

## CLINICAL TRIAL OF HRIDYARNAVA RASA ON HRIDSHOOLA (ANGINA PECTORIS)

Dikshit Manisha<sup>1</sup>, Saxena G.K<sup>2</sup>

<sup>1</sup>Associate professor, *Rasa Shastra & Bhaishajya Kalpana*, Patanjali Ayurvedic College, Hardwar, Uttarakhand, India

<sup>2</sup>Ex-Prof. & H.O.D., *Rasa Shastra & Bhaishajya Kalpana*, Rishikul State Ayurvedic P.G. College, Hardwar, Uttarakhand, India

### ABSTRACT

*Rasaushadhies* or Rasa- medicines are the backbone of the Ayurvedic system of medicine. These are quick in action and are administered in very small doses. Nowadays, the fast pace of life has become a major cause of increasing instances of heart diseases. The study attempts to assess the efficacy of Hridyarnava Rasa on Hridshoola (Angina Pectoris) Patients. The medicine *Hridyarnava Rasa* contains Tamra Bhasma, Parada and Gandhaka. Tamra Bhasma has properties of Madhur Rasa, Laghu Guna, Sheet Veerya, Katu and Madhur Vipak and also possesses Pittahara and Kaphahara properties. Gandhaka is also known to possess, Pitta-Sravak and Virechak properties. Copper also increases absorption of Iron, acts on Liver and cures cardio respiratory ailments. So a fairly good response is observed in the sign and symptoms of Hridashoola, by the use of Hridyarnava Rasa. After assessing the clinical study, this medicine was able to cure 58% of the patients, moderate improvement in 25% and 16.66 % patients showed no improvement.

**Keywords:** Rasa, Hridashoola(Angina Pectoris), Precordial Pain, Dyspnoea, Electrocardiogram(ECG)

### INTRODUCTION

Now-a-days, life has become so stressful, that the fast & stressed lifestyle originate many serious diseases, eg. Diabetes, Heart disease, Hypertension etc. In this, *Hridaroga* (Heart disease) <sup>1</sup> is one of the most common fatal disease. Sometimes, the patient is confused with "GAS", & sometimes, sudden onset of severe pain, breathlessness, etc. occur.

The main object of *Ayurveda* is to maintain health of healthy and eradication of disease with chief principle of "*Nidana Parivarjana*". It also includes psycho-socio philosophical aspects of life. *Hridshoola* (AP) is described as a clinical syndrome rather than a disease. In spite of technological & pharmacolog-

ical advancement the management of Angina Pectoris is still a medical problem.

### AIMS & OBJECTIVES

According to *Ayurveda*, the term *Hridaya* is derived from the verbal roots, *Hri*, *da*, & *I* giving the sense of *receiving*, *giving* & *moving* respectively. *Hridaya* is *Sadhyapranahara Marma* & organ of *Madhyam Marga*<sup>2,3,4</sup>, so diseases of heart are difficult to cure. But in this fast moving life, it is very important to treat the patients through *Ayurveda*. So, the main aim of this study is to assess and to find out the efficacy of *Hridyarnava Rasa* on *Hridshoola* patients.

Hence, the study was designed to be administered over a period of 45 days.

## MATERIALS & METHODS

### Inclusion Criteria

1. Signs of symptoms of *Hridshoola* (Mild & Moderate)<sup>5</sup>
2. History of Previous myocardial infarction and Ischemia<sup>6</sup>
3. Evidence for Ischemia by ECG<sup>6</sup>

### Exclusion Criteria

1. *Hridshoola* with *Upadravas* (severe cases) and Angina Pectoris with complications.<sup>5,6</sup>
2. Pregnancy
3. Endocrinal disorders
4. Other Complications

The clinical assessment of the drug, *Hridayarnava Rasa* over the patients suffering from Angina Pectoris has been carried out in the OPD of the Deptt. of *Kaya Chikitsa*, Rishikul State Ayurvedic P.G. College & Hospital, Haridwar (U.K.). The criteria of selection of the patients is age, sex, occupational status, dietary habits, addiction, family history etc. dosage of this Ayurvedic line treatment & details of this treatment was recorded on case paper. The patients were advised to continue their Allopathic treatment & then, tapered off or discontinued with proper consultation of experts.

**Selection & Administration of drug**  
*Hridayarnava Rasa* is prepared by one part of *Shuddha Parada* (Purified Mercury)<sup>9,11</sup>, one part of *Shuddha Gandhaka* (Purified Sulphur)<sup>9,11</sup> and two parts of *Tamra Bhasma* (Purified Copper).<sup>10,12,13</sup> This self prepared drug *Hridayarnava Rasa* (*Rasendra Chintamani*) standardised by drug testing lab, R.S.P.G.College, HDR & sterlite laboratory, Udaipur, Rajasthan. Tablets of *Hridayarnava Rasa* 125 mg BD were given with *Triphala*<sup>14</sup> decoction & *Makoya*<sup>15</sup> extract *anupan*

20ml. BD. According to severity in some patients it was given more than twice.

### Study Evaluation

1. All signs & symptoms were scored by Canadian Cardiovascular Society (CCS) & Newyork Heart Association (NYHA) according to their severity. *Samanya lakshana* of *Hridshoola* were given scores ranging from 0, I, II, III, IV, & *Vishesha Lakshana* (special sign & symps) of *Hridshoola* were given scores ranging from 0, I, II, III, IV.
2. Objective criteria was lipid profile & ECG (because of thickening of arteries or atherosclerosis).<sup>7</sup>
3. For the evaluation of total effect of treatment following categories were taken into consideration :-
  - Significantly improved - Patients who were fully cured.
  - Moderately - Symptoms upto 75-50% cured.
  - Mildly - Symptoms less than 50% cured.
  - Not Improved - No improvement was found.

## OBSERVATION & DISCUSSION

In this study, 32 patients & of *Hridshoola* (Angina Pectoris) were registered. Each patient was, observed after 15 days. The signs & symptoms, investigations & ECG were the main criteria for diagnosis & assessment. Other classical symptoms of Angina were also considered. NYHA & CCS classification was also used to assess symptoms of Angina. The scoring was based upon severity of symptoms. The assessment of trial drug was carried out before & after treatment to assess the total effect of treatment.

### General observation of patients

The present study is conducted in two parts:-

- a) Clinical study on *Hridshoola* vis a vis Angina Pectoris as a disease entity.
- b) To evaluate the effect of *Hridyarnava Rasa* in *Hridshoola* patients.

### Clinical study of Hridshoola (on 24 patients) <sup>6</sup>

1. Age & sex incidence :- In this study, maximum patients belong to age of 30-60 yrs. are 88%. It indicates that the disease was observed mainly after 40 yrs of age. 45.82% patients were males, while 54.14% were females. Male to female ratio in study was 1:1.2.
2. Occupational status :- It is general observation that coronary heart disease is more common in the business class & high skilled professionals. In this series, only 12.5% cases were from business class & 8.33% were professionals. Service class were 12.5% & agricultural community was 20.83%. Housewives were 41.66% & 4.16% cases were miscellaneous.
3. Environment :- 62.5% patients belong to urban area & only 37.5% patients belong to rural area.
4. Addiction :- 8.33% cases were addicted to tobacco chewing, 25% were addicted to smoking & 12.5% were addicted to alcohol i.e. smoking is one of the major risk.
5. Dietary habits :- In this study, vegetarian persons suffering from *Hridshoola* were more which is reverse than observation of western countries. This indicates that non-veg. diet do not play major role as causative factor or extensive various sectoal population studies are necessary to bring out final inference of this issue.
6. Associated disease with *Hridshoola* :- Diabetes, obesity, hypertension & only *Hridshoola* are considered to be major risk factor 16.66% cases were suffering

from diabetes, 25% cases had obesity & 29.17% cases were hypertensive, 29.17% of patients were suffering from *Hridshoola* only.

7. Family History :- Regarding incidence of associated diseases in the family history of *Hridshoola* 4.16% of cases had history of diabetes, 12.5% cases had history of obesity & 12.5% cases, had history of hypertension.
8. Clinical features of the diseases :- Precordial pain, dyspnoea on effort and palpitation are the main symptoms of *Hridshoola* (Angina Pectoris). As regards to their grades, majority of cases belongs to gr. I & II. It shows that most of cases, who subjected themselves for clinical trial were early cases of *Hridshoola*. 75% cases were suffering from lethargy, 16.66% had constipation & 12.5% had giddiness, whereas 58% cases had other symptoms like – fever, cough, pallor, joint pain etc.
9. ECG findings :- Mainly there were evidences of ST segment depression & T-wave inversion in different leads according to the site of lesion 46% patients showed positive ECG changing & in rest of the cases, pattern was within normal limit.

### RESULT OF THE TRIAL DRUG (HRIDAYARNAVA RASA) ON HRIDSHOOLA PATIENTS

**On precordial pain (*Hridshoola*)** In this group, all the 24 patients were having chest pain. After 45 days of treatment, severity was gr. IV in 1 patient i.e. (4.16%), gr. III in 2 patients i.e. (8.33%), gr. II in 1 patient i.e. (4.16%) & gr. I in 6 patients i.e. (25%) & 14 patients i.e. (58.33%) cured completely.

**Improvement in dyspnoea on effort** Out of 24 patients, 18 patients had symptoms of dyspnoea. After 45 days of treatment, there was 1 patient each in gr.

III & II i.e. (5.56% each) 4 patients were in grade-I i.e. (22.22%) and 12 patients cured completely i.e. (66.66%).

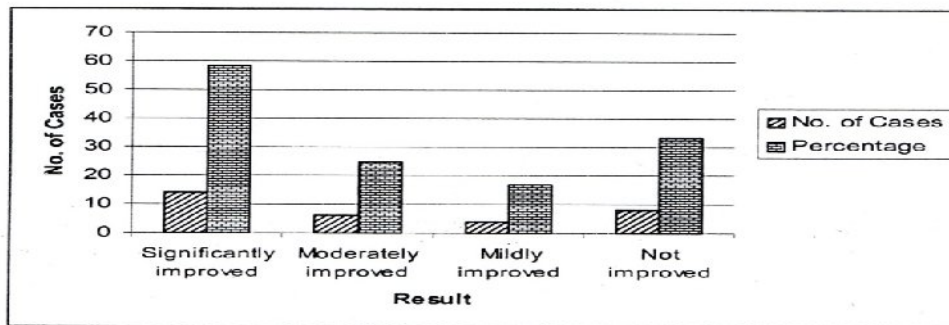
**Assessment by ECG findings** 36.36% patients showed significant improvement and 36.36% patients showed improvement, while rest of the patients did not show any change in their ECG tracings. As regards the nature of change, mostly inverted T-waves become upright or their depth had been reduced in all cases showing improvement.

**Total effort of treatment** According to symptoms of Angina Pectoris (NYHA/CCS classification) & according to Ayurvedic Symptomatology after 45 days of treatment, 58.30% were found near to cured or significantly improved, 25% patients had moderate improvement, 16.66% had mild improvement & 32.32% patients dropped out in between treatment.

**Table No.1 showing improvement in Hridashoola patients after 45 days treatment with trial drug**

Result	No. of Cases	Percentage
Significantly Improved	14	58.30
Moderately Improved	6	25.00
Mildly Improved	4	16.66
Not Improved	8	32.32

**Diagram Showing improvement in Hridshoola patients after 45 days treatment with trial drug.**



## CONCLUSION

- Total 32 patients of Hridshoola (Angina Pectoris) were registered for clinical trial. Mainly, this trial drug has property of curing number of diseases associated to Hridshoola.
- This drug contains tamra bhasma & ingredients were treated with triphala decoction & extract of ripe fruits of makoya for one day, which are very effective in Hridshoola.
- Mainly, incidence of this disease occurs as the age progress.
- Females are more prone than males & especially vegetarian are more prone than non-veg.
- It was observed in middle economical class & mainly in housewives due to lack of exercise & improper consumption of what they eat.
- Pre cordial pain, breathlessness, palpitation, lethargy, constipation & other symptoms were commonly found.
- Incidence of hypertension was found maximum in patients.

- In this disease, quality of life, sense of well being, increase in faith were more important beside of drug.
- Lipid profile test & ECG findings were significantly marked.
- There is no hazards or any side effects of trial drug was observed. The result of present study would certainly boost the moral of the *Ayurvedic* physicians, particularly the young generations, who generally think that *Hridroga* is a great problem of current era...

## REFERENCES

1. Tortora J. Gerard, Gorabowski, Sandra Reynolds. Principles of Anatomy and Physiology. 7ed. Harper Collins Colleague publication; 1992. P.591.
2. Maharshi Agnivesh. Charaka Chikitsa edited by Shastri Kashinath, Chaturvedi Gorakhnath. 22 ed. Varanasi:Chaukhamba Vishwa Bharti;1996. Ch26, P.731.
3. Maharshi Susruta. Susruta Samhita(Uttarardha) edited by Shastri Ambika Dutt. 10 ed. Varanasi:Chaukhamba Sanskrit Sansthan;1996. Ch43, P.277.
4. Acharya Vagbhata. Astanga Hridayam(Chikitsa Sthan) edited by Upadhyay Yadunanadan. Re ed. Varanasi:Chaukhamba Sanskrit Sansthan; 2006. Ch6, P.328.
5. Acharya Madhava. Madhava Nidana (Poorvardha) edited by Upadhyay Yadunanadan. 26 ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. P.495.
6. Davidson. Principles & Practice of Medicine edited by Edwards R.W., Bouchier I.A.D., Haslett C., Chilvers E.R. 17 ed. Churchill Livingstone Pub; 1995. P.205,208,212,245.
7. Kumar Vinay, Cotran S. Ramzi, Robbins L. Stanley. Basic Pathology. 15 ed. Bangalore: Prism Books Pvt. Ltd;1992. Ch11, P.307.
8. Dhunduka Natha. Rasendra ChintaMani edited by Mishra Sidhinanadan. Reprint. Varanasi:Chaukhamba Orientalia; 2006. P.286.
9. Yadavji Tikramji. Rasamrita edited by Joshi Damodar, Rao G. Prabhakar. Reprint. New Delhi:Chaukhamba Pub;2007. P.29,30, 43-48.
10. Somdeo. Rasendra Chudamani edited by Mishra Sidhinandan. Reprint. Varanasi: Chaukhamba Orientalia; 2009. P.242.
11. Bhatt Gopal Krishna. Rasendra Saar Sangraha edited by Suresh Parimi, Kumari Vinay. Varanasi: Chaukhamba Orientalia; 2007. P. 4-31, 59-66.
12. Bhagwat Sri Govind Padacharya. Rasa Hriday Tantra edited by Bajpayee Rameshwar Dayalu. Varanasi: Chaukhamba Orientalia. 1998. P.72
13. Acharya Vagbhata. Rasa Ratna Samuchhay edited Kulkarni Dattatreya Ananta. Reprint. New Delhi: Mehar Chand Laxman Das Publication; 1998. P.101.
14. Sharma P.V. Drvayaguna Vigyan Vol.2. 17 ed. Varanasi: Chaukhamba Bharti Academy; 1996. P.758, 753.
15. Mishra Bhav. Bhav Prakasha Nighantu edited by Pandey G. S. Chunekar K.C. Reprint. Varanasi:Chaukhamba Bharati Academy;2006. P.438.

## CORRESPONDING AUTHOR

### Dr. Manisha Dikshit

Associate professor,  
*Rasa Shastra & Bhaishajya Kalpana*  
Patanjali Ayurvedic College,  
Hardwar, Uttarakhand, India  
**Email:** miti.manisha@gmail.com

Source of support: Nil  
Conflict of interest: None Declared