



## CONCEPTUAL STUDY OF MEDO-VRIDDHI WITH SPECIAL REFERENCE TO HYPERLIPIDEMIA

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### ABSTRACT

In present era, life style modification and use of more and more junk food with stressful life helping obesity tree to propagate. Recent studies have reported that high cholesterol is present in 25-30% of urban and 15-20% rural population. Hyperlipidemia is a serious life style disease in today's era of fast and furious life. Hyperlipidemia is a disorder of lipid metabolism manifested by elevation of plasma concentration of the various lipids and lipoproteins fraction, which is the key risk factor for all the life threatening diseases like cardio vascular disease, diabetes, hypertension etc. It has been well described about the consequences of Medo-vriddhi and its hazards in Ayurvedic classics. Medo-vriddhi is mainly imbalance of agni because of various etiological factors. Etiological factors may be Aaharatmak, Viharatmak, Manasik and others like Bijaswabhaba (hereditary). In Ayurvedic classics there is no such term like Hyperlipidemia but the properties of sneha dravya like Medodhatu in Ayurveda are described. Present study tries to correlate conceptual facts to show relation between Medo-vriddhi and Hyperlipidemia.

**KEYWORDS :** Hyperlipidaemia, Medo Dhatu, Medo-vriddhi

### INTRODUCTION

As per Ayurveda, human body consists of 7 types of tissues known as *Dhatu*. *Meda* is one of those *Dhatu*s and necessary to maintain *snehatwa* (lubricity). *Sneha* is essential and offers corpulence to the body when normal, but it leads to born various disorders when it is in a disturbed state in terms of *Rasagata Snehavridhi* which lead to *Medo-vriddhi* (Hyperlipidaemia). In Ayurveda, Hyperlipidemia does not bear a precise reference in any Ayurvedic classical treatises, though the study of Ayurvedic literature bears some implicit references. Hyperlipidemia is characterized by an increased amount of lipids present in the bloodstream. The lipids which are elevated can be correlated to *Sneha*, *Medo-dhatu*, *Saama-rasa*, due to the similarity in their properties. Attempts were made by various scholars of Ayurveda to correlate clinically it to *Rasagata Sneha Vriddhi*, *Raktagata Sneha Vriddhi*, *Rasaraktagata Sneha Vriddhi*, *Medoroga* and *Sithaulya*. Hyperlipidemia can be included in *Santarpanjanya vyadhi*. Hyperlipidemia is also a *Dhatu-pradoshaja Vikara* in which *Medodhatu* is being dominant, thus it can be correlated with '*Medodoshha*' (*Amaposhakamedo-dhatu Vriddhi*) comes under the broad umbrella of *Ama*. Hence, the condition of Hyperlipidemia can be considered under *Medo-vriddhi* as well as *Santarpanjanya Vyadhi*. By understanding the concept of lipid on the basis of *Meda* in Ayurveda, it is necessary to modify lifestyle and follow the rules of diet and behavioural factors as per Ayurveda.

### AIMS AND OBJECTIVES

- To study the etiology, symptoms, pathology of *Medo-vriddhi* with special reference to Hyperlipidemia.

### Concept of Meda

*Meda* is mainly present in *Udara* but *Mamsa* and *Brihat Asthi* also consist some of it's part. It is termed as *Sarakta Meda* when *Meda* is present inside of *Anu Asthi* (small bones) and said as *Majja* when it is present in *Sthula Asthi* (large bones). *Vasa* is the pure form of *Meda* which is present inside the *Mamsa (Peshi)*<sup>(1)</sup> Thus *Meda*, *Vasa* and *Majja* can be correlated to all forms of lipids. But among these, *Medo Dhatu* has more importance as it is responsible for *Medo-vriddhi* (Hyperlipidaemia) and various metabolic disorders. *Medo Dhatu* is of two types- (a) *Poshak* and (b) *Poshya*. *Poshaka Medo Dhatu* is circulated in the whole body along with the *Rasa* and *Rakta Dhatu* to give nutrition to *Poshya Medo Dhatu*. *Poshya Medo Dhatu* is stored in *Medodhara Kala* which is immobile in nature. The site of *Medodhara Kala* is *Udara*, *Stana*, *Gala*, *Anu Asthi* and *Sphika*.

### Medo-vriddhi

*Medo-vriddhi* is a disorder of *medovahasrotas* as per Ayurvedic concept with symptoms of deposition of *meda* at the site of abdomen, buttock, chest, arm, thigh, neck, and all over body. The associated symptoms like *chalasphikudarastana*, *kshudraswasha*, *pipasatiyoga*, *kshudhatimatra*, *swapna*, *kshavathu*, *dourgandha*, *dourbalya* etc. are also found in this condition<sup>(2,3)</sup>

### Nidana (Causative Factors)

In brief, all causative factors described in Ayurveda can be classified into four groups-

- 1) *Aharaja*
- 2) *Viharaaja*
- 3) *Manasik*
- 4) *Anyaj*

For better understanding these causes are being tabulated as follow:

**Table 1: Aharaja Nidana**

Aharaja nidana	Ch.	Su.	A.S.	A.H.	Mn.	B.P.
Ati sampurana (Over eating)	+	-	+	-	-	-
Samtarpana	+	-	+	+	-	-
Adhyashana	-	+	-	-	-	-
Guru Ahara sevana (Excessive consumption of Heavy food)	+	-	+	+	-	+
Madhura Aharasevana (Excessive consumption of sweet food)	+	-	+	+	-	+
Sheeta Aharasevana (Excessive consumption of cold diet)	+	-	-	-	-	-
Snigdha Aharasevana (Excessive consumption of unctuous food)	-	+	+	+	-	+

**Table 2: Viharaaja nidana**

Avyayama (Lack of physical exercise)	+	+	+	-	+	+
Avyavaya (Lack of sexual life)	+	-	+	-	-	-
Divaswapa (Day's sleep)	+	+	+	-	+	+
Asana Sukha (Luxurious sitting)	+	-	+	+	-	-
Swapnaprasangat (Excessive sleep)	+	-	+	+	-	-

**Table 3: Manashik nidana**

Manasika Nidana	Ch.	Su.	A.s.	A.h.	Mn.	B.P.
Harshnityatvat (Uninterrupted cheerfulness)	+	-	+	+	-	-

Achintanant (Lack of anxiety)	+	-	+	+	-	-
Manasonivritti (Relaxation from tension)	+	-	+	+	-	-
Priyadarshana (Observations of beloved things)	+	-	-	-	-	-
Saukhyena	-	-	-	+	-	-

Table 4: Anya nidana

Anya Nidana	Ch.	Su.	A.s.	A.h.	Mn.	B.p.
Amarasa	-	+	-	-	-	+
Snigdha Madhura Basti Sevana (Administration of unctuous & Sweet enema)	+	-	-	-	-	-
Tailabhyanga (Massaging of oil)	+	-	+	+	-	-
Snigdha Udvartana (Unctuous unction)	+	-	-	-	-	-
Bijadoshasvabhavat (Hereditary)	+	-	-	-	-	-

**Rupa (Symptoms)**

The symptoms of atisthoulya are considered as Medo-vridhhi. Person can be diagnosed as ati sthoulya when his buttocks, abdomen & breasts begin to show movement due to excess accumulation of Meda in these areas. Contrary to his age there is a disproportionate in relation to build & enthusiasm. Kustha, visharpa, Bhagandara, Jwara, Atisara, Prameha,

Arsha, Slipada, Apachi, Kamala may develop in medo dhatu dushti. (B.P.M.39/9-1)

Table 5: Rupa

Rupa	Ch.	A.S.	Mn.	A.H	Mn.	B.P.
Chala Sphika (Pendulous Buttock)	+	-	+	+	+	+
Chala Udara (Pendulous Abdomen)	+	-	+	+	+	+
Chala Stana (Pendulous Breast)	+	-	+	+	+	+
Ayatha Upachaya (Abnormal growth of the body)	+	-	+	-	+	+
Udara parshva vridhhi (enlargement of abdomen)	-	+	-	+	+	+

**Samprapti (Pathogenesis)**

Medo-vridhhi is a complex consequential process caused by Dushti of Medo Dhatu. Acharya Madhav described its pathogenesis as follows[4] -

1. Excessive production of Medo Dhatu (due to dietary factor, behavioural factor, genetic or hereditary factor)
2. Excessive Medo Dhatu lead to margavarodh and depletion of other Dhatus and provocation of Vayu.
3. Provocation of Vayu increases false appetite which lead to excessive consumption of food.
4. Excessive consumption of food lead to excessive Medo Dhatu production(Medo vridhhi).

**Different Concepts of Hyperlipidaemia**

Hyperlipidaemic condition cannot be directly referred to diseases. Moreover various scholars have their different opinions. Most of them compare Hyperlipidaemia under the heading of Medo-vridhhi and some consider it as Rasagata Snehavridhhi, whereas some suggest it under broad term of Ama. So all these conditions are somewhat similar.

Table 6: Comparison between Meda And Lipids

Sr. No.	Ch	Su.
1.	Ingestion of excessive Sneha	Intake of high fat diet

	(Ghrita, Taila, Vasa, Majja) <sup>[5]</sup> increases meda	(ghee, oils, butter,etc.) increases body lipids
2.	Dietary intake of excessive Madhur Dravya causes Medovridhhi <sup>[6]</sup>	Increase consumption of carbohydrates (specially sucrose enhances cholesterol level) <sup>[7]</sup>

Table 7: Comparison between Medo-vridhhi And Hyperlipidaemia[8]

	Medo-vridhhi	Hyperlipidaemia
Etiologic al factors	Avyayam, Diwaswapna, Medyanam Atisevan, Ati Varuni sevan	Intake of high fat diet, junk food habits, lack of exercise, genetic predisposition
Clinical features	Medo, Maans Ativridhhi, Flabbiness of buttocks, abdomen and breasts, loss of enthusiasm	Excessive deposition of fats in abdomen, waist, buttock, etc. Excessive appetite, exersional dyspnoea, excessive perspiration, general weakness
Complica tions	Ayushya hras, loose and delicate body, Javoparodh, difficulty in mating, Weakness, Excessive sweating with bad odour, frequent thirst and hunger	Decreased life expectancy, Mechanical disabilities, loss of immunity, cardiovascular and cerebrovascular manifestations.

**Hyperlipidemia**

- Disorder of Lipid & Lipoprotein Metabolism
- A common form of Hyperlipidemia is characterized by three lipid abnormalities:
  1. Elevated triglycerides.
  2. Elevated LDL.
  3. Reduced HDL cholesterol.

**Risk Factor**

Important Modifiable Risk Factor for Hyperlipidemia

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

**Types of Hyperlipidemia**

Hyperlipidemia is divided into primary and secondary types.

1. Primary - Inherited
2. Secondary - Aquired

**Symptoms**

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

**Diagnosis**

- Lipid profile (Blood test for LDL, HDL, and Triglyceride)

**Prevention**

- Following heart-healthy diet
- Exercise regularly
- Quit smoking

**DISCUSSION**

1. After studying the above facts, Hyperlipidaemia can be correlated with Medo-vriddhi. Acharya Charak didn't mention Medo-vriddhi separately but instead that he explained Sthaulya which is nothing but Medo-vriddhi[9].
2. Acharya Charak has described Medo-vriddhi under the heading of Atisthauya and he explained Atisthauya is due to the dushti of Medovaha Srotas and can be taken as synonym of Medo-vriddhi.
3. Acharya Madhava described Medo-vriddhi and its etiology. He explained abnormal deposition of Medo Dhatu in the body is termed as Medodushti. Medodushti includes several numbers of other Medo Vikaras which are collectively known as Medo-vriddhi.
4. It can be stated that abnormal and unequal distribution or collection of Medo Dhatu in the body may be known as Medo-vriddhi.
5. This theory is also supported by Madhukoshkara[10] and Bhavamishra[11] by describing individual chapter of Medoroga.
6. Madhavakar has described the disease under heading of Medoroga in 34th chapter and has used Medaswina[12], Atisthula[13] and Sthula[14] words as synonyms.
7. Madhavakar has mentioned the Nidana, Rupa and gave clear picture of Medo-vriddhi- borrowing all the thoughts of previous authors.

**CONCLUSION**

With the proper exploration of literary sources and applying the basic concepts of Ayurveda, one can make the possible equivalence of concept of medo-vriddhi with the hyperlipidemia. The Etiological factors, signs and symptoms mentioned for medo-vriddhi or any santarpanottavyadhi's are almost similar to Hyperlipidemia. Thus the condition which is characterized by Hyperlipidemia in the body can be considered under the concept of medo-vriddhi.

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