



AYURVEDIC UNDERSTANDING OF DYSLIPIDEMIA

Ayurveda

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ABSTRACT

Dyslipidemia is one of the commonest presentation and major cause for various lifestyle disorders like cardiovascular diseases, pancreatitis, fatty liver and many other diseases. Sedentary lifestyles, unbalanced diets, and stressful situations are contributing to deadly diseases and complications that are impossible to reverse in today's world¹. As a result of all of these factors, the prevalence of dyslipidemia is rising. In modern medicine, there are effective dyslipidemic drugs which give rapid relief, but may cause some long term side effects. So there is a need for safe alternative treatment which may be effective in reducing lipid level, for prolonged use. In Ayurveda, dyslipidemia can be considered as a condition in which Kapha, Medas and Rasa are pathologically deranged due to Ama. There is defective Medo dhatu poshana due to Dhatwagnimandhya and formation of Ama at the level of Medo dhatu. It can be considered as presumable level of stage of Samprapti or a morbid state which may cause disease, but not attained a full status of disease. Nidanans include Beejadushti, Ahara – vihara – vikara and Manasika nidanas. Lipid profile can be brought back to normal by correcting Agni and ensuring proper Dhatuparinama. Treatment modalities include Nidana parivarjana, Sodhana, Samana, Rasayana and following Pathyapathya. Drug having Kaphamedohara, Deepana, Pachana, Ruksha and Lekhana property is useful to treat this clinical condition².

KEYWORDS

Ayurveda, dyslipidemia, Medoroga, life style disorder.

INTRODUCTION

Dyslipidemia is one of the commonest presentation and major cause for various lifestyle disorders like cardiovascular diseases, pancreatitis, fatty liver and many other diseases. Sedentary lifestyles, unbalanced diets, and stressful situations are contributing to deadly diseases and complications that are impossible to reverse in today's world. As a result of all of these factors, the prevalence of dyslipidemia is rising. Dyslipidemia is a condition in which the levels of lipids and lipoproteins in the blood are elevated.^{1,2}

In Ayurveda, there is no direct reference to a single disease entity that can be directly correlated with dyslipidemia. In addition, different scholars have different opinions on the nearest possible disease. Most of them considered dyslipidemia under the heading of *medoroga* or *medodosh*. Few of them considered *rasagata-snehavridhi*, *raktagata-snehavridhi* or *rasa raktagata-snehavridhi*, while some suggest dyslipidemia under the broad heading of ama.³

The prevalence of hyperlipidaemia ranges from 25-30% in urban people and 15-20% in rural sub-jects. Preventing these lifestyle disorders which are a major contributing factor to many life-threatening diseases such as coronary artery disease is a need of the hour. Proper Ayurveda modalities when used will help in preventing this condition in a better way.⁴

Aim And Objective

The aims and objectives of present research work are as follows:-

- To study the Medo Dusti in context of Dyslipidemia
- To evaluate the relation between Medo Dusthi and Dyslipidemia.

MATERIAL AND METHODS

It is a review study article. In classical Ayurvedic literature, the Medo Dusthi described in the form of etiology, causative factor, sign & symptom briefly mainly in Brihatrayi and Laghutryi.

In this article review some Ayurvedic text, modern books, PUBMED and Research article.

Conceptual study of Medo Dusthi w.s.r. to Dyslipidemia

Medo Dhatu- Two types of Meda (Fat) are described in Ayurveda

- Baddha (bounded/unmovable) Meda- The fat, which is not mobile and is stored in the form of fat at various places (fat depots/omentum/muscles in the body).
- Abaddha Meda (unbounded/movable) - The fat, which is mobile and circulates in the body along with blood in the form of lipids (Cholesterol, Triglycerides, LDL, HDL & VLDL etc.)

Karma of Medo Dhatu –

As states by Acharya Sushruta, Snehana (oiliness/ luster of skin, hairs and eyes etc.), Sweda (sweat), Dridhatva(strength), Asthipusti (strengthening of bones) and NetraGatra Snigdhatva (oiliness of eyes and body) are the mainfunctions of Medo Dhatu.⁸ The term Medoroga was first used by Acharya Madhava to define obesity and related lipid complications. Literally it means a disease in which Medo Dhatu is deranged. In Ayurveda also Meda is considered as prime Dushya in context of different diseases like-Prameha, Medoroga and Sthaulya etc. In the Metabolic Syndrome the abnormal Meda, when deposited into subcutaneous tissue, it gives the clinical presentation of Obesity and similarly when that incompact Meda (Abadha)extracted to Basti (urinary system) it creates the manifestations of Prameha (D.M.) and when this Meda is unnaturally deposited in the arterial wall and increase the peripheral resistance (Dhamnpratichaya/ arteriosclerosis), clinical manifestation like Hypertension and when these unnatural Meda present in the Rakta-vahasrotas (CVS) leads to increased level of unwanted fat level-Hypercholesterolemia.

Causes of Medo Dusthi-

The most common cause of Medoroga is an unbalanced diet along with sedentary lifestyle (Sthaulya).

The following are the etiological factors of Medoroga:

- Aharaja Nidana (Dietary Factors): Overeating, frequent eating, excessive Madhura, Sheeta, Guru Ahara, Shleshmadravaya Ahara, Ati Meda Ahara, Ati Madya (Liquors) sevana, excessive bakery products, and so on are examples of incorrect eating methods.
- Mansik Nidan (Behavioral Factors): The majority of metabolic disorders are caused by a change in lifestyle. These are caused by habits such as daytime sleeping, lack of exercise, lack of thinking, exhilaration, and sedentary habits.
- Bija Doshaj (Genetic or Hereditary Factors): These factors play important role. Mithya Karma (Improper Therapeutic Application):Santarpana (weight gain therapy) may give to Medoroga (Sthaulya).³Medoroga is caused by Dushti of Medo Dhatu which involve complex consequential process of Medovridhi. Acharya Madhav described its pathogenesis as follows-^{12,13}

Samprapati-

- Excessive production of Medo Dhatu (due to dietary factor, behavioral factor, genetic or hereditary factor)
- Excessive Medo Dhatu lead to margavarodh and depletion of other Dhatus and provocation of Vayu.
- Provocation of Vayu causes an increase in false appetite, which leads to overeating.
- Excessive consumption of food lead to excessive MedoDhatu production.

Rupa-

The excessive accumulation of fat and flesh results in ugliness, such as pendulous buttocks, abdomen, and breasts, as well as a reduction in energy, making the person less interested in physical activity.

Apart from these basic symptoms, the Charaka Samhita mentions eight Medo Roga impairments, each with a detailed aetiology.

Ayushohrasa (Diminution of longevity) - Decreased life expectancy due to insufficient feeding of other Dhatus.

Javoparodha (Lack of enthusiasm) –

Kricchavyavaya (Difficulty in sexual activity)

Daurbalya (Debility) –

Daurgandhya (Foul smell from the body) –

Swedabadha (Distressful sweating) –

Kshudhatimatrata (Excessive hunger)

Pipasatiyoga (Excessive thirst)

Dyslipidemia^{5,6,7}

Dyslipidemia are disorder of lipoprotein metabolism, including lipoprotein overproduction or deficiency. These disorders may be manifested by elevation of the serum total cholesterol, LDL and triglyceride concentration, and a decrease in the HDL cholesterol concentration.

Risk Factor-6

Important Modifiable Risk Factor for Dyslipidemia, Several behaviors can lead to dyslipidemia.^{17,18}

1. Cigarette smoking
2. Obesity and sedentary lifestyle
3. Consumption of foods high in saturated fat and trans fat
4. Excessive alcohol consumption may also contribute to higher triglyceride levels.
5. Genetical cause
6. Advanced age.

Types of Dyslipidemia

Dyslipidemia is divided into primary and secondary types.

1. Primary – Inherited or Familial Dyslipidemia
2. Secondary - Acquired

Among the specific types of primary dyslipidemia are-

- a) Familial combined dyslipidemia
- b) Familial hypercholesterolemia
- c) Familial hyperapobetalipoproteinemia

Symptoms-

- High blood pressure
- Coronary artery diseases
- Diabetes
- PAD (pulmonary artery disease)
- Obesity
- Abdominal pain
- Acute pancreatitis
- Chronic kidney disease
- Chest pain
- Stoke
- Dizziness
- Calf muscle pain during walking
- Dyspnea
- Confusion

DISCUSSION

Medoroga is classified as Atisthaulya by Acharya Charak, who explains that Atisthaulya is caused by the dushti of Medovaha Srotas and can be considered a synonym for Medoroga. Medoroga and its genesis were described by Acharya Madhava. He said that Medodushti is the aberrant deposition of Medo Dhatu in the body. Medodushti is made up of various other Medo Vikaras, together known as Medoroga. Medoroga can be defined as an abnormal and unequal distribution or collection of Medo Dhatu in the body. Madhukoshkara and Bhavamishra support this notion by describing various chapters of Medoroga. In the 34th chapter, Madhavakar describes the disease under the title of Medoroga, using the words Medaswina, Atisthula, and Sthula as synonyms. Madhavakar highlighted Nidana and Rupa, and painted a detailed image of Medoroga, incorporating all prior authors' opinions in the development of Medoroga (Sthaulya).^{15,16}

CONCLUSIONS

Dyslipidemia is a condition in which the body's lipid levels are abnormal. The vitiated medo dhatu plays a vital part in the development of many metabolic disorders. The etiological reasons, signs, and symptoms of medoroga are essentially identical to those of dyslipidemia. Agni is in charge of the body's metabolic processes. Excess homologues poshak Medo Dhatu circulate due to the disease of medodhatwagni mandya. which can be used to describe a condition like dyslipidemia. The treatment option is determined by the type of lipid problem. The Ayurvedic classics don't have a specific term for dyslipidemia. Scholars have attempted to utilize different names for dyslipidemia, according to the literature. The Ayurvedic notion has been used to treat biomedically defined clinical conditions including dyslipidemia. These hypotheses have been used to better understand the origin and pathogenesis of dyslipidemia, including Medo Dhatu dusthti.

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