *Srotorodha* thus, obstruction of *Prana Vayu* and *Hrda Badha* (Ischemia).

Regarding pathogenesis only few sentences are on record in the available *Ayurvedic* literature and two types of pathogenesis of Cardiac diseases is found. One deals with derangement of *Rasa* thus causing disturbance in the nutrition of *Hrdaya* and then manifestation of different types of pain in the precordial region. Second type describes any organic change in the cardiac structure with the formation of nodules, distortion of normal structure, formation of a

space with accumulation of fluids (*Kleda*). This all causes growth of organisms in this area and thus severe pain and complications in the cardiac function.

## CONCLUSION

*Vatika* variety *Ayurveda* seems to have conceived the disease entity that comes under ischemic heart disease. All the *Aharaj* (*Ati Usna*, *Guru*, *Kasaya*, *Tikta sevana*, *Adhyashana*) *Viharaj* (*Srama*, *Vegadharana*, *Abhigata*, *Ativerechana*) and *Mansik Nidana* (*Cinta*, *Bhava*, *Trasa*, *Mada*) are responsible for 3 type of mechanism by which *Hrudyarogas* are developed, these are *Agnimandya*, *Vata Prakopa* (vitiating of *Vata Dosh*) and *Dhatu Kshaya*.

## REFERENCES

1. Athavale V.B. 1st ed. Chaukhamba Sanskrit Pratishthan; 1999. Cardiology in ayurveda. [Google Scholar]
2. Sastry J.L.N., Nisteswar K. 1st ed. Chaukhamba Sanskrit Pratishthan; 2014. Ayurvedic management for heart diseases. [Google Scholar]
3. Charaka Samhita, Sutra Sthana, Kiyantashiraseeyam *Adhyayam*, 17/06. Available on <https://niimh.nic.in/ebooks/ecaraka>
4. Sushruta Samhitha, Uttara Tantra, Hrudyaroga pratishedham, 43/05. Available from: <http://niimh.nic.in/ebooks/esushruta>.
5. Madhav nidana, Madhukosha teeka, Hrudroga nidanam 29/01
6. Available at <https://niimh.nic.in/ebooks/madhavnidana>
7. Britannica, The Editors of Encyclopaedia. "astringent". Encyclopedia Britannica, 2 Apr. 2020, <https://www.britannica.com/science/astringent>. Accessed 25 November 2021
8. Mamgain P, Singh RH. A critical study of the concept of iaschaemic heart disease in ayurveda. *Anc Sci Life*. 1993 Jul;13(1-2):102-10. PMID: 22556635; PMCID: PMC3336546
9. Caraka Samhita Sutra Sthana, Vidhishonitiya *adhyaym*24/8,13. Available on <https://niimh.nic.in/ebooks/ecaraka>
10. Caraka Samhita Chikitsa Sthana, Trimarmiyam Chikitsa *adhyaym* 26/78. Available on <https://niimh.nic.in/ebooks/ecaraka>

11. Das Tripti, Chakraborty Swapan Kumar, Analytical Study of Heart in Ayurveda, [https://www.ijrrjournal.com/IJRR\\_Vol.5\\_Issue.11\\_Nov2018/Abstract\\_IJRR001.html](https://www.ijrrjournal.com/IJRR_Vol.5_Issue.11_Nov2018/Abstract_IJRR001.html)
12. Murthy, A.R.V. & Singh, RH. (1993). Ayurvedic concept of hridroga its present relevance. Ancient science of life. 12. 403-13.

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