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Review Article

# PREVENTION OF CARDIOVASCULAR SYSTEM {HRIDROG} - AN AYURVEDIC REVIEW

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#### **ABSTRACT**

The development of human being brings a complementary package of burden of many new and non-communicable diseases. These diseases are now a days observed in very young age also. There are many noncommunicable diseases in which cardio vascular diseases are tremendously increasing in our society due to change in the diet pattern, lifestyle and environment conditions. They are also known as chronic diseases. Cardiovascular diseases or hridrog is one of them. Although there are many advanced techniques to cure such diseases and live life further but these techniques are not pocket friendly to every human being. So as one correctly said, "Prevention is better than cure", in the text of Ayurveda there are no. of drugs, yogas, pathya and

apathy, dincharya followings which have wonderful prevention and curative effect on cardiac diseases. Furthermore, the good health is required for everyone so this article explains how hridrog resembles with CVS diseases and how Ayurveda helps in its preventive and management.

**KEYWORDS:** cardiovascular disease, hridroga, pathya apthya.

### INTRODUCTION

One cannot ignore this deadly diseases, the group of four diseases which mainly include cardiovascular diseases, cancer, chronic respiratory diseases and diabetes. All these diseases are equally deadly but among all these cardio vascular diseases are the no. 1 cause of death in the world. Due to change in concept of diet and life style, the incidence of cardi- ovascular diseases and diabetic mellitus is in- creasing at a high rate. In the 21th century diet pattern and life style of populations across the world have been changed dramatically. Change in life style & diet pattern, lack of physical exercise, increase mental stress, environmental changes has increases the incidence of this disease. Cardiovascular disease mainly starts with angina (a type of chest pain caused by reduced blood flow to the heart). It is estimated that 90% of CVD is preventable. From the ancient time *Ayurveda* is known for serving the society by cure & prevention (Swasthya rakshanam) & this concept is ex- actly applicable on the cure and prevention of the cardiovascular diseases. Ayurveda teaches & enriches us such a good diet and wonderful living pattern that are very effective in the prevention of cardiovascular diseases. If we give importance to Ayurveda it is helpful in maintaining good health for every person. There are no of preventive (Pathya Apathya), curative aspects, medicinal drugs and preparations described in the Ayurveda having wonderful effect on these diseases. In order to treat any disease we must do nidan parivarjan. We should avoid stressful activities, and should take proper diet, exercise daily. Ashta ahaar vidhi visheshayetan has major role in prevention of cardiovascular disease. Ahara, vihar and yoga plays major role in prevention of diseases. Treatment modalities include panchkarma like virechan and basti, external therapies like abhyanga, shiro dhara, hrid basti, and internal medications like arjuna, shrung and many kashya rasa and amla rasa etc. which regulates the blood flow and provide strength to the heart. The person's satva also depends on the bala of hridya as hridya is also said as site of mana.

### Hridya

According to Sushruta Samhita *Hridya*, similar to *pundarika* (lotus bud) is facing downwards; it opens when the person is awake and closes when he is asleep.<sup>[1]</sup>

According to Madhav Nidan heart is a vital organ in the body; hence any disease affecting this organ is of a serious nature.

#### Hridaroga

*Nidan* (etiology)

According to Charak Samhita<sup>[2]</sup>

### *Hridaroga* is caused by following factors

- Excessive exercise;
- Excessive use of articles having *tikshna* (sharp) attributes;
- Administration of purgation and emetic therapies, and enema in excess;

- Excessive worry, fear and stress;
- Emesis, *ama* (product of improper digestion and metabolism), and suppression of the manifested natural urges;
- Emaciation and
- Trauma (physical and mental). According to Madhav Nidan [3]
- Excessive Consumption of hot and heavy diet.
- Excessive Consumption of diet having *Kashaya* and *tikta rasa*.
- Excessive Fatigue, trauma and stress.
- Suppression of natural urges.

### **Types**

Five types have been described.

- Vataj;
- Pittaj;
- Kaphaj;
- Tridoshaj and
- Krumija

### Samprapti (pathogenesis)<sup>[4]</sup>

High calorie and saturated lipid rich diet + Sedentary lifestyle  $\rightarrow$  *Mandagni* (low digestive power)  $\rightarrow$  *Rasa dushti*  $\rightarrow$  *Sama Rasa* (Hyperlipidemia) + *kapha* - *pitta* + *rakta* + *meda*  $\rightarrow$  *Dhamni Prachitya* (Atherosclerosis)  $\rightarrow$  *Strotorodha* (obstruction of artries) + *Vayu*  $\rightarrow$  *Uro Ruja* (chest pain)  $\rightarrow$  *Hridashoola* or *Hridaroga*.

### Samprapti Ghatak

- Dosha Vatadi dosha, Vata pradhan
- Dushya Rasa, Meda
- Adhishthan Hridya
- Strotas Rasvaha

## Lakshan (Symptoms) According to Charak Samhita<sup>[5]</sup>

- Discolouration of the skin
- Fever, cough, hiccup, asthama
- Bad taste in mouth
- Morbid thirst

- Unconsciousness
- Vomiting, nausea, pain, anorexia

The modern correlation of various symptoms is present below<sup>[6]</sup>

Table no.1: Modern correlation.

Samanya lakshan	Modern	
(Clinical feature)	correlation	
Ruja	Pain	
Shwas	Dyspnoea	
Kasa	Cough	
Aasyavairasya	Bad taste	
Trishna	Thirst	
Vaivarnya	Discolouration	
Murcha	Syncope	
Hikka	Hiccough	
Kaphautklesha	Nausea	

Five types of *Hridaroga* are present. Here we will see their modern correlation<sup>[7]</sup>

Samanya lakshan	Modern		
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Hikka	Hiccough		

# **Etiology of hridrog**<sup>[8]</sup>

Dietary related

Excess of dietary regimen like ushna, tikshan, guru, ruksha, and kashya properties.

Life style related

Excessive physical exercise and activity (*Vyayama*).

Excessive enema (*Basti*), purgation (*Vire- chan*), emesis (*Vamana*). Suppression of natural urges (*vegadhaaran*).

Abhighatajanya (physical & mental trauma).

Excessive stress like chinta, shoka, raag, krodh.

### Types of *Hridroga* and their correlation with modern view

- 1. Vataja Hridroga Due to the Shoka (sad mood), Upashaya (fasting), Ativyayam (excessive exercise), Rooksha, Shushka and Alpa aahar Vata aggravates and produce pain in the heart region. <sup>[9]</sup>Shula (pain) is also a common symptom of Vata ja Hridaya roga. In angina also severe pain occurs. On the point of view of pain Vataja Hridroga can be correlated with angina. Due to Ruksha & Laghu Guna Va- ta aggravates & cause hardness or calcifi- cation of arterial wall. i.e Arteriosclerosis can be correlated with the Vataja Hridaya roga.
- 2. *Pittaja Hridroga* Due to *Ushna*, *Amla*, *Lavana*, *Kshara*, *Katu Rasa's* food and excessive use of alcohol *Pitta Dosha* aggra- vates and produce burning heart, bitter taste, vomiting (*Vamana*), thrust (*Trishna*), *Murcha* (syncope), *Sweda* (sweating) in the body. <sup>[9]</sup> As per modern view we can correlate with pericarditis, inflammatory disorder of heart.
- 3. *Kaphaja Hridroga* Due to excessive in- take of food, *Snigdha*, *Guru* food,Lack of physical work *Kapha* aggravates and produce the symptoms of *Kapha dosha* in heart region like heaviness & numbness in the chest, anorexia. [9] *Kaphaja Hridroga* Can be correlated with the myocardial infarction because in myocardial infarction also feels heaviness in chest.
- 4. *Sannipataja Hridroga* It produces due to *Vata*, *Pitta & Kapha &* in produce the symptoms of all three *dosha* at the same time. <sup>[9]</sup> *Sannipataja Hridroga* can be cor- related with acute chest pain.
- 5. Krimija Hridroga- If pt suffering from kaphja hridya roga takes, Tila, Guda then Rasa dhatu dusthi Rasa leads to granthi utpatti In this granthi Krimi arrives and spread in all region of heart & produces severe cutting pain, itching etc. It may also lead in death & Acharya Charka also advice to do early management in this condition. Krimija Hridroga can be correlated with myocardial infarction because in case of myocardial infarction there is severe pain occur & required urgent management like as Krimija Hridroga.

### Prevention of *Hridaroga*

Aacharya Charak has given following message for prevention of *Hridaroga*<sup>[11]</sup>: Those who want to preserve *ojas* and maintain heart and the vessels attached to it in good condition should avoid such of the factors as may lead to unhappiness (mental worries). Diets and drugs which are conductive to the heart, *ojas* and channels of circulation should be taken.

Tranquility and wisdom should be followed meticulously for this purpose.

Avoid various risk factors like smoking, alcohol consumption and stress.

Brisk walking and certain physical activities should be done for weight loss.

- 1. Avoidance of Manas hetu
- 2. Diet & life style modification
- 3. Rasayana therapy for Hridroga- Brahm Rasayana, Amalaki Rasayana, Shilajeet Rasayana, Agastaya Haritaki, Chayavanprasha Rasayana<sup>[12]</sup>

### Management of Cardiovascular Diseases as per Ayurveda<sup>[13]</sup>

- 1. Nidan parivarjana (eg- change in diet & life style)
- 2. Samshodhana therapy
- Vamana Karma (only mridu Vamana in Vataja & Kaphaja Hridroga)
- Virechana Karma (Benificial in Hyparten- sion, Hyperlipidemia & Krimija Hridroga & mridu Virechana in Pitta Hridroga)
- Basti (Beneficial in Obesity, Hyperlipidemia, Hypertension)
- Snehan, Sevadan, Shirodhara
- **3.** *Saman* Therapy
- Hridya Mahakashya Amra, Amarataka, Lakucha, Karmarda, Vrikshamla, Amlave- tas, Kuvala,(Badi Ber) Badra, Dadima, & Matulunga.
- Beneficial formulation in *Hridaroga*-<sup>[13]</sup>
- a) Rasa- Hridyarnawa Rasa, Nagarjunabhra Rasa, Kalayansunder Rasa
- b) Churna- Haritakyadi churna, Pipali chur- na, Pushkermul churna
- c) Ghrita—Haritakyadi Ghrita, Arjun Ghrita, Pipplyadi Ghrita
- d) Vati- Prabhakara Vati, Shanker vati, Hri droga vati
- e) Kwatha- Arjunatwak Kwatha, Shunti Kwa- tha
- f) Bhasma /Pishti- Akika Bhasma, Akika Pishti, Mukta Pishti

Dietary changes<sup>[15]</sup>

Serve more vegetables, fruits, whole grains, and legumes.

Choose fat calories wisely by.

- Limited saturated fat (found in animal product)
- Avoid artificial trans fat as much as possible.

 When using added fats for cooking or baking, choose oils that are high in monounsaturated fat (for example, olive and peanut oil) or polyunsaturated fat (such as soybean, corn, and sunflower oils).

Serve variety of protein rich foods: lean meat, fish and vegetable sources of protein.

Limit cholesterol: avoid high fat dairy products, red meat.

Serve right kind of carbohydrates: include foods like brown rice, oatmeal, quinoa, and sweet potatoes to add fiber and help control blood sugar levels. Avoid sugary food.

Eat regularly: don't skip your meals.

Cut back on salt: too much salt can cause high blood pressure.

Encourage hydration: drink 1 to 2 litres of water daily as staying hydrated makes you feel energetic and eat less.

### Diet regimen (pathya apathya) for Hridroga<sup>[16]</sup>

Pathya Aahar	Apathya Aahar
Puraanraktshali, Jaangal pshupakshiyo ka	
maasrasa,	Bheda ka Dudh, Nadi ka Jla, Usna,
Munga, Kultha ka Yush, Khandayush, Aama,	Tikshna, Gurupakee, Kashaya Aahar
Anaar, Amal- taash, Nayi Muli, Shunti,	ka Sevan, mahuaa etc
Kelaa, Aakesh ka Jla, Parwal etc	

### Pathya Apathya Vihara for Hridroga

Pathya Vi	hara			Apathya Vihara		
Sevadan,	Vamana,	Basti,	Virechana,	Tarishna, Vamana,	Mutra,	Adhovayu,
Vishraama, Laghna			Kash, Ashru Vega			
Etc				dhaaran karna, Daatun karna etc		

Various yoga asanas which can be done to prevent

### Hridaroga<sup>[17]</sup>

- Breathe deeply: it is an effective tool to help manage hypertension
- Sukhasana (easy pose) Meditation
- *Tadasana* (mountain pose)
- *Uttanasana* (standing forward bend)
- *Padangushtasana* (big-toe pose)
- Adho mukha svanasana (downward dog)
- Janu sirsasana (head to knee forward bend)
- Setu bandha savangasana (bridge pose)
- Sputa padangushthasana (reclining hand to big toe pose.

#### **DISCUSSION AND CONCLUSION**

We all know that the heart is one of the most vital organs in the body. The heart is an important seat (primary location) of vata, pitta, kapha, and ojas, and it plays a crucial role in a number of internal bodily *channels* (*srotamsi*). The increase incidence of the cardiovascular diseases all over the world is due to the faulty diet pattern & life style, Obesity, & Diabetes mellitus. Uncontrolled hypertension & Hyperlipidemia are the common risk factors for the cardiovascular diseases. Role of Ayurveda in the prevention and cure of the cardiovascular diseases is very systematic and good manner. In Ayurveda Ahara, Vihara, Dinacharya, Ritucharya, Yoga, Rasayana are described which have good role in prevention & cure of the cardiovascular diseases. The heart is an important crossroads among pathways through the subtle body (nadis), and it is intimately connected to the heart chakra as well. So, we should protect our heart by simply following healthy lifestyle, avoiding stress, and eating right and practicing yoga daily. Many forms of heart disease can be prevented or treated with healthy lifestyle choices. Not only cardiac diseases but many diseases can be treated by following dincharya, rutuachrya and pathya apthya. In text of Ayurveda there are number of drugs, formulation are described which have very effective result on the cardiovascular diseases as mentioned above in details. One in every four deaths occurs as a result of heart disease. So, this is a highly alarming situation and we can't ignore this lethal disease. In our samhitas to minimize the disease various yoga asanas we can perform is included in this article. The researches on the cardio protective drugs mentioned above have an effective role in the cardiovascular diseases. The prevention and management can be done successfully in Ayurveda. Moreover Ayurvedic treatments are safe & affordable by everyone.

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