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# ROLE OF VIRECHANA KARMA IN THE MANAGEMENT OF THE ISCHEMIC HEART DISEASE: A CONCEPTUAL STUDY

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#### **ABSTRACT**

Ischemic Heart Disease (IHD) is a condition in where heart does not compensate myocardial oxygen supply and demand. It occurs due to regional reduction in myocardial blood flow and inadequate perfusion of O2 in myocardium tissue. The most common cause is atherosclerotic disease. The ischemic heart disease is very dangerous and high rate of mortality in world. Old age is major risk factor for IHD. In IHD the episodic chest pain takes human life in danger. In allopathic the medication Nitroglycerin, Isosorbide Dinitrate, Isosorbide Mononitrate and Pentaerythriotol Tetranitrate are used. In very serious cases, surgery coronary artery bypass graft (CABG) may require. *Virechana* purifies macro and micro channels of the body by the *shrotoshodan kriya*. *Virechana* also breaks down fat and triglyceride and it decreases chances of chest pain or IHD.

Keywords: Ischemic heart disease, Virechana Karma

#### INTRODUCTION

Ischemic means that an organ is not getting enough blood and O<sub>2</sub>. Ischemic heart disease is a condition of recurrent chest pain or discomfort that occurs when a part of the heart does not receive enough blood. This condition occurs most often during exertion or excitement. Life threatening illness in the United States, where 13 million persons have IHD, >6 million have angina pectoris, and >7 million have sustained a myocardial infarction. Old age is major increase risk factor of IHD due to hardening and narrowing of the blood vessels. IHD or cardiovascular disease develops 7 to 10 yr later in women than men. Sedentary life style and fat rich energy diet is factor to develop Ischemic heart diseases. Life style management, low fat diet, exercise and yoga decreases risk of IHD.

Nitroglycerin, Isosorbide dinitrate, Isosorbide mononitrate, Pentaerythriotol tetra nitrate are given in modern medicine. Nitroglycerine dilates blood vessels and Isorsorbide nitrates treat angina attack in IHD. Ischemic heart disease is most common of the cardiovascular disease. It is also known as coronary artery disease. IHD is caused when there is decrease O<sub>2</sub> and blood supply in myocardial tissue that causes ischemia. When area of ischemic zone increases the severity also increases and it may develop MI and may causes death. Accumulation of high blood cholesterol specifically, serum LDL and triglyceride concentrations play a role in binging of IHD.

In IHD main symptoms are heaviness, tightness and pressure in chest, behind the breast bone, extreme

fatigue, pain radiating towards arm, shoulder, jaw and neck, heart palpitation, dizzy sensation. The group of these symptoms called angina pectoris. In Ayurveda Acharya Shsusruta said suppression of natural urge, Excessive intake of Ruksha Anna, Virrudhha anna, Adhayanshan, Ajirna, Asatamaya anna causes dusti of rasa dhatu. Rasa dhatu dusti causes pathology of heart (hridhaya) and causes hridhya gati badha (interpreting heart beat). Hridhay is pradhana marm in Trimarm. Any pathology in heart (hridya) may cause mortality. Acharva Charak also gives same concept in hridaya roga. Cholesterol lowering medications, beta-blockers, nitroglycerin, and calcium channel blockers are given in this stage etc. IHD in advance condition may require surgical procedure angioplasty for removing mechanical obstruction.

#### **PATHOPHYSIOLOGY**

The normal coronary circulation is dominated and controlled by the heart's requirements for oxygen. There is (in healthy vessels) coronary vascular resistance change by the changing with oxygen demand such condition is exercise, exertion, and excitement. Other stimulants are which effects in change of resistance is Coffey, emotional stress, shock. This is the normal physiology. Old age. obesity, fatty diet intake damages normal physiology and may cause IHD. In diseased condition or when narrowing of the coronary vessels occur the vessels cannot dilate properly so there is less O<sub>2</sub> supply than O<sub>2</sub> demand by the myocardium cell. Overall it develops ischemia. Recurrent ischemia means the obstruction is not present in major level but there is narrowing of artery that causes chest pain. The episodic chest pain occurs whenever the narrowing increases due to taking of high cholesterol diet or excitement, exertion and shock which mainly occurs due to atherosclerosis. Atherosclerosis is the inflammatory disease in which artery narrows due to plaque formation. Atherosclerosis in later stage leads to hemorrhage and thrombus formation and causes condition worse. The fundamental pathophysiological defects are inadequate perfusion. There is also reduction of nutrition and inadequate removal of metabolic end product. The causes that may complicate the IHD are Type 2 Diabetes,

hypertension, dyslipidemia, and smoking, any congenital deformity, depression and genetic cause also. IHD may be associated condition with isolated hypoxemia and preserved perfusion such as cyanotic heart disease, severe anemia or advance lung disease.

#### LITERATURE REVIEW CORRELATION

Ischemic heart disease can be correlated with Vatai Hridya roga. In IHD there is main dusti of meda dhatu that causes dhorbalaya. Heart fails to pump blood in all over the body that causes chest pain. The meda dhatu are fat and adipose tissue. When vitiation of vyan vayu and pran vayu occurs that causes lack of O<sub>2</sub> in circulatory system & myocardial cell. There is sanga of meda dhatu with kapha in dhamni causes hardening of blood vessels or dhamni pratichaya. There is mandagni in level of rasagni, and medagni that causes rasdhatu dusti, raktadusti and medadhatu dusti. In meda dhatu dusti quantity of LDL increases, that means the bad fat (LDL) formation increases which gets stuck in arteries. Normally meda dhatu gives bala. But in meda dhatu dusti there is lack of energy (glani, dorbalay) and dysponea at slight exertion due to decrease O2 or prana vayu vitiation. Acharya Shsusruta and Acharya Charak described Vatik hridva roga. Vata prokop causes pain in heart (Hridya shool). We can correlate it with ghanata of raktavahini (thrombosis or atherosclerosis of vessels). The main or beginning of pathology is Kapha and meda (atherosclerosis) stagnation in vessels causes avarana of vata and that causes Vataprakop. The main symptom of IHD resembles with symptoms of Vataj Hridaya roga.

#### DISCUSSION

ः|तत्रोष्णतीक्ष्णसूक्ष्मव्यवायीविकाशीन्यौषधानीस्ववीर्येण हृद्यमुपेत्यधमनीरनुसृत्यस्थुलाणुस्रोतोभ्यःकेवलंशरीरगतं दोषसंघातमाग्नेयत्वाद्विष्यन्दयन्तितैक्ष्णयाद्विच्छिन्दन्तिवि च्छिनः| (च.क. १/५)

The Virechana aushadi has ushana, tikashana, suksham, vyavayi and vikasi guna. The drug due to virya or suksham guna) first reaches to heart' (hridaya) and circulates in vein, arteries and reaches micro and macro channels, small capillaries. Usana

guna liquefies the dosha by the process of dosha sanghat. Tikashana guna breaks down dust meda dhatu or unwanted disease causing material. Virechana dravya brings dosha, mala and disease causing material into koshatha and eliminates through adhobhag or anal rout due to prabhav of prithivi and jala mahabhut and Saraguna. In Virechana processes in sneha pana there is no formation of bad lipid (LDL) so there is no contribution in development of atherosclerosis. Virechana purifies pitta from the pachayamanasya or 2nd part of duodenum. By the Virechana bile elimination occurs by the liver more rapidly so excess cholesterol gets excreted through the bile. Study shows Virechana decreases fatty acid from the other organs by increases the insulin sensitivity to insulin receptor.

#### SAMPRAPTI GHATAK

Dosha –Tridhosha vata pradhana

Dushva – Ras

Srotas – Rasvahashrotas, Pranavaha shrotas

Adhhisthan - Hridaya,

Srotodusti prakar – Sang

Agni – Vishamagni, Mandagni

Sawabhav – Darun

Sadhayata Asadhayata - Krichhasadhayata /yapya

#### **MANAGEMENT**

In IHD management of the patient's life style and treatment are required such as complete rest (mental and physical rest), Fat rich diet control, Careful assessment of other disease (HTN, Diabetes, and hyperlipedimia) that may complicate IHD, Avoid smoking, and improve life style. Daily mild to moderate healthy routine exercise, deep breathing, yoga (meditation) can prevent IHD.

Panchakarma – Panchakarma chikitasa is a sanshodhan chikitasa means whole treatment of disease and shodhan (purification) of dosha or disease causing material. IHD is mainly causes by shroto dusti and sang so there is need of shodan chikitasa. Panchakarma purification of the dosha eliminates metabolic waist material which can cause damage to the body organ. It not only treats disease but it increases strength of the body by using rasayana chikitasa.

In ayurveda, Virechana is the main treatment for rasajvikar, raktaja vikar and medajvikar. Virechana also purifies all pitta, kapha, vata dosha. It acts very fast due to direct elimination of dosha without much effort. Kapha is mala of meda and Virechana is best treatment for both vikar. Virechana eliminates dosha fat from the micro channels (artery and veins) due to sukshma guna of Virechana drug. So Virechana increases the blood supply to the heart, by increasing elasticity of blood vessels. Virechana increases capacity of changing resistance of vessels according to myocardial O<sub>2</sub> supply and demand. Virechana normalizes vyan vayu and prana vayu vitiation by treating kapha and meda dhatu dusti.

#### CONCLUSION

Virechana karma plays important role in the management in ischemic heart disease by multiple effects. Virechana prevents the increase sequence of atherochelerosis formation and decreases LDL from the vessels by biopurification method or shrotoshodan kriya. Shrotoshodan chikitas is mentioned in the case of Avarana of vata without causing kapha vridhi by the Charak.

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