

## Study of Hetuvimarsha of Hridroga

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**Abstracts: Introduction:** Cardiovascular diseases are rising as a newer epidemic in developing countries like India. In 2010 cardiovascular diseases accounted for approximately 38 percent of all deaths. This problem is heading so dynamically that preventive medicine will play a major role than that of specific treatment for the disease. Ayurvedic concept of *Hetuvichar* is very important aspect of treatment of *Hridroga* as it is said in *Charaka vimanasthana 7-*

*Sanshodhanam sanshamanam nidanasya cha varjanam |*

*Etavadbhishaja karya roge roge yathavidhi ||*

'*Nidanparivarjana*' is also important part of treatment and prevention of disease. So it is very important to know the etiological factors of any disease because prevention is better than cure and most of Heart diseases can be prevented. **Aim And Objective:** To study *Hetus* (Etiological Factors) of *Hridroga* according to Ayurvedic classical texts with special reference to Cardiovascular Diseases. **Material And Methodology :** 40 Patients were included in study. Detailed history of *Hetus* was obtained with the help of case record format. Obtained data was tabulated and Statistical analysis was done. **Result:** In *Ahariya hetus Tikta rasa sevan* P value is 0.010, *Kashay rasa* P value is 0.005, *Snigdha har sevan* P is 0.026 and *Paryushit ahar* P value is 0.010. In *Viharaj hetus Avyayam* P value 0.007 and *Atichankramana* have P value 0.050. **Conclusion:** This study confirms presence of classical causative factors of *Hridroga* in CVD patients. [Mantra M NJIRM 2014; 5(3) :108-115]

**Key Words:** *Hridroga*, Cardiovascular diseases, *Hetus* of *Hridroga*.

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**Introduction:** Cardiovascular diseases (CVD) are one of the leading causes of deaths in developed as well as developing countries. In 2010 CVD accounted for approximately 38 percent of all deaths. CVD has been the number one killer in the developed countries. Rate of CVD increased so rapidly between 1940-1967 that WHO announced it most serious epidemic.

As heart is one of the important *Marma* explained in *Ayurvedic samhitas*, it is the seat of important body constitutes like *Vyana vayu*, *Sadhak pitta* and *Avalambaka kapha* and *Ojas*. Many important and involuntary functions of body are regulated by heart. Any abnormality or affliction of normal heart physiology leads to morbid conditions or ultimately to death. Ayurvedic concept of Etiology (*Hetuvichar*) has potential to provide solution to rising cause of cardiovascular diseases. Consideration of *Hetu* (causative factor) is an important aspect, which could be useful in prevention, diagnosis and treatment of *Hridroga*; Though diet & lifestyle related risk factors are known, some of the Ayurvedic aspects like *Viruddha ahaar*, *Ajirnashana*, *Pramitashan*, *Guruahar*, *Snigdha har* etc. need to be considered.

Therefore it is necessity of time to understand *hetuvichar* of *Hridroga* according to various classical texts and contribute to prevention of *Hridroga* by holistic approach.

### **Hridaya Nirukti- (Etymological Interpretation):**

The word *Hridaya* is derived from basic *Sanskrit* *Dhatu- Hru+ Da+ Eena*

- *Hru-Hruja* - Means 'to receive' i-e Heart is receiver of the blood and nutrients from rest of the body.

- *Da- Dane* - Means 'to distribute' i-e Heart circulates pure blood and nutrients to body parts.

- *Ee- Eeno gatyarthe* - Means 'to move i-e Heart is continuously functioning/moving organ.

**Hridroga-** "*Dooshayitva rasam doshah viguna hridayam gatah| Hridi badha prakurvanti hridrogam tam prachakshate ||*"

*Madhav nidan Hridroga:* Vitiated *Doshas* get lodged in *viguna* (with abnormal qualities) *rasa dhatu* & vitiate the *rasa dhatu*. This vitiated *rasa dhatu* embeds into heart which ultimately afflicts

the heart and results into impairment of heart and resulting in the disease *Hridroga*.

**Hetu( Etiological Factors):** Causative factors which aggravate the *Dosha* and leads to disease are called as *Hetu*. *Nimitta, Ayatana, Pratyaya, Utthaana, Karan* and *Nidan* are synonyms of *Hetu*. In classical texts various *Hridroga Hetus* are described. For this study all directly mentioned classical causative factors are considered. Many other causative factors are scattered in classical texts.

Heart is vital organ in the body; it has close correlation with *Rasavaha srotas* and *Pranavaha srotas*, as site of origin (*Srotomul*). So causative factors of both these *srotodushiti* considered. *Charaka* has some other causative factors in *Charaka Sutrastahana* 17 and *Vimanasthana* 5; which can also be included in *Hridroga Hetus*. These *Hetus* comprises *Rathakshobha* (Irritation due to excessive travelling), *Ati chankramana* (excessive walking), *Divaswap* (Nap in day) and *Ativyavay* (excessive sexual intercourse).

Suppression of forceful stimulation for urges (*Vegadharana*) of *Adhovat* (Flatus), *Shakrut* (Defecation), *Udgar* (Belching), *Trishna nigraha* (Thirst), *Kasa* (Cough), *Shrama Shwas* (Exercise induced breathlessness), *Ashru* (Tears), *Shukra* (Eructation) and can lead to *Hridroga*. *Sushruta* has clearly mentioned that suppression of most of the urges develop *Udavarta*, which can further leads to *Hridroga*.

**Hetu Classification:** As per involvement of causative factors in disease development process, they are divided into following manner-

#### Classification-1

- *Sannikrishta* (Immediate cause of disease)
- *Viprakrishta* (Distant cause of disease)
- *Vyabhicharee* (Factor not potent enough to cause disease)
- *Pradhanik* (Prime cause of disease)

#### Classification-2

- *Asatmendriyarth Sanyog* (Unwholsome contact with senses)
- *Pradnyaparadh* (Intellectual blasphemy)

- *Parinaam* (Seasonal blasphemy)

#### Classification-3

- *Vyadhi Hetu* (Factors associated with disease)
- *Dosh Hetu* (Factors vitiating humours in the body)
- *Ubhay Hetu* (Factors associated with disease & vitiating humours in body)

#### Classification-4

- *Vyanjak* (Precipitating/Aggravating factors)
- *Utpadak* (Developing factors)

#### Classification-5

- *Bahya* (External factors)
- *Abhyantar* ( Internal factors)

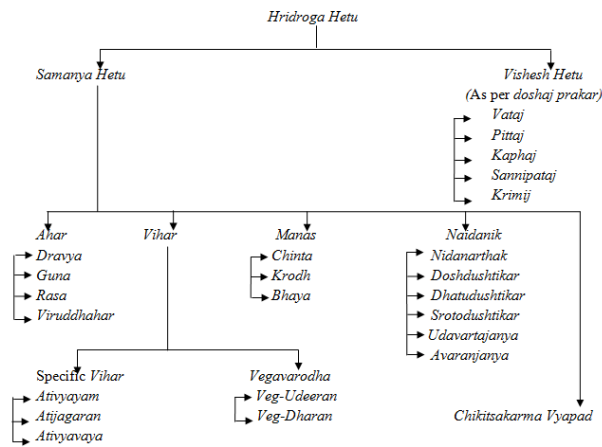
#### Classification-6

- *Vyapad* (Complication of treatment)
- *Nidanarthakar* (Result of another disease)

#### **Causative Factors Of *Hridroga* Are Considered In Following Related Aspects-**

- Classical causative factors of *Hridroga vyadhi*
  - ❖ *Samanya Hetu*
  - ❖ *Vishesh Hetu*
- *Ahar* related factors-
  - ❖ *Viruddha ahaar* (*Hrid Viruddha*)
  - ❖ *Dravya*
  - ❖ *Guna*
  - ❖ *Rasa*
  - ❖ *Vidhi* (*Vidhi Visheshayatanani*)
- *Vihar* related factors-
  - ❖ Specific *Vihar*
  - ❖ *Vegavarodha*
- *Manas Hetu*
- *Nidanarthakar Hetu*
- *Samprapti Ghatak* related *Hetu*
  - ❖ *Dosha Hetu – Prakop, Avritatva* etc
  - ❖ *Dhatu dushti* related *Hetu*
  - ❖ *Srotas Dushti*
- *Rasavaha Srotas*
- *Pranavaha srotas*
  - ❖ *Avayava dushtikar Hetu*
  - ❖ *Paratantra Hridroga*
  - ❖ *Chikitsa karma vyapad*
  - ❖ *Agantu Hetu*
- *Abhighata*

## Classification Of Hridroga Hetu:



Samanya Hetu: As Hridaya is a mulasthan of Pranavaha and Rasavaha srotas causes affecting them are also responsible for Hridroga. “Kshayat sandharanat raukshyat vyayamat kshudhitasya cha | Pranavahini dushyanti srotamsi anyaischa darunaihi ||” Charak vimansthan 5/10

“Gurusheetamatisnigdhamatimatram samashnatam | Rasavahini dushyanti chintyanam cha atichintanat ||” Charak vimansthan 5/13

Samanya hetus of Hridroga according to various classical texts- “Shokopavasvyayamruksh ashushkulpabhojanaihi | Vayuravishya hridayam janayutyuttamam rujam ||” Charak sutrasthan 17/30

“Vegaghatoshnarukshannairatimatropasevitaihi | Viruddhadhyashanjeernairasatmaishchapiati bhojanaihi ||” Sushrut Uttartantra 45/3

Vyayamteekshnaativirekabastichintabhayatrasgada tichara | Chardiyamsandharanakarshanani hridroga katruni tatha abhighataha ||” Charak chikitsasthan 26/7

**Ahara Hetu (Dietary Factors) :** Dravya (Groceries)- Under this group, Acharyas mentioned specific Dravyas which might develop particular type of

Hridroga considering the specific attributes Tila sevan (Sesame), Ati Ksheera sevan (Excessive milk consumption), Ati gudasevan ( Excessive consumption of jiggery), Atimadya Sevan ( Alcohol abuse). Guna (Attributes) Ati Rooksha Sevan(Consumption of excessive dry food stuff), Ati Shushka Sevana (excessive dry food stuff), Ati Ushna Sevan(Drug having innate tendency to generate sweating and increase burning sensation), Ati Sheeta Sevana( Attribute cold to touch), Ati Kshar Sevana(Kshar has predominant intense, hot properties; it has irritating action on soft parts of the body), Ati Guru Sevana(Food stuff heavy to digest).

Ahar Matra( Quantity Of Food)-Alpa Bhojana(Consumption of less quantity of food) , Ati Ahar Sevana(Regular consumption of ample quantity of food), Upavasa (Fasting).

Ahar Vidhi (Dietary Habits)- Adhyashana (Repeated consumption of food), Ajeerna Bhojan (Consumption of food before effective digestion of previously consumed food ), Asatmya Bhojana(unwholesome diet),Viruddha Ahar Sevan(Consumption of unctuous food stuff), Hrid Viruddha(Consumption of food against will), Excess intake of Katu(Pungent), Lavan(Salty), Kashay(Astringent) rasa.

Vihar Hetu (Lifestyle Related Factors) Ati Vyayama (Excessive physical exercise), Shrama (Physical activity beyond capacity), Ativyavay (excess of coitus or sexual act), Avyayam (Lack of exercise), Ati Atapa Sevan (Recurrent exposure to sunlight), Rathakshobha (irritation to the body due to vehicle), Atichankramana(Regularly excessive walking), Divasvapa (Nap during day time), Vegadharan(Suppression of urges).

→ Manas Hetu (Psychological Factors) Achinta(Lavish and luxurious lifestyle), Shoka (Sorrowful or miserable state of mind), Atichinta(Excessive stress), Bhaya(Fear), Atikrodha(Excessive anger), Trasa(anxiety or physical irritation).

→ Agantu (External Factors) Abhighata(Injury), Gadatichara(Treatment abuse)

→ Nidanarathakara Hetu ( Factors that leads to a disease and its associated diseases)

- Dosha Hetu ( Factors vitiating three humours of body viz. Vata, Pitta and Kapha)  
 → Dhatu(Constituents related factors)  
 → Avayava dushtakar Hetu(Etiological factors that depravities organs in the body)  
 → Srotas related Hetus (Etiological factors related to vitiation of channels in the body)
- Hridroga as Upadrava(Heart disease as complication)  
 → Udavartjanya Hridroga(Heart diseases due to suppression of urges)  
 → Chikitsa Karma Vyapad(Complication of incorrect treatment)

Vegavarodha (Suppression of urges)	Lakshana (Symptoms)	Reference
Adhovat(Flatus)	Hridgada(Hrid-Heart, Gada-Disease)	A.H.Su 4/2
Shakrut(Defecation)	Hridayasya Uparodha (Obstruction)	A.H.Su 4/4
Udgar(Belching)	Hrid Vibandha(Impediment at Heart region)	A.H.Su 4/9
Trishna nigraha(Thirst)	Hridgada (Heart diseases)	A.H.Su 4/11
Kasa(Cough)	Hrid amaya (Heart diseases)	A.H.Su 4/14
Shrama Shwas (Exercise induced breathlessness)	Hridroga (Heart diseases)	A.H.Su 4/15
Ashru(Tears)	Hridruka (Chest pain)	A.H.Su 4/17
Shukra(Eructation)	Hrid Vyatha (Pain)	A.H.Su 4/20

#### Samanya Hetu Of Hridroga (General Etiological Factors)

Sr No	Hetu	Charak	Sushrut	M.N.	Y.R.	A.S/ A.H.
1	Vyayam(Exercise)	+	-	-	-	-
2	Tikshana Dravya(Intense hot food)	+	-	-	-	-
3	Ativirechana(Excessive purgation)	+	-	-	-	-
4	Chinta(Stress)	+	-	+	+	-
5	Bhaya(Fear)	+	-	-	-	-
6	Trasa( Anxiety/Mental irritation)	+	-	-	-	-
7	Gadatichara(Treatment abuse)	+	-	-	-	-
8	Chardi(Vomiting)	+	-	-	-	-
9	Ama( Toxic material of indigestion)	+	-	-	-	-
10	Sandharan(Suppression of urges)	+	+	+	+	+
11	Karshana(Emaciation)	+	-	-	-	+
12	Aghat(External injury)	-	+	+	+	-
13	Ushna Dravya(Foods hot in nature)	-	+	+	+	-
14	Ruksha Dravya(Dry food stuff)	-	+	-	-	-
15	Viruddhashan(Incompatible food stuff)	-	+	-	-	-
16	Adhyashan(Excessive food consumption)	-	+	-	-	-
17	Sajir nabhojan(Indigestion->Food consumption)	-	+	-	-	-
18	Asatmya(Incompatible food stuff)	-	+	-	-	-
19	Atibhojana(Excessive food consumption)	-	+	-	-	-
20	Atiguru(Food heavy to digest)	-	-	+	+	+
21	Amlapadartha( Sour food)	-	-	+	+	-
22	Kashayarasa(Astringent food)	-	-	+	+	-
23	Tiktarasa(Bitter food )	-	-	+	+	-
24	Atishrama(Excess of heavy work)	-	-	+	+	-
25	Atimaithuna(Excess of Coitus)	-	-	+	+	-
26	Udavarta(Suppression of urges)	+	-	-	-	-

27	Ajirna(Indigestion)	-	-	-	-	+
28	Vyayam(Exercise) after food	-	-	-	-	+
29	Shodhan snehan swedan(Oilation after Panchakarma)	-	-	-	-	+
30	Shodhanottar Vidahi ahar(Spicy food after Panchakarma)	-	-	-	-	+
31	Diwaswap(Nap during day time)	+	-	-	-	-

**Vishesh Hetu( Specific Causative Factors):** Under this type we will consider hetus described in the Hridroga chapters in the classical texts.

“Vegaghatoshnarukshannairatimatropasevitaihi | Viruddhadhyashanjeernairasatmaishchapiati bhojanaihi ||”Sushrut Uttartantra 45/3

“Vyayamteekshnaativirekabastichintabhayatrasgad atichara | Chardiyamsandharanakarshanani hridroga katruni tatha abhigataha ||” Charak chikitsasthan 26/7

“Tesham gulmanidanoktaihi samutthanaishcha sambhava | Vaten shulyate atyartha tudyate sfutateeva cha ||” Ashtang hridaynidanasthan 5/39

“Atyushnagurvanna kashayatikta shramabhighatadhyashan prasangaihi | Sachintanairvegavidhaaranaishcha hridamayaha panchavidha pradishtaha ||” Madhav nidan 29

Charaka in Sutrasthana 17 has mentioned hetus according to type of hridroga-

#### Vataj Hridroga:

“Shokopavasvyayamrukshashushkalkapbhojanaihi | Vayuravishya hridayam janayutyuttamam rujam ||”

#### Pittaj Hridroga:

“Ushnamla lavankshar katukajeerna bhojanaihi | Madya krodhatapaishchashu----- ||”

#### Kaphaj Hridroga:

“Atyadanam gurusnigdham achintanam acheshtanam | Nidrasukham chabhyadhikam kapha hridrogakaranam ||”

**Sannipatika Hridroga :** “Hetulakshanasamsargata uchyate sannipatikaha |” Krumij Hridroga-

“Tridoshe tu Hridroge yo duratma nishevate | Tilakshira gudadeeni ---- ||”

Sr No	HETU	Charak	Sushrut	A.S	A.H	M.N
	AHAR HETU					
1	Ati Ushna Annasevan(Excess of hot food stuff)	+	+	-	-	+
2	Ati Ruksha Annasevan(Excess consumption of dry food stuff)	+	+	-	-	-
3	Ati Shushkanna Sevan(Excess consumption of dry food stuff)	+	-	-	-	-
4	Ati Kashaya Sevan(Excess consumption of astringent food stuff)	-	-	-	-	+
5	Ati Tikta Sevan (Excess consumption of bitter food stuff)	-	-	-	-	+
6	Amla Bhojan(Excess consumption of sour food stuff)	+	-	-	-	-
7	Ati Lavan Ras(Excess consumption of salty food stuff)	+	-	-	-	-
8	Ati Katu Ras(Excess of bitter food stuff)	+	-	-	-	-
9	Ksharatiyoga(Excess of irritant food material)	+	-	-	-	-
10	Ati Matra Bhojana(Excessive food consumption)	+	+	-	-	-
11	Viruddhannasevan(Incompatible food stuff)	-	+	+	+	-
12	Adhyashan(Excessive food consumption)	-	+	-	-	+
13	Ajeernashan (Indigestion→Food consumption)	+	+	-	-	-
14	Asatmya Bhojan(Incompatible food stuff)	-	+	-	-	-

15	Upavas(Fasting)	+	-	-	-	-
16	Alpabhojan(Consumption of less quantity of food)	+	-	-	-	-
17	Gurubhojan(Food stuff heavy for digestion)	+	-	-	-	+
18	Snigdhanna Sevan(Oily food)	+	-	-	-	-
19	Tilakshirgudadisevan(Sesame,milk,jiggery)	+	-	-	-	-
20	Bubhukshit avastha shitambu sevan(Consumption of cold water while hungry)	-	-	+	+	-
21	VyadhiKarshit →Aharsevan (consumption of excess of food while emaciated due to disease)	-	-	+	+	-
22	Bhojanottar Kshubdha(Heavy work after food intake)	-	-	+	+	-
23	Atimadyapan(Alcohol abuse)	+	-	-	-	-
B	VIHAR HETU					
24	Vega dharan(Suppression of urges)	-	+	+	+	+
25	Chardi Udiran(Suppression of vomiting)	-	-	+	+	-
26	Ativyayam(Excess of exercise)	+	-	-	-	-
27	Achesta(Lavish lifestyle)	+	-	-	-	-
28	Ati shram(Excess physical work)	-	-	-	-	+
29	Ati nidra(Excess of sleep)	+	-	-	-	-
30	Atap Sevan( Over sun exposure)	+	-	-	-	-
C	Chikitsa Vishesh HETU					
31	Karmatichar(Treatment abuse)	+	-	-	-	-
32	Gadatichar(Complication of treatment)	+	-	-	-	-
33	Sneha Swedan Virahit Shodhan(Panchakarma without prior karmas like oliation))		-	+	+	-
34	Teeksha Virechan Basti(Strong purgation & enema)	+	-	-	-	-
D	MANAS HETU					
35	Chinta (Stress)	+	-	-	-	+
36	Bhaya (Fear)	+	-	-	-	-
37	Trasa(Anxiety)	+	-	-	-	-
38	Krodha(Anger)	+	-	-	-	-
39	Shok (Depression)	+	-	-	-	-
40	Achintan (Lavish lifestyle)	+	-	-	-	-
E	AGANTU					
41	Abhighata(External injury)	+	-	-	-	+

**Material & Methods:** 40 patients suffering from Cardiovascular diseases.

**Inclusion Criteria:** Patients of Hridroga vyadhi according to Ayurvedic textual criteria.

**Age group:**-Above 40 years; irrespective of sex, religion, economic status, marital status, occupation.

**Exclusion Criteria :** 1. Terminally ill patients with multiple diseases. 2. Patients who need emergency medication. 3. Patients affected with HIV, Tuberculosis, and Malignancy were excluded.

Every patient was examined clinically according to standard case record format. Prior informed written consent was taken from each and every patient. Detailed history of Hetus was taken with the help of specially designed case record format.

**Observations:**

Sr.No.	Hetu (Ahar)	Percentage	Sr.No.	Hetu (Ahar)	Percentage
1	Madhur rasa	30%	14	Snigdharahar	37%
2	Amla rasa	33%	15	Ajirnahar	44%
3	Lavan rasa	42%	16	Adhyashar	21%
4	Katu rasa	88%	17	viruddharahar	57%
5	Tikta rasa	29%	18	Vidahi	51%
6	Kashaya rasa	16%	19	Pramitashar	49%
7	Atiushna	40%	20	Paryushit	56%
8	Ruksha	56%	21	Madyapan	23%
9	Shushka	33%	22	Dadhisevan	33%
10	Alpa	42%	23	Ushapan	14%
11	Upvas/Langhan	26%	24	Tila	0%
12	Guruahar	43%	25	Guda	2%
13	Sheet	12%	26	Dugdha	16%

Sr.No.	Hetu(Vihar)	Percentage	Sr.No.	Hetu(Vihar)	Percentage
1	Avyayam	74%	6	Ekasthanasan	23%
2	Ativyayam	14%	7	Atapsevan	14%
3	Achankraman	72%	8	Acheshta	21%
4	Atichankraman	14%	9	Divaswap	23%
5	Atishram	23%	10	Nidradhikya	16%

Sr.No.	Vegavarodh	Percentage	Sr.No.	Vegavarodh	Percentage
1	Mala	70%	4	Ashru	5%
2	Mutra	77%	5	Nidra	2%
3	Apan	44%	6	Kshudha	2%

Sr.No.	Manas Hetu	Percentage	Sr.No.	Manas Hetu	Percentage
1	Chinta	91%	4	Shoka	40%
2	Achinta	2%	5	Khinnata	35%
3	Krodha	56%	6	Bhaya	19%

Sr.No.	Vyasan hetu	Percentage	Sr.No.	Vyasan hetu	Percentage
1	Tea	65%	6	Smoking	21%
2	Coffee	22%	7	Bidi	12%
3	Alcohol	30%	8	Pan	7%
4	Tobacco	35%	9	Supari	5%
5	Mishri	21%	10	Tadi	7%

**Discussions** : Classically mentioned etiologacal factors like Viruddharahar (57%), Guruahar(43%), Snigdharahar (37%), Katu rasa(88%), Tikta rasa(29%), Kashaya rasa(16%),Paryushit ahar(56%), Avyayam(74%), Achankraman(72%), Chinta(91%), Krodha(56%), Madyapan(30%). is found in most of the patients. In Ahariya hetus Tikta rasa sevan P value is 0.010 and Kashaya rasa P value is 0.005,

Snigdharahar sevan P value is 0.026 and Paryushit ahar P value is 0.010 (P<0.05) therefore all these factors have correlation with Hridroga.

In Viharaj hetus Avyayam have P value 0.007 and Atichankramana have P value 0.050 both have P value less than 0.05 therefore both plays important role in the development of disease.

In Vyasana hetu Tea (65%), Alcohol(30%), Smoking(21%), Tobacco(35%) are vyasana hetus found in patients.

In Vataja Hridroga etiological factors found are excessive Katu rasa, Tikta, Kashaya rasa sevan, Ruksha ahar, Shushka ahar, Alpahar, Ativyayam, Atichankraman, Atishram, Vegavarodh, Chinta, Shoka, and Bhaya.

In Pittaja Hridroga etiological factors found are excessive Katu rasa, Amla rasa, Lavan rasa sevan, Viruddhahar, Vidahi ahar, Atiushna ahar, Dadhisevan, Madyapan, Atapasevan and Krodha.

In Kaphaja Hridroga etiological factors found are excessive Madhur rasa, Guru ahar, Sheet ahar, Snigdha ahar sevan, Avyayam, Achankraman, Eksthanaan and Nidradhikya.

**Conclusion:** This study confirms presence of classical causative factors of Hridroga in CVD patients. In Ahariya hetus Mamsashan, Viruddhahar, Dadhisevan and Paryushit ahar is seen in either of the patients. Katu rasa sevan is seen in most of the patients followed by Ushna gunatmak ahar, Rukshahar, Alpahar, Madhur rasa, Snigdharahar & Tikta rasa Amongst Ahariya hetu Tikta rasa, Kashaya rasa, Snigdharahar, Paryushit ahar have correlation with Hridroga (P<0.05).

In Viharaja hetus Avyayam, Achankraman, Atishram are the commonly found viharaja hetu. Mala, Mutra, Apan Vegavarodh is seen in number of the patients. Amongst Viharaja hetus Avyayam, Atichankramana have correlation with Hridroga (P<0.05).

In Manasa hetu Chinta is found in number of the patients followed by Shoka and Krodha. Manovaha srotodushti is seen in all of the patients. In Vyasana hetu Tea, Alcohol, Smoking, Tobacco are vyasana hetus found in number of patients.

#### References:

1. Charaksamhita - Agnivesh. Elaborated by Charak & Dridhbala. With Ayurveda Dipika commentary by Chakrapanidatta & edited by Yadavjee Trikamjee Acharya, Chaukamba Prakashan Varanasi, Reprint 2011.

2. Sushruta Samhita with Nimbandha Sangraha by Dalhana Yadavji Trikamji Acharya Chaukambha Surbharti Prakashan Varanasi Reprint edition 1994.
3. Ashtanga Hrudayam of Vagabhatta with Arun datta's sarvang sundar & Hemadri's Ayurved Rasayan Pandit Hari Sadashiv Shastri, Chaukambha Surbharti Prakashan Varanasi, 1997.
4. Ashtanga Sangraha of Vagabhatta Kaviraj Atridev Gupt Krushnadas Akadami, Varanasi, Reprint 2002.
5. Madhava nidana with madhukosh tika by vijayrakshit and shrikant datta. Yadunandan Upadhyaya Chaukambha Prakashan, Varanasi Reprint edition 2006.
6. Bhavaprakasha Bramtia Shankar Mishra Chaukambha Sanskrit Sansthan, 8th Edition, 2003.
7. Yogaratnakara Shri Lakshmi Pati Shastri Chaukambha Sanskrit Sansthan, Reprint 2005.
8. Ayurveda Shabda Kosha Veni Madhavaashastra Joshi, Maharaashtra Sahitya Sanskrut Mandal 1968.
9. Shabdakaplpadruma Dev Raja Rajakant Nag publishers, New Delhi Reprint, 1987.
10. The Practical Sanskrit English Dictionary Apte V.S. ,Motilal Banarasidas Publisher Pvt limited, Delhi 1992.
11. A Dictionary English and Sanskrit Monier M. – Williams, Motilal Banarasidas Publisher Pvt limited, Delhi, 1992.

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