

PREVENTIVE ASPECT OF ARJUN KSHIRAPAK IN CARDIO VASCULAR DISEASES- A REVIEW

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ABSTRACT

Ayurveda is the oldest system of medicine with a consistent theoretical basis and clinical applications. Cardio Vascular Diseases comprises of group of heart disease. India is currently leading towards becoming a heart disease capital of world. This puts tremendous pressure on available resources of medical management. Treatment of Cardio Vascular Diseases in elderly is not easy and there is need for development of Herbal remedy which can be used safely. Terminalia arjuna, its bark decoction is being used in the Indian subcontinent for anginal pain, hypertension, congestive heart failure and dyslipidemia. *Kshirapak* is one unique preparation of Ayurvedic pharmaceuticals. By *Kshirapak Kalpana*, we may increase efficacy and potency of drugs

and minimize unwanted effects. That's why the study was planned with the aim to review the literature regarding Cardio Vascular Diseases and Arjuna Kshirapak. There are many medicinal plants mentioned in Ayurveda which are very beneficial effect in Cardio Vascular Diseases and of which Arjuna is one of them. By using *Arjuna Kshirapak* it could be very much effective in Cardio Vascular Diseases.

KEYWORDS: Ayurveda, *Kshirapak*, Cardio Vascular Diseases.

INTRODUCTION

Today the incidence of chronic non communicable disease is increasing at high rate in our society. Due to change in concept of diet and life-style, incidence of Cardio Vascular Diseases is increasing at high rate. The Cardio Vascular Diseases has largest share in non-communicable diseases i.e. 31%.^[1] Cardio Vascular Diseases continue to be the major cause

of mortality representing about 30% of all deaths worldwide.^[2] In India, current status of heart disease is alarming, suggesting that the burden of Cardio Vascular Diseases in India will exceed that of any other country in the world; as it is the first cause among top ten causes of deaths in Indian population.^[3]

It is estimated that 17.5 million people die each year in India from Cardio Vascular Diseases. There are estimated 40 million heart patients in India, out of which 19 million are in urban areas and 21 million are from rural areas, this suggests that heart diseases are becoming an epidemic in rural India and a structured solution is needed for combating the issue.^[4]

Synthetic drugs like organic nitrates, beta blockers and calcium antagonist are recently used to treat the Cardio Vascular Diseases but they are not free from adverse effects like hypotension, bradycardia, dizziness etc.^[5]

Ayurveda as known from the ancient times is serving the society by its specific measures of cure. Ayurveda is the only medical science which has insisted more importance on prevention of disease and maintenance of health rather than treating any disease. Ayurveda teaches and enriches us with wonderful herbal medicines that are very effective in prevention of heart disease.

Ayurvedic herbal medicine are increasingly gaining greater acceptance from the medical profession and public, the common belief that, herbal formulations are safer than modern drugs and leads to increase in use of herbal preparations.^[6]

Arjuna is one of the cardiogenic herb mentioned in ancient literature. *Acharya Vagbhata* first time advocated use of stem bark powder in heart ailments.^[7] Its action is specific for heart and is useful in all types of heart diseases, promoting heart function and adding in longevity.

Kshirapak is one of the useful preparation of ayurvedic pharmaceuticals, by this preparation potency of drug is transformed into milk. Besides this, milk is also having antacid property, more dietic value and palatable. In this review an attempt has been made to explain cardiogenic action of *Arjuna Kshirapak* as it is easy to prepare at home, cheap and could be helpful in preventing Cardio Vascular Disorders.

AIM AND OBJECTIVE

To review the literature regarding Cardio Vascular Diseases & the preventive aspect of

Arjuna and *Arjuna Kshirapak*.

MATERIALS AND METHODS

Literature regarding *Arjuna* and *Arjuna Kshirapak* from an Ayurvedic classical texts was reviewed and different research papers and journals were reviewed, compiled and analyzed.

Arjuna

Arjuna improves function of cardiac muscle and pumping activity of heart. *Arjuna* contains saponin glycosides might be responsible for inotropic effect, while flavonoids provide vascular strengthening & free radical antioxidant activity.^[8]

Pharmacological properties^[9]: *Guna- Laghu, Ruksha*

Rasa- Kashaya Vipaka- Katu Veerya- Sheeta

Dosha karma- Kapha-pitta shamak Prabhav- Hridya.

Arjuna is one important medicinal herb mentioned in ancient text. In *Charak Samhita* and *Nighantus*, it is documented to possess ‘ama’ (free radicals) reducing properties i.e. antioxidant.^[10] *Shotha*(anti-inflammatory)^[11] *medohanti*(anti-hyperlipidemic)^[12] properties, which are also been validated. Its role as cardi tonic has also been recognized by both Ayurvedic as well as by modern medical practitioners.^[13,14] That’s why *Arjuna* is regarded as important cardi tonic herb.

A standard preparation of T. *Arjuna* is *Kshirapaka*, was first time prescribed in cardiac disorders by Acharya *Vrinda* in *Sidhhayoga Samgraha*.^[15] It consists of *Arjuna* dry bark powder, cow milk and water in the ratio of 1:4:16. As *Arjuna* is having *laghu, ruksha guna* and *Kashaya rasa*, that will be reduced by doing *kshirapaka* and by this active principle of *Arjuna* will get dissolved in milk and become more palatable. *Kshirapak* have more nutritive value than decoction as it contains milk, in fact by this preparation potency of drug is transformed into milk. Besides to this milk also have antacid property & have more dietetic value. It was seen that milk decoction exhibit potent antioxidant action in comparison with water decoction. And it proved that milk decoctions are more beneficial as compared to water decoctions of same herbal drug.^[16,17]

Therapeutic uses

Arjuna contains prostaglandin enhancing and coronary threat modulating properties and promotes effective cardiac performance by regulating blood pressure and cholesterol level

properly. It possesses diuretic and general tonic outcome, reduces the effects of stress and nervousness on the heart, relieves hypertension, supports normal heart function, platelet function, and blood pressure levels and act as natural tone-up for heart. Arjuna helps in lowering cholesterol levels and maintaining it to normal levels, beneficial for all heart related problems and provides a significant cardiac protection in heart attack.^[18]

DISCUSSION AND CONCLUSION

Chakrapani Dutta described the use of T. Arjuna in the form of *Arjuna Kshirapak*. The main aim of *Kshirapak* is to reduce the *tiksha guna* of *dravya* by it becomes more palatable. Apart from that both water and fat soluble active ingredients comes into this preparation which makes it more efficacious. The additional advantage of *Kshirapak* is due to property of milk itself. Property of milk is similar to property of Ojas^[19], by these milk promotes the longevity of life and maintain dhatus as it has more nutritive value.

The therapeutic potential of T. Arjuna is well defined in our ancient literature and thus it is validate as an adjunct therapy to prevent cardio-vascular diseases via its anti- inflammatory and cardioprotective effects.

As we know Cardio Vascular Disorders is caused mainly due to intake of fatty substance. Researches shown that it has anticoagulant property, anti oxidant, reduces cholesterol level and cardio protective effect development of standardize, synergistic, safe and effective traditional herbal formulation like *Arjuna Kshirapak* with scientific evidence may offer faster and more economical alternatives.

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