RESEARCH PAPER

Ayurvedic management of TRIPLE VESSEL CORONARY ARTERY DISEASE : A Case Report

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Abstract

Background : Triple vessel coronary artery disease (TVD) is a severe form of coronary atherosclerosis where all three major coronary arteries—the Left Anterior Descending (LAD), Left Circumflex (LCX), and Right Coronary Artery (RCA)—are significantly narrowed or blocked. This restricts oxygenated blood flow, causing stable/unstable angina, fatigue, or heart attacks. Ayurveda offers a holistic approach in managing such chronic conditions.

Case presentation: A 70 year old male presented with complaints of chest pain, restlessness, fatique for the past 2 years. Coronary angiography report reveals CAD with TVD. Initially he went for allopathic treatment and was advised coronary artery bypass surgery but he refused the surgery and allopathic medicinal treatment too. Then ,he decided to take ayurvedic treatment.

Intervention: The patient was managed with ayurvedic medicines including Arjuna tvak churna, Kachnar tvak churna, Mukta pisti , Praval pisti, Abhrak bhasma, Punarnava mandoor, haritaki churna for 4 months along with dietary and lifestyle modifications.

Outcome: Significant improvement was observed in symptoms , lipid profile, and overall quality of life without any adverse effects. Signicant improvement was observed in Coronary Angiography Report which denies need for CABG.

Conclusion: Ayurvedic management may be benficial in patients suffering from Triple vessel coronary artery disease .

Keywords: CAD, TVD, AYURVEDA, Hridroga, Arjuna, Kachnar

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Introduction

Triple Vessel Disease (TVD) is a severe form of coronary artery disease (CAD) characterized by significant stenosis (>50-70% narrowing) in all three main coronary arteries: the Left Anterior Descending (LAD), Right Coronary Artery (RCA), and Left Circumflex (LCx), often associated with atherosclerosis. It signifies a high risk for ischemic events and typically requires coronary artery bypass grafting .

In the three large early RCTs, TVD was defined as “a reduction of at least 50% in the three major arteries” (Veterans Administration Cooperative Study(VA study) [1]

TVD is defined as 50% or more obstruction in three major arteries” (European Coronary Surgery Study (ECSS).[2]

It is defined as a 70% or greater reduction in the internal diameter of the right, left anterior descending (LAD), and left circumflex coronary artery” (Coronary Artery Surgery Study (CASS).[3]

Patients with stable ischemic heart disease (SIHD) and triple vessel disease (TVD) have been recommended coronary artery bypass grafting (CABG) with a view to derive a survival benefit compared to medical therapy. [4][5]

TVD Represents advanced CAD, often resulting in widespread ischemia, reduced left ventricular function, and increased risk of heart failure ,

Its Symptoms are severe angina, significant fatigue, shortness of breath, and arrhythmias (irregular heart beat) .

- CVDs caused approximately 20.5 million deaths in 2021, accounting for one-third of all global deaths.
- TVD Prevalence in Hospitalized Patients: A US study (2006-2015) found that 1.7% of all-cause hospitalizations (patients ≥50 years) had TVD, with that number rising to 4.7% for heart failure (HF) hospitalizations.

Prevalence of CVD with TVD in India

- High Prevalence: Studies in India show a high prevalence of TVD (ranging from 12% to over 50% in different cohorts), often presenting as Acute Coronary Syndrome (ACS).
- In Ayurveda, Coronary Artery Disease (CAD) is understood as Hridroga (heart disease), often caused by the accumulation of Ama (toxins) and excessive Medo Dhatu (unhealthy fats/plaque) in the arteries (Dhamani), leading to reduced flow. It involves vitiation of Vata and Kapha doshas . Treatments focus on reducing Ama, removing arterial blockage, and promoting heart health .

Case Presentation

Patient Information

A male patient of 70 years old and weight 75 kg, diagnosed with Triple vessel coronary artery disease visited OPD (outdoor patient department) August 16,

2025 presented with chest pain, restlessness, fatique for the past 2 years. The patient had a history of dyslipidemia along with sedentary lifestyle and irregular dietary habit including excessive intake of outside food and lack of exercise.

Reports showed dyslipidemia (high level of direct LDL cholesterol and high VLDL and low HDL. Patient had no history of Blood pressure. Patient was not taking any medicine.

Clinical Findings

1.Aseess for angina, shortness of breath, unusual fatique, dizziness .

2.Blood pressure was 140/70

3. Dyslipidemia was found.

4. Stress test was Positive .

Diagnostic Findings: (15/05/25)

ADVISE- CABG (Coronary Artery Bypass Grafting)

Outcome

Diagnostic Findings-

Coronary Angiography Report (5/12/25)-

Left Main Coronary Artery (LMCA)- NORMAL

Left Anterior Descending (LAD)- TYPE-III VESSAL, PROXIMAL PLAQUE f/b DISTAL MYOCARDIAL BRIDGE.

Left Circumflex (LCX)- NON-DOMINANT, OSTIAL PLAQUE.

1.Coronary Angiography- This is the gold standard showing significant narrowing of the arteries.

Left Main Coronary Artery: Distal 50%stenosis

Left Anterior Descending: Type III Vessel & Ostial to Mid long segment 90%stenosis.

RAMUS: Proximal 100% Occlusion.

Left Circumflex: Non-Dominant. Ostial 80% stenosis.

Major OM:-Ostial 70%stenosis.

Right Coronary Artery- Dominant Mid 99% Occlusion, Distal filling by homo Collaterals.

Patent ductus arteriosus -Distal Disease.

Posterior Left Ventricular Artery (PLV)- 100% Occlusion.PDA & PLV, Distal Retrogradely filling from left system.

Diagnosis- TVD (TRIPLE VESSEL DISEASE)

Right Coronary Artery (RCA)- DOMINANT, NORMAL.

Conclusions- NON-OBSTRUCTIVE CAD WITH LAD- MYOCARDIAL BRIDGE

Parameter	Before	After
Angina	Severe	Mild
Exercise tolerance	Poor	Improved

No need of CABG .

2. CT Coronary Angiography- Detects -plaque buildup.

3. ECG- ST depression in leads V3 and V4(in reports 15/05/2025)

AFTER TREATMENT (5/12/25) fig.3

Ayurvedic Understanding of Hrid Roga (Cardiac diseases) [6]

Based on ideas like Panchamahabhuta (the five major elements), the notions of Dosha, Dhatu, and Mala, as well as the Samanya-Vishesha hypothesis, Ayurveda encourages a holistic approach to life and treatment. The Tridosha theory—Vata, Pitta, and Kapha—is used in Ayurveda to categorise the majority of illnesses based on their symptoms. Hridroga, or heart illness, is an exception, though, since it is classified according to the body's anatomical structure. Here, Hrudshoola (angina) is defined as an abrupt, intense pain in the heart area. Based on tridosa, all mixed dosa (Sannnipata), and krimija (infective), there are five types of hridroga. The causes of Hridroga include vitiation of Rasa dhatu (digestive fluid), adhyasana (repeated eating of guru), chinta (stress), trasa (harassment), etc. The exception is hridroga (heart disease), which is classified according to the body's anatomical structure. Hridshoola (angina) is defined as an abrupt, intense pain in the heart area. Based on tridosa, all mixed dosa (Sannnipata), and krimija (infective), there are five types of Hridroga.). Hridshoola (angina) is a symptom in coronary artery disease (CAD). Susruta classified it as Kaphaja shola [7] ,while Madav Nidan [8] referred to it as Vataja shoola. Clinical observations suggest that Kaphaja hridshoola is prevalent in obese individuals, but Vataja hridshoola is observed in lean patients. Vata, Kapha, and Meda are involved in the pathophysiology of Coronary Artery Disease (CAD) and hridshoola (angina) is a sign of Coronary Artery Disease (CAD).

Ayurvedic Diagnosis[9]

Disease: Hridroga

Dosha: Kapha-Vata predominance

Dushya: Rasa, Rakta, Meda

Srotodushti: Sanga (obstruction)

Intervention

1.Mukta pisti- 3gm for 1month

2.Praval pisti-3gm for 1 month

3.Abhrak Bhasma-3gm for 1 month

4.Arjuna tvak churna- 20gm for 1 month

5.Kachnar churna- 20gm for 1 month

6.Purnarnva mandoor-250mg tablet BD for 1 month

Haritaki churna- 40g for 1 month

Drug name	Role in CAD with TVD	Dose
Mukta pisti	Cardiac tonic , manage BP and alleviate stress related symptoms like palpitations	100 mg -100 mgBD
Praval pisti	Cardiac tonic ,Strenghthens health muscles ,improve circulation	100 mg-100 mg BD
Abhrak Bhasma	Rasayan properties helps in stress and anxiety related diseases, relieve breathing issues and cough related to congestive heart failure	100 mg-100mg BD
Arjuna tvak churna	Hridya as it is the best medicine for heart, strengthen heart muscle, lowering bp, reducing cholesterol, and providing	600 mg-600mg BD

	antioxidant activities	
Kachnar churna	Cholestrol management and improved circulation	600mg-600mgBD
Punarnava Mandoor	Manage high BP , reduce edema improve blood circulation, cholesterol regulation	250 mg-250mg BD
	and in anemia	
Haritaki churna	Lipid lowering, reduces ama toxins (fat in the arteries), bp management, antioxidant property	1200mg-1200mg BD

This Treatment continues for 4 consecutive months .

Other measures like Lifestyle Modification, Diet control, Yoga and pranayama were advised.

Discussion-

This case demonstrates the potential role of Ayurveda in managing severe Coronary Artery Disease (CAD) with Triple Vessel Disease (TVD).

Ayurveda targets srotoshodhan (channel cleansing), medohara (lipid reduction) and rejuvenation properties.

Arjuna tvak churna[10] - It is considered as hridya as its mukhya karma in Priyavrat.[11] Mechanism of action- Arjuna (Terminalia arjuna) acts by increasing left ventricular ejection fraction, decreasing heart volume, decreases LDL , and enhancing myocardial contractility.

Kachnar tvak churna [12] -Kachnar churna is considered as effective in CAD due to its antioxidants, Kanchanar lowers the body's lipid and cholesterol levels and helps treat heart conditions. It prevents LDL cholesterol from becoming oxidised. Additionally, it has been demonstrated that this herb's extracts lessen platelet stickiness, which lowers the risk of coronary artery disease.

This case report suggests Ayurveda may help in

Improve Lipid profile

Enhance quality of life

Reduce cardiovascular risk factors.

Conclusion

As per this case report and previous other studies ,Arjun tvak churna along with Kachnar churna and other ayurvedic medications plays a significant role in the management of Triple Vessel Coronary Artery Disease as compared with Arjuna tvak churna alone . Ayurveda offers a holistic, patient centered approach in the management of CAD with TVD, addressing not only symptomatic relief but also underlying pathogenesis.While surgical interventions remain the standard of care in such cases, Ayurveda may serve as a supportive or alternative option, particularly in patients unwilling or unfit for invasive procedures.

Bibliographic References:

1. M. L. Murphy, H. N. Hultgren, K. Detre, J. Thomsen, and T. Takaro, “Treatment of chronic stable ssangina. A preliminary report of survival data of the randomized Veterans Administration cooperative study,” New England Journal of Medicine, vol. 297, no. 12, pp. 621–627, 1977.
2. NCBI, “Long-term results of prospective randomised study of coronary artery bypass surgery in stable angina pectoris.European Coronary Surgery Study Group,” The Lancet, vol. 2,no. 8309, pp. 1173–1180, 1982.
3. NCBI, “Coronary artery surgery study (CASS): a randomized trial of coronary artery bypass surgery. Survival data,” Circulation, vol. 68, no. 5, pp. 939–950, 198
4. L. D. Hillis, P. K. Smith, J. L. Anderson et al., “2011 ACCF/AHA guideline for coronary artery bypass graft surgery,”Journal of the American College of Cardiology, vol. 58, no. 24, pp. e123–e210, 2011
5. Gupta, Aashray & Paterson, Hugh & He, Cheng & Vallely, Michael & Bennetts, Jayme. (2023). Triple Vessel Coronary Artery Disease Needs a Consistent Definition for Management Guidelines. Journal of Cardiac Surgery. 2023. 1-8. 10.1155/2023/6653354.
6. Panda AK, Kar S. Ayurvedic approaches for the prevention and treatment of coronary artery disease: Moving from theory to clinical practice. J Prev Med Holistic Health. 2025;11(1):16-22.
7. Susruth, Sushruth Samhita. Hindi commentary by Ambikadatta Shastri .9th ed. Varanasi: Chaukhambha; 1982.
8. Vrinda Madhava. Madhava Nidana. Commentary by Sudarshana Shastri. 4th ed. Varanasi: Chaukhambha; 1975.
9. Agnivesh, Charaka,Charak Samhita ,Vidyotini Hindi commentary by Shastri KN, Chaturvedi GN,13TH ed. Varanasi: Chaukhambha; 1986.
10. Maulik SK, Talwar KK. Therapeutic potential of Terminalia arjuna in cardiovascular disorders. Am J Cardiovasc Drugs. 2012;12(3):157-63.
11. Sharma PV, Dravyaguna Vigyan. Vol 2, Varanasi: Chaukhambha Bharati Academy.
12. https://www.netmeds.com/c/health-library/post/kanchanar-guggulu-this-ayurvedic-formulation-treats-hormonal-imbalance.