

A CRITICAL REVIEW OF AYURVEDIC LITERATURE ON MEDODUSHTI W.S.R. TO DYSLIPIDEMIA

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ABSTRACT

Conditions like *Medoroga*, (Lipid disorders) *Sthoulya* (Obesity), *Shonita Abhishyanda* (Increased sliminess and heaviness of blood) etc. are caused due to *Dushti* (vitiation) of *Medo dhatu* (Fat tissue). In Ayurveda, lipid disorders are correlated with *Medapradoshaja vikara* diseases due to vitiated fat. Dyslipidemia is recognized as a prevalent lifestyle disorder characterized by disruptions in lipoprotein metabolism, which may manifest as either an overproduction or a deficiency of lipoproteins. The accumulation of atherogenic lipoproteins plays a central role in the development of atherosclerosis, a condition that significantly increases the risk of coronary artery disease (CAD), cerebrovascular accidents (CVA), and peripheral vascular disease (PVD). Strategies for addressing *Medoroga* involve treatments such as *Rukshana* (Drying), *Udvartana* (Dry powder massage), *Ruksha-ushna Basti* (Dry and hot medicated enema), *Virechana* (Purgation), and oral medications like

Guggulu (*Commiphora mukul*), *Shilajithu* (Asphaltum), *Guduchi* (*Tinospora cordifolia*) etc. Contemporary science advises different classes of medications for the management of dyslipidemia. Most of the medications are reported have adverse effects. Hence it is essential to find some safe and effective lines of management. This can be achieved through Ayurvedic therapeutic procedures as well as oral medications.

KEYWORDS: *Medoroga*, Dyslipidemia, Lipoprotein, *Udvartana*, *Basti*.

INTRODUCTION

The global prevalence of dyslipidemia is highly variable, with some studies estimating a range of 20% to 80% in adults, depending on the definition used. analysis of adult populations, the prevalence of specific dyslipidemias was reported as follows: Low HDL-C: 38.4%, Hypertriglyceridemia: 28.8%, Hypercholesterolemia: 24.1%, High LDL-C: 18.93%.^[1] Review of population based studies in India shows increasing mean total cholesterol levels. Recent studies have reported that high cholesterol is present in 25-30% of urban and 15-20% rural subjects. One study from November 2025 reported a prevalence of 19.6% in a specific patient population.^[2]

Body uses cholesterol as a building block to produce various membranes. It serves as a precursor for the manufacture of several hormones, bile acids, and vitamin D and preserves the fluidity and integrity of cell membranes.^[3] The primary dietary (exogenous) sources of cholesterol include egg yolks, shrimp, beef, hog, poultry, cheese, and butter. Endogenous cholesterol is produced in the extra-hepatic tissue or liver.^[4]

An anomaly in the metabolism of lipoproteins, characterized by either an excess of production, a deficiency, or both, is called dyslipidemia. Elevated levels of triglycerides, plasma cholesterol, or both, as well as a decreased concentration of high-density lipoprotein, which all aid in the development of atherosclerosis, may be characteristics of this illness.^[5] Increased triglyceride levels, decreased high-density lipoprotein (HDL) levels, and higher low-density lipoprotein (LDL) cholesterol are common signs of dyslipidemia. Atherosclerosis and an increased risk of CAD, CVA, and PAD can arise from the buildup of fatty plaques in blood arteries caused by elevated LDL cholesterol.^[6]

In Ayurveda, dyslipidemia falls under the general heading of *Santarpanajanya vikara*, or disorders brought on by over nutrition. The cause of ailments like *Medoroga*, *Sthoulya*, and *Shonita Abhishyanda* is *Santarpana Nidana*. The pathogenesis and treatment of these disorders are comparable as well. The primary treatment for *Santarpanajanya vikara* is emaciating therapy, or *Apatarpana chikitsa*.^[7]

AIM AND OBJECTIVES

To develop a comprehensive understanding of the Ayurvedic framework for dyslipidemia and its relevance in integrative healthcare.

MATERIALS AND METHODS

A concerted attempt was made to gather diverse textual references related to the management of *Santarpanajanya Vikara*, *Medoroga*, and *Sthoulya*, with particular focus. The existing literature including *the Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya* and *Ashtanga Samgraha*, *Yogaratanakara*, *Bhavaprakasha* and *Sharangadhara Samhita*, *Chakradatta*, *Bhaishajya Ratnavali* and other pertinent current books are all reviewed. Published articles and internet sources were used to review the treatment approaches mentioned to manage.

NIDANA (CAUSATIVE FACTORS) OF MEDODUSTHI

Sushruta and *Vabhatta* describe *Medo Dushti* (vitiation of fat tissue) as an internal disorder caused by disturbances in intracellular metabolism and dysfunction of the related *Agni* (digestive/metabolic enzyme). On the other hand, *Charaka* focuses on external (exogenous) causes for *Medo Dushti*, listing several contributing factors and specifically highlighting *Beejadosha* (Hereditary defect) as a key reason behind the excessive formation of *Medo Dhatu* (Fat tissue). Various classical Ayurvedic texts discuss the causes of overproduction and accumulation of *Medo Dhatu* under different categories such as *Sthaulya* in the *Charaka Samhita* and *Ashtanga Samgraha*, and *Medo Roga* in texts like *Madhava Nidana*, *Bhavaprakasha*, and *Sharngadhara Samhita*.^[8]

1. *Aharaja Hetus* (Dietary causes)
2. *Viharaja Hetus* (Lifestyle cause)
3. *Manasa Hetus* (Psychogenic causes),

AHARAJA HETUS (Dietary factors)^[9]

Atibhojanam (Over eating), *Guruahara* (Excessive consumption of Heavy food), *Madhura Ahara* (Excessive consumption of sweet food), *Sheeta Ahara* (Excessive consumption of cold diet), *Snigdha Ahara* (Excessive consumption of unctuous food), *Navanna Sevana* (Intake of fresh grain), *Navamadya Sevana* (Intake of fresh alcoholic preparation), *Gramya Ahara Sevana* (Impure Food), *Sarpi Sevana* (Excessive use of *Ghee*), *Shleshmala Ahara Sevana* (*Kapha* increasing food), *Ikshu Sevana* (Use of sugarcane's preparations), *Guda Vaikrita Sevana* (Use of jaggery's preparations), *Mamsa Sevana* (Use of *Phasilous mungo*), *Adhyashana* (Eating Before The Previous Meal Is Digested), *Shali Sevana* (Intake Of Rice), *Godhuma Sevana* (Intake Of Wheat), *Rasayana Sevana* (Taking Rejuvenating Substances).

VIHARAJA HETUS (Lifestyle factors)^[10]: *Avyayama* (Lack of physical exercise), *Avyavaya* (Lack of sexual life), *Divasvapna* (Day's sleep), *Sukhasaya* (Luxurious sitting), *Snana Seva*

(After meals), *Gandhamalyanusevanam* (Use of perfumes garlands), *Svapnaprasanga*, *Bhojanottara Snana* (Bathing after taking the meals), *Bhojanottara Nidra* (Sleeping after meal).

MANASA HETUS (Psychological factors)^[11]

Harshanityatva (Uninterrupted cheerfulness), *Achintana* (Lack of anxiety)

CAUSES OF DYSLIPIDEMIA

Dyslipidemia has varied etiologies influenced by genetic, environmental, and lifestyle factors. It is categorized into primary and secondary based on etiology.

Primary dyslipidemia: Genetic mutations

Secondary dyslipidemia: Obesity, Diabetes mellitus, Excessive consumption of alcohol, Smoking

RISK FACTORS

Obesity, hypertension, sedentary lifestyle, stress, anxiety, irregular sleep, suppression of natural urges, lack of exercise, low digestive fire, alcohol & others addictions etc.

LAKSHANA (SYMPTOMS)^[12]

Guruta (Heaviness or weight gain), *Utsahahani* (Lack of energy or motivation), *Shithilata* (Body looseness or laxity), *Kshudra Shwasa* (Shortness of breath during physical activity), *Nidradhikya* (Excessive sleep), *Kshudhadhikya* (Increased appetite), *Trishnadhikya* (Excessive thirst).

SIGNS & SYMPTOMS OF DYSLIPIDEMIA^[13]

No symptoms in its early stages. Symptoms that appear usually result from the long-term consequences of untreated dyslipidemia such as: atherosclerosis, xanthomas, xanthelasmas, corneal arcus, shortness of breath, fatigue, sudden weakness, numbness, vision changes, claudication, chest pain, hepatosplenomegaly, swelling in legs, ankles, feet, vein of neck.

SAMPRAPTI^[14]

Medoroga develops due to improper *Ahara*, *Vihara*, and mental factors causing *Kapha prakopa* and *Mandagni*. This weak digestion leads to *Ama* formation, which impairs *Meda dhatvagni* and results in abnormal *Meda* metabolism. The accumulated *Ama-meda* causes *Srotorodha*, leading to *Meda-kapha dushti* and *Vata avarana*, ultimately producing *Meda sanchaya* and manifestation of *Medoroga*.

Samprapti Ghataka

Dosha- Kledaka Kapha, Pachaka Pitta, Samana Vayu, Vyana Vayu

Dushya: Rasa, Meda

Srotas: Rasavaha, Medovaha

Srotodushti Prakara: Atipravrutti, Sanga, Vimarga Gamana

Agni: Jatharagni, Medodhatvagni

Udbhavasthana: Amashaya

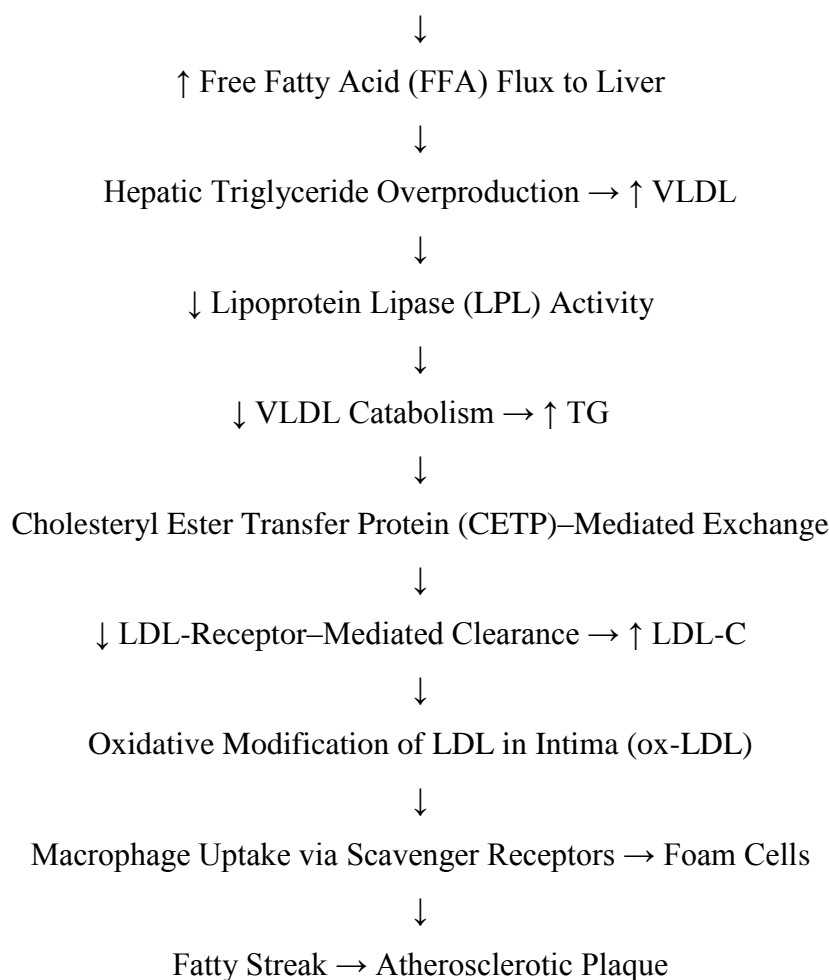
Adhishthana: Medovaha Srotas

Roga Marga: Abhyantara

Swabhava: Chirakari

PATHOGENESIS OF DYSLIPIDEMIA^[15]

Obesity / Insulin Resistance / High-Saturated Fat Intake / Genetic Abnormalities



SADHYA- ASADHYATA

Medoroga is described as a *Krichchhra Sadhya Vyadhi*. In *Charaka Samhita* poor prognosis of *Medoroga* has been mentioned.^[16]

CHIKISTHA: [MANAGEMENT]

Therapeutic Approach: Interventions aimed at reducing adipose tissue (*Medas*), as well as balancing *Vata* (*Anila*) and *Kapha* (*Shleshmana*) *doshas*, are indicated.

SHAMANA CHIKITSA

- **Rasa Kalpana**-Trimurti Rasa, Vadavagni Rasa
- **Vati Kalpana**-Pippalyadi Vati
- **Lauha Kalpana**- Lauharishta, Lauha Rasayana, Vidangadi Lauha
- **Guggulu Kalpana**- Navaka Guggulu, Amritadhy Guggulu
- **Churna Kalpana**- Kushthadi Churna, Sindhutthadi Churna
- **Kwatha Kalpana**- Triphlaadi Kwatha, Mustadi Kwatha
- **Asava-Arishta Kalpana**-Lauhasava, Punarnavasava
- **Kshara Kalpana**- Eranda Kshara, Hingwadi Kshara
- **Sattu Kalpana**- Vyoshadhya Sattu
- **Arka Kalpana**- Medohara Arka

SHODHANA CHIKITSA

In Ayurvedic practice, several types of *Basti* therapy, such as *Lekhana Basti*, and *Kshara Basti* which incorporate cow's urine are frequently employed in the treatment of lipid metabolism disorders. These therapies are traditionally used for their detoxifying and fat-reducing properties.^[17] *Bhavaprakasha* mentions *Raktamokshana* and *Dhoopana*, along with *Lekhana Basti*.^[18] However, *Basti* therapy is considered more beneficial in the treatment of obesity, due to its capacity to eliminate *doshas* that are distributed throughout the body (*Vishwak sthitha doshas*). This systemic action makes *Basti* particularly suitable for conditions involving widespread metabolic imbalance. In dyslipidemia, excessive *Kapha* and *Meda* accumulate predominantly in the *Amasaya*. *Vamana* eliminates this vitiated *Kapha* directly from its primary site. *Virechana*'s purgative action directly addresses the root cause of the *medorogdusthi*.

PHARMACOLOGICAL TREATMENT OF DYSLIPIDEMIA^[19]

DRUG CLASS	DRUGS's NAME	TYPICAL EFFECT
Statins	Levostatin, Pravastatin, Atorvastatin, Simvastatin	↓ LDL (20–50%), ↑ HDL (5–15%), ↓ TG (10–25%)
Bile-Acid Sequestrants	Colestyramine, Colestipol	↓ LDL (≈15%), HDL minimal change, TG may increase up to 10%
Absorption Blockers	Ezetimibe	↓ LDL (5–15%), HDL (10–20%), ↓ TG (20–50%)
Fibric Acids	Cipro fibrate, Gemfibrozil, Fen fibrate	↓ LDL (~17%)

YOGA CHIKITSA^[20]: The following *Yogasanas* and *Pranayama* practices are beneficial for reducing excess fat, improving metabolism, and balancing *Kapha* and *Meda*: *Trikonasana*, *Ardhamatsyendrasana*, *Matsyasana*, *Paschimottanasana*, *Padahasthasana*, *Bhujangasana*, *Dhanurasana*, *Sarvangasana*, *Halasana*, *Surya Namaskara* etc.

Pranayama: *Anuloma–Viloma*, *Nadi Shodhana*, *Kapalabhati* etc.

Dietary Recommendations: Inclusion of low-glycemic, metabolism-enhancing foods such as: *Kulattha* (Horse gram), *Shyamaka* (Barnyard millet), *Yava* (Barley), *Mudga* (Green gram), Intake of warm water mixed with honey is advised to support digestion and fat metabolism.

PATHYA AHARA

Shukadhanya – *Shyamaka*, *Kodrava*, *Yava*,

Shamidhanya- *Mudga*, *Kulattha*, *Rajmasha*, *Masura*

Mamsa varga- *Vishkera*, *Lava*

Phala varga- *Bilva*, *Jambu*, *Amalaki*, *Dadima*,

Harita varga- *Shunthi*

Taila varga- *Sarshapa Taila*

Tikta–Katu–Kashaya foods: *Karela*, *Methi*, *Neema*, *Haldi*, *Lashuna*

APATHYA AHARA

Shukadhanya - *Shali*, *Shashtika*, *Vrihi*, *Yavaka*

Shamidhanya - *Masha*, *Priyangumakushta*, *Tila*

Mamsa varga - *Varaha*, *Mahisha*, *Ushtra*

Phalvarga - *Mridvika*, *Draksha*, *Amrataka*

Taila varga - *Eranda Taila*

Madhura, *Amla*, *Lavana Rasa Aahara*

Dugdha padharth, Ghrita Sevena

Lifestyle Modifications: Engage in stimulating mental activity (moderate psychological stress may help counter *Kapha*- induced lethargy). Undergo detoxification and purification therapies (e.g., *Panchakarma*). Avoid daytime sleep to prevent *Kapha* aggravation and metabolic slowing.

PATHYA VIHARA

Ratrijagarana, Nityabhramana, Ashvaarohana, Vyavaya, Vyavama, Shrama, Nidra Tyaga. etc.

APATHYA VIHARA

Divasvapna, Avyayama, Sheetala Jala Snana, Avyavaya, Asana Sukha etc.

PREVENTION

- Regular exercise
- Weight management
- Limit alcohol intake
- Stop smoking
- Avoid junk food and saturated diet
- Regular health check up

DISCUSSION

Dyslipidemia is increasingly recognized as a major contributor to the global burden of cardiovascular disease. Conventional medicine attributes its pathogenesis to factors such as a high-fat diet, sedentary lifestyle, obesity, insulin resistance, and genetic predispositions. However, Ayurvedic literature offers a complementary understanding of this Condition through the concept of *Medoroga*, which provides insights into the role of improper digestion and metabolic dysfunctions in lipid disorders.^[21] In Ayurveda, *Medoroga* arises due to excessive consumption of *Kapha-vardhaka Ahara* (*Kapha*-aggravating foods), *Diwaswapna* (Inappropriate daytime sleep), and lack of physical exertion, all of which lead to *Agnimandya* (weakened digestive fire) and the production of *Ama*. The accumulation of *Ama* acts as a toxic intermediary substance that impairs the normal function of *Dhatwagni* (tissue-level metabolism), particularly *Medo Dhatwagni*, which governs the transformation and utilization of fat. This pathophysiology closely resembles the lipid accumulation, impaired fat metabolism,

and inflammation observed in biomedical models of dyslipidemia.^[22] In the pathology of dyslipidemia, main vitiated *Dosha* is *Kapha* and main *Dushya* is *Medo Dhatu* and *Rasa Dhatu*, while *Agnimandhya* takes place at *Jatharagni*, *Rasadhatvagni* and *Medodhatvagni* level. So the type of drug that is to be selected should have *Kapha Shamak* and *Medohara* property. The drug should have *Deepana* and *Ama Pachana* property to correct the function of *Jatharagni*, *Rasadhatvagni* and *Medodhatvagni*. Like *Shunthi* is useful for the treatment of dyslipidemia because it has *laghu*, *tikshna*, *ruksha guna*, *katu rasa*, *ushna virya*, *madhura vipaka* indicating that it has a potency that enhances *Agni*, reduces *kapha* and *vata*. It has also therapeutic activities such as hypolipidemic, hepatoprotective, antibacterial etc.

Pippali has *Katu Rasa*, which gives it a pungent taste that stimulates *Agni* (digestive fire) and promotes metabolism. Its *gunas* are *Laghu*, *Snigdha*, and *Tikshna*, making it light to digest, and sharp in action, allowing its effects to penetrate deep into the tissues. It has *Ushna Virya* (hot potency), which reduces *Kapha* and *Vata doshas* while enhancing digestion and circulation. Its *Vipaka* is *Madhura*, meaning that after digestion it produces a sweet post-digestive effect that nourishes *Dhatu*s (body tissues) and supports overall strength and rejuvenation. In the *medoroga* maximum ingredients having *Katu Rasa*, *Laghu*, *Ruksha Guna*, *Ushna Virya*, *Katu Vipaka* and *Vata Kapha Shamaka* property. So it may be effective to control dyslipidemia. When comparing *Virechana* and *Basti*, *Virechana* is generally regarded as more effective in managing dyslipidemia, primarily because it acts on *Rakta Dhatu* (the blood tissue), where lipid abnormalities are manifested. Since dyslipidemia involves increased lipid concentrations in the blood, *Virechana*'s purgative action directly addresses the root cause, making it a preferred intervention in such cases.^[23] In *Medoroga* treatment, *Agni*, *Nidra*, and *Koshtha* are fundamental because restoring digestive fire, ensuring proper sleep, and maintaining normal bowel function help prevent *Ama* accumulation, balance *doshas*, and reduce *Medo dhatu* vitiation, forming the Ayurvedic management.

Status of Agni: It is now well-known fact to maintain required energy level of the fat stores obese persons eat more than average. The total daily energy expenses are higher in obese than lean individuals.

Pattern of Nidra: *Atinidra* increase *Kapha*, *Meda*, *Kleda* and *Rasa* in body due to its *Snigdha Guna*. It is also a cause of *Santarpanotha Vyadhis*. So *Atinidra* attributes to dyslipidemia.

Type of *Koshtha*: People with *Madhyama-Krura Koshtha* are more prone to *Ama* formation, *Agnimandya* (low digestive fire), and *Medo dhatu* vitiation, which are key factors in dyslipidemia pathogenesis according to Ayurveda.

CONCLUSION

The use of *Ayurvedic* treatment techniques is crucial for managing dyslipidemia in a safe and efficient manner. Several formulations and dosage forms that are helpful in the management of dyslipidemia are described under *Medoroga chikitsa*. The best medication should be chosen based on the patient's lipid levels, clinical symptoms, risk of problems, body composition, and nutritional state. The obese individuals with dyslipidemia are to be treated with *Apatarpana* line of treatment using *Shodhana* and *Langhana* as treatment modalities, whereas dyslipidemia in lean individuals can be treated in the lines of *Laghu Santarpana*. If *Rogi* is *Balavan*, *Mridu Shodhana* can be adopted. Ayurveda provides a holistic approach focusing on correction of root causes and sustainable lifestyle modification, making it an effective system for preventing and managing dyslipidemia.

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