



A SYSTEMIC REVIEW ON JALAUKAVACHARANA AND ITS CLINICAL SIGNIFICANCE IN HRUDROG

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ABSTRACT

Today, the word "panchakarma" is well-known around the world and is considered an Ayurvedic super specialty. Raktamokshana, according to Acharya Sushruta, is a karma that entails the elimination and replenishment of dushta Rakta. The Ashastrakruta Raktamokshan known as "Jalaukavacharan" is carried out using leeches. It emphasizes the significance of the Jalauka in medical therapy that it has a position in Lord Dhanvantari's right hand. Arthritis, arterial and venous illnesses, varicose vein ulcers, heart and lung issues, as well as skin conditions including psoriasis, eczema, and hypopigmented patches are all treated with nirvish Jalauka. The signs and symptoms of Hrudrog described in the Samhitas are virtually identical to those of cardiovascular disorders, of which coronary heart disease (CAD), also known as ischemic heart disease, is the most prevalent and the main cause of mortality for both men and women worldwide. Modern medical systems only provide adequate emergency management for cardiac disease, but Jalaukavacharan plays a crucial role in the prevention and treatment of cardiac disease by acting as a thrombolytic and anti-inflammatory agent by eliminating toxins and impurities from the local circulation. A sort of bloodletting therapy called Jalaukavacharan aids in the elimination of vitiated doshas, particularly Pitta dosha. Whenever there is venous stasis, leeches are recommended in surgery. More than 100 bioactive compounds with analgesic, anti-inflammatory, and microcirculatory disorder-curing capabilities are present in the saliva of the Jalauka plant. Leech therapy is another less expensive and efficient Hrudrog treatment, particularly for coronary heart disease.

KEYWORDS – Jalaukavacharana, Leech therapy, coronary heart diseases, etc.

INTRODUCTION

Hrudrog is one of the most critical illnesses in emergency situations, and it may be lethal if left untreated. According to a WHO report, cardiovascular illnesses are the primary global cause of mortality and disability. Hrudrog is now affecting both the elderly and younger generations as a result of changing lifestyles.¹ Panchakarma is an Ayurvedic treatment that not only provides immediate results or treats chronic illnesses, but also treats emergency illnesses in conjunction with Hrudrog. When performed at the appropriate time of year (Sharad Ritu), panchakarma Raktamokshan with food regimen might be significantly necessary to avoid Hrudrog. Jalaukavacharan involves applying leeches to the appropriate area to eliminate blood impurities and related Doshas. The least dangerous and complicated kind of Raktamokshan is kalukavacharan.²

All heart and circulation-related illnesses fall under the category of cardiovascular diseases, which also includes stroke, congenital heart disease, heart failure, and coronary heart disease. Coronary heart problems and Hrudrog disorders described in the classics of Ayurveda can be connected.³ coronary heart disease, also known as atherosclerotic heart disease, is managed with self-care, medicine, and surgery (coronary bypass graft and angioplasty). Exercise, quitting smoking, weight loss, and a low-fat diet are examples of self-care, whereas Statins and blood thinners make up the majority of medicine. Blood thinners are medications that facilitate easy blood flow via arteries and veins.⁴

Additionally, they prevent blood clots from growing or developing in the first place. They can guard against heart attacks and strokes, but they also have hazards, such as the possibility of more severe bleeding than normal. These medications frequently provide life-saving advantages that outweigh any possible risks. Two categories of blood thinners exist. Antiplatelets and anticoagulants.⁵ Antiplatelets, such as Aspirin and clopidogrel, target the platelets, which are minute blood particles. They do prevent blood from clotting again. They can halt the expansion of current ones. Instead of treating an existing blood clot, they are frequently prescribed to patients who are at risk for developing one in the future. Every year, between 2 and 3 million people use blood thinners to lower their chance of suffering a second heart attack or stroke.⁶

METHODOLOGY

Information was acquired from doctors, doctors who practice Ayurveda, the internet, and personal experiences.

HEART VYADHI

Angina and myocardial infarction are examples of cardiovascular disease (CVD), which includes coronary artery disease (CAD). Heart failure and stroke are two other CVDs. thromboembolic conditions, aortic aneurysms, carditis, valvular heart disease, hypertensive heart disorders, and venous thrombosis.⁷ The primary feature of the condition is a physical degeneration in the cellular makeup of the walls of the cardiovascular arteries. There are three primary categories.

- 1) Vascular plaque and cholesterol buildup
- 2) Reduced vessel lumen and wall thickness
- 3) Affected regions as a result of elevated pressure and free radical activity.

Pain, weakness, shortness of breath, palpitations, and fainting are some of the symptoms that result from this. Ayurvedic classics indicate how the condition of Hrudrog is connected to cardiovascular disease.⁸

Ayurvedic symptoms include changes in complexion, breathlessness, confusion, and lack of appetite. Vataja symptoms include palpitations and arrhythmia, Pittaja symptoms include anginal pain and yellow discoloration, and Kaphaj symptoms include drowsiness, coughing, and a heavy feeling in the chest. Shodhana and Shaman therapies are among the therapy options, along with preventative practices such a good diet, regular exercise, abstaining from cigarette use, and consuming alcohol in moderation.⁹

HISTORICAL REVIEW OF JALAUKA -

Jalauka has been recognized by Acharya Charaka as the greatest Anushastra. In their writings, Acharya Sushruta Vagbhata and Harita concentrated on the specific use of Jalauka. The two primary categories of Jalaukas are Savish (poisonous) and Nirvish (medical). The six varieties of Nirvish Jalaukas include the Kapila (greenish), Pingala (reddish), Shankumikhi (18 angulas in length), Mooshika (18 Angula in length), Poondarikmukhi (rat-like in color and form), and Savariaka. According to their sex characteristics, Acharya Vagbhata divided Jalaukas into Stree Jalauka and Purusha Jaloukas.¹⁰

GUNAS OF JALAUKAS

Sheet, Snigdha, Slakshna Action on Dosha – Pittahara

INDICATIONS OF JALAUKAVACHARAN

Jalaukavacharan should be performed, especially on kings, wealthy people, kids, seniors, women, and sukumar people, according to Acharya Sushruta. Leeches are the favored method of bloodletting for non-healing sores caused by venom or poison, when Raktamokshan is prescribed to promote healing. when treating an abscess. Inflamed scrotal edema was caused by several grandular inflammatory swellings. Jalaukavacharan has been recommended by Acharya Sushruta as a necessary step before incision and drainage in order to localize the abscess. Use of leeches in surgery poses a major risk for tissue necrosis in plastic surgery due to the possibility of venous blockage leading to thrombus development and stasis. Consequently, reducing venous congestion is a crucial step in maintaining transplanted tissues.¹¹

The blood oozing caused by a leech bite has a cumulative impact that is relieved by the presence of bioactive enzymes, anticoagulants, and vasodilators in the leech's secretion. After microsurgery for cases of scalp avulsion,

leeches have been reported to successfully increase blood flow. Patients who had surgery for the repair of their fingers were given a leech application as post-operative treatment. Numerous studies on people with osteoarthritis who reported that leech treatment is more alleviating than topical Diclofenac sodium established the painkilling properties of Jalaukavacharan.¹²

FACTOR OF LEECH SALIVA-

Hirudin, Hirustasin, Hyluronidase, Bdecellins, Calin, Histamin like substances, Tryptase inhibitors, Acetylcholine, Collagenase.

DISCUSSION

Jalauka is administered all over the surface of the heart on both sides when Jalaukavacharan is performed on a Hrudrog patient. Pitta and raktaj doshas' impurities are aggressively removed by Jalauka when she actively begins sucking blood, breaking the Samprapti of the Hrudrog. after which the wound begins to passively ooze blood. Jalauka injects biologically active compounds into the circulatory system around the applied region using saliva. More than 100 bioactive compounds, including as coagulation inhibitors, platelet aggregation inhibitors, vasodilators, antimicrobials, and anti-inflammatory chemicals, are found in the saliva of leeches, which soothes local inflammation and encourages normal flow around the coronary circulation. Jalauka's action zone is one (wet) hasthal. Thus, for optimal benefits, Jalauka should be applied across the chest area close to the heart. Therefore, we promote the repair process in coronary tissues before as well as after ischemia evidences in the heart by bloodletting of 10 to 30 ml with Jalauka, preventing the damage to myocardium.¹³

PROBABLE MODE OF ACTION

The blockages and amyolytic and kininogestic actions of plasma kallikrein are linked to the anti-inflammatory and analgesic characteristics of Jalauka in many aspects, which limit the creation of new thrombi and eventually improve heart health and function. additionally, to numbing throughout leech sessions. Additionally, leeches may release histamine-like vasodilators that improve blood flow and encourage the growth of collateral blood capillaries around blood vessels. Positive changes in local hemodynamic improvements of coronary circulation increase oxygen supply which promotes tissue metabolism and eliminates coronary tissue ischemia. The persistent bleeding also relieves capillary network, which reduces venous congestion.¹⁴

CONCLUSION

Blood-lighting therapy with Jalaukavacharan is a simple, less costly approach. The panchakarma process is practical and may be used in many different situations. Modern investigative technologies have made it possible to better understand the mechanism of action of jalauka. Jalaukavacharan should be supported in light of the rising prevalence of coronary artery disorders. Since there are no adverse effects, it might be a useful solution for people

with ischemic heart disease. The possibility of more research into the function of leeches in various coronary artery illnesses keeps the field of inquiry open.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NONE

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