



INTEGRATIVE MANAGEMENT OF CONGESTIVE HEART FAILURE (HRIDROG) WITH AYURVEDA AND MODERN MEDICINE: A CASE REPORT

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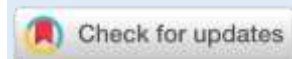
<https://doi.org/10.46607/iamj17p7032023>

(Published Online: March 2023)

Open Access

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Article Received: 26/04/2023 - Peer Reviewed: 28/04/2023 - Accepted for Publication: 30/04/2023.



ABSTRACT

The prevalence and incidence of Congestive Heart Failure (CHF) in India are often unreliable. However, there is a growing burden of CHF with an estimated annual incidence of 0.5–1.8 million. An 82-year male patient known case of CHF, DM II, HTN IHD came with complaints of dyspnea, cough, mild orthopnea associated with chest pain, abdominal distension, loss of appetite, constipation, bilateral pedal oedema, and constipation for 10 days. The patient was treated on the basis of the treatment principle of *Hrudroga* with *shaman chikitsa*, *Hridbasti*, and *Arjunadi ksheerbasti* along with modern medicines. There is an increase in left ventricular ejection fraction from 20% to 25% within 1 month. ECG was normal, with complete relief in symptoms after 2 month's course of treatment. This case report gives direction to the treatment of CHF through Ayurveda. Hence further research in this direction is warranted.

Key words: Congestive Heart Failure, Low ejection fraction, *Hridrog*, *Ayurved*, *Hridbasti*

INTRODUCTION

Congestive Heart Failure with low ejection fraction is a complex clinical condition that results from either functional or structural impairment of ventricles resulting in symptomatic left ventricle (LV) dysfunction. The symptoms come from an inadequate cardiac output, failing to keep up with the metabolic demands of the body. It is a leading cause of cardiovascular morbidity and mortality worldwide despite the advances in therapies and prevention. It can result from disorders of the pericardium, myocardium, endocardium, heart valves, great vessels, or some metabolic abnormalities. There is a growing burden of CHF with an estimated annual incidence of 0.5–1.8 million. Conventional medicinal therapy has improved over a decade. The overall survival of CHF patients may be unsatisfactory due to lowered ejection fraction or low aerobic capacity in CHF patients leading to increasing rates of mortality and morbidity. Perhaps complementary and alternative medicines can be of benefit as adjuvant therapy for better management of CHF having low ejection fraction. In Ayurveda *Hridaya* (Heart) is considered under *Trimarma*. In view of the increasing evidence of cardiac disorders in the present times, this aspect assumes added importance. As Ayurveda is recognized as the foremost life science and describes ways to prevent and manage every disorder, the world is being attracted to its potential.

In this case, study, 82 years old Male patient, came with a diagnosis of CHF, DM II, HTN IHD came with complaints of dyspnea, cough, mild orthopnea associated with chest pain, abdominal distension, loss of appetite, constipation, bilateral pedal edema, and constipation for 10 days. The patient was treated with integrated treatment allopathy and *ayurvedic* treatment. The study showed significant improvement in all the parameters.

PATIENT INFORMATION

An 82-year male patient known case of congestive cardiac failure, DM II for 5years, Hypertension, and Ischemic heart disease for 15 years came into the outdoor patient department with complaints of dyspnea on exertion, mild orthopnea associated with

chest pain, abdominal distension, loss of appetite, constipation, bilateral pedal edema, Fatigue and cough for 10 days. In the routine examination, the 2D Echo shows LVEF 20%, Hyperglycemia, Patient was taking modern medicine physician treatment but did not get complete relief. So, he was managed as modern medicine treatment was continued along with Ayurvedic medicine.

General examination

He was afebrile with a pulse of 98/min, blood pressure was 100/60 mm of hg, SPO2 was 98%, pallor +, and icterus clubbing was absent. Bilateral leg pitting edema was present. Tenderness was absent at bilateral legs. In *Ashtavidha Parikshan* his *Nadi* was (*Vatapradhan*), *Mala*-he had constipation, *Jivha* (~tongue) was *Saam* (~slightly coated), *Mootra* (~urine) passed 4-5 times per day. His *Aakruti* (~body built) was *Stul*, *Shabd- Spashta*, *Sparsha - Samshitoshna*, *Druk* (~vision) -*Avikrut*.

Dashavidh Pariksha

Prakriti - Vatpittaj, *Sar - Awar*, *Samhanan - Awar*, *Satv - Alpa*, *Satmya - Alpa*, *Aaharshakti - Alpa*, *Vyamshakti- Alpa*, *Desh - Sadharan*, *Vaya - Vrud-dhavastha*.

Systemic examination

Respiratory bilateral air entry decreased, Cardiovascular S3 sound was present and Central nervous systems were within normal limits. Bowel sound present. Superficial and deep tendon reflexes were also normal. Per abdomen - dull note present on percussion

Strotas Parikshan: Rasavaha Strotas, Pranvaha Strotas, Purishvaha Strotas Dushti Lakshan were observed.

Clinical findings

Clinical symptoms of Congestive Heart Failure; dyspnea on exertion, mild orthopnea, pedal edema, fatigue, and anorexia were present in the patient.

Diagnostic Assessment

The patient was diagnosed with Congestive Cardiac failure from clinical symptoms and investigations. Details of the investigation are mentioned in Table 1.

Table 1: Details of the investigation

	Before Treatment	After Treatment
Chest x-ray	Mild Cardiomegaly, left CP angle obscured, Pleural effusion, old, calcified lymph nodes, osteopenia	
2 D Echo	Severe LV, RV dysfunction, Dilated LA, RA, RV. Pericardial Effusion, Severe TR, Mild AR, Trivial MR, IVC collapsing > than 50%, LVEF-20%	As compared to the previous echo LV function improved remarkably by 30% Mild hypokinesia, No cardiac effusion
ECG	Atrial flutter	Sinus Tachycardia, T wave abnormality, anterior ischemia
HbA1C	10.40%	8.8
BSL	>500	199
Sr. Creatine	1.35	1.1
Urea	105	
Hb	12	12.4
WBC	11600	7600
Platelets	254000	

Therapeutic intervention

The patient was treated on the basis of the treatment principle *Hrudrog* considering vitiation of *Vat*, *Pitta*, *kapha Dosh*, and *Ras Dhatu*. *Shaman* treatment is mentioned in Tables 2 and 3. The rationale for *Panchkarma* treatment is mentioned in table 3.

Table 2: *Shaman* treatment

Sr. No.	Ayurvedic Formulation	Dose, frequency	Adjuvant	Duration
1.	<i>Pravalpanchamrut Vati</i>	250 mg twice Daily	With Lukewarm Water	Daily for 30 days
2.	<i>Arjunghan Vati</i>	250 mg twice Daily	With Lukewarm Water	Daily for 30 days
3.	<i>Gokshuradi Gugulu</i>	250 mg Twice daily	With Lukewarm Water	Daily for 30 days
4.	<i>Sarak Vati</i>	500mg at Night Before food	With Lukewarm Water	Daily for 30 days
5	<i>Arjun, Punarnava, Gokshur, Bala, Ashwagandha</i> , (Each 4 gm) <i>kwatha</i>	40ml Twice daily	With Lukewarm Water	Daily for 30 days

Table 3: Modern treatment-

Sr No	Modern Medicine	Dose	Duration
1	Tab Digoxin 0.25mg	½-0-0	Daily
2	Tab Carvidol 3.125mg,	½-0-0	Daily
3	Tab Rosumac Gold	0-0-1	Daily
4	Tab Dytor 20 mg	1-1-0	Daily
5	Inj Human Actrapid Insulin	10 U-10U-10 U	For 5 days (then taper according to BSI)
6	Inj Lantus	8 Units HS	For 5 days

Table 4: Method of drug administration for Panchkarma-

Sr no.	Procedure	Medicine used	Duration
1	Sarvang Snehana	Bala taila	14 days
2	Swedana	Nadi sweda	14 days
3	Arjunksheer basti	Arjunkshir 280ml	14 days
4	Hrudbasti	Bala Tail for 30 mins	14 days

Observation and Results

The efficacy of Ayurvedic treatment i.e Shaman treatment, Snehan, Swedan, Arjunksheer basti, and Hridbasti therapy was assessed on the basis of symptoms and investigations, 2DECHO Initially the patient was having Moderate Chest pain-due to angina (Urah Shool), Dyspnea, Shortness of Breath (Shwas),

Cough (Kasa), Leg and Ankle swelling (Padshoth), Palpitation (Hritspandan), Fatigue (Dorbalya), Anorexia (Aruchi). After treatment Patient got significant relief in the symptoms; There was a significant improvement in LVEF%, BSL, HbA1C, and ECG.

Table No 5: Overall Assessment Criteria: -

Sr. no	Symptoms	Day-0	Day-30
1	Chest pain-due to angina (Urah Shool)	+++	-
2	Dyspnea, Shortness of Breath (Shwas)	+++	-
3	Cough (Kasa)	++	-
4	Leg and Ankle swelling (Padshoth)	++	-
5	Palpitation (Hritspandan)	+	-
6	Fatigue (Dorbalya)	+++	+
7	Anorexia (Aruchi)	++	-

DISCUSSION

In Ayurveda Hridaya (Heart) is considered under Trimarma. Hridaya provides Rasa, Rakta, Prana, and Oja to the entire srotas of the body through sira-s. Ayurveda classics state that those who want to preserve Ojas and maintain the heart and vessels attached to it in good condition should avoid Unhealthy diets, drugs, and stress which are conducive to the heart. There are five types of Dosha accompanied in the heart these are Pran Vayu (vitiation shows dyspnoea on exertion, cough, drowsiness), Vyan Vayu (Vitiation shows increased heart rate, swelling at ankle joint), Sadhak Pitta (vitiation shows loss of confidence), Avalambak Kapha (vitiation shows cardiac dilatation). According to Ayurveda, dysfunctional Rasa Dhatvagni is a cause of Hrudrog (heart disease). Symptoms of Hrudroga are abnormal complexion, fainting, fever, cough, hic-cough, dyspnoea, thirst, mental confusion, and anorexia. Physical exertion, anxiety, fear, and suppres-

sion of natural urges such as sleep, stool, and flatus are causative factors of heart disease. Avoidance of causative and risk factors of heart disease such as sleep deprivation, exercise, and suppression of natural urges are advised to the patient.

Probable mode of action of medicines - Arjun-Bark stem of arjuna possesses diuretic, inotropic, and chronotropic properties. the aqueous extract has been demonstrated to cause an increase in the coronary flow. Arjuna increased the force of contraction of cardiac muscle with potent antioxidant and hypolipidemic properties.

Punarnava- The extensive properties of this rejuvenative herb plays a crucial role in intreating a heart ailment. It relaxes the cardiac system, by calming the mind, which is extremely beneficial for patients suffering from arrhythmias and palpitation. It acts as a diuretic.

Bala-According to Sushruta, "Bala" is defined as "the factor due to which one obtains the nourishment and stability of Mamsa dhatu.

Ashwagandha- It is categorized as *Rasayanas* and described to promote health and longevity. *Ashwagandha* affects the heart significantly. It provides strength and improves glycogen content in heart muscles. A study on rats suggested that *Ashwagandha* also increases relative heart weight. *Ashwagandha* has cardioprotective, adaptogenic, and anticoagulant properties.

Gokshur- Owing to powerful antioxidative properties, the *Gokshura churna* may be helpful for a variety of heart conditions. It may strengthen the cardiac muscles and keeps lipids and other debris out of the blood vessels, preventing atherosclerosis. The bioactive ingredients in *gokshura* may lower the levels of non-esterified fatty acids (NEFA), which may help in lowering the risk of heart attacks, strokes, blood clots, and other cardiovascular diseases.

Hriday Basti- *Hridaya Basti* is one of the most powerful and effective treatments in Ayurveda that aids in the healthy functioning of the heart. The treatment helps to nourish, strengthen and balance the heart functions and rejuvenate the heart area. High blood pressure, palpitations, and respiratory problems such as asthma, bronchitis, or wheezing can also be treated with *Hridaya Basti*.

CONCLUSION

This case report gives direction to the treatment of CCF through Ayurveda. Hence further research in this direction is warranted.

Patient perspective: The patient is satisfactory with Ayurveda treatment.

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Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Pallavi N. Mane & Pruthviraj Ugale: Integrative Management of Congestive Heart Failure (Hridrog) with Ayurveda and Modern Medicine: A Case Report. *International Ayurvedic Medical Journal* {online} 2023 {cited March 2023} Available from: http://www.iamj.in/posts/images/upload/301_306.pdf