WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 21, 413-419.

Review Article

ISSN 2277-7105

HYPERLIPIDEMIA AND ITS HOMEOPATHIC REVIEW

Dr. Richa Verma*

Jaipur, Rajasthan, India.

Article Received on 12 September 2024,

Revised on 02 October 2024, Accepted on 23 October 2024

DOI: 10.20959/wjpr202421-34408



*Corresponding Author
Dr. Richa Verma
Jaipur, Rajasthan, India.

produced.

ABSTRACT

Hyperlipidemia is defined as an increase in either one or more of the plasma lipids above the normal range. It is a major topic of concern in the prevention of cardio-vascular disease and stroke. According to WHO, high cholesterol is estimated to cause 2.6 million deaths and 29.7 million disability adjusted life years. Cause of hyperlipidemia can be classified into primary and secondary in origin. It can be present asymptomatically or may present itself in the form of xanthelasma, xanthomas, atherosclerosis, etc. Its management aims for reduction in plasma lipid levels. Homeopathy offers a wide range of medicines for the reduction of plasma lipid levels as well as for reduction of its accumulation in the arteries (atheroma) and the symptoms thus

KEYWORDS: Hyperlipidemia. Cholesterol. Triglycerides. Atheroma. Homeopathy.

INTRODUCTION

Hyperlipidemia is defined as an increase in either one or more of the plasma lipids above the normal range. The plasma lipids consist of triglycerides, cholesterol, cholesterol esters and phospholipids and plasma lipoproteins which includes very low density lipoproteins and low density lipoproteins.^[1]

Hyperlipidemia is a topic of concern in the field of preventive medicine. It is considered as one of the major risk factors for the causation of cardiovascular disease and stroke. Worldwide, one third of ischaemic heart disease is attributable to high cholesterol. According to WHO, high cholesterol is estimated to cause 2.6 million deaths (4.5% of total deaths) and 29.7 million disability adjusted life years (DALYs).^[2]

Etiology

Causes of hyperlipidemia are divided into two major categories:

- 1. Primary hyperlipidemia: It is due to hereditary factors and is a less common cause.
- 2. Secondary hperlipidemia: This is an acquird condition and is attributed to dietary intake and lifestyle of the personconcerned.

Classification

I. According to National Cholesterol Education Program(NCEP) Adult Treatment Panel(ATP) III. Given in Table 1.^[3]

Table 1.

LDL Cholesterol	
<100	Optimal
100-129	Near or above optimal
130-159	Borderline high
160-189	High
≥190	Very high
Total Cholesterol	
<200	Desirable
200-239	Borderline high
≥240	High
HDL Cholesterol	
<40	Low
≥60	High
Triglycerides	
<150	Normal
150-199	Borderline high
200-499	High
≥500	Very high

II. According to predominantly raised lipid in blood. Given in Table 2.^[4]

Table 2.

Disease	Elevated lipid results	Elevated lipoprotein
Predminant Hypercholesterolaemia		
Polygenic (majority)	TC±TG	LDL±VLDL
Familial hypercholesterolaemia	TC±TG	LDL±VLDL
Hyperalpha-lipoproteinaemia	TC±TG	HDL
Predminant Hypertriglyceridemia		
Polygenic (majority)	TG	VLDL±LDL
Lipoprotein lipase deficiency	TG>TC	Chylo
Familial hypertriglyceridemia	TG±TC	VLDL± Chylo
Mixed hyperlipidemia		

Polygenic (majority)	TG±TC	VLDL±LDL
Familial combined hyperlipidemia	TC and/or TG	LDL and VLDL
Dysbetalipoproteinaemia	TC and/or TG	LDL

TC = Total Cholesterol TG = Total Triglycerides

LDL = Low Density Lipoprotein

VLDL = Very Low Density Lipoprotein

Homeopathic miasmatic classification: Hyperlipidemia is classified as a sycotic miasm condition according to its insidious onset and its steady course of duration.^[5]

Signs and Symptoms

Hyperlipidemia can be asymptomatic and can be an occasional finding during routine checkups. It can be accompanied with hypertension, diabetes mellitus, obesity, fatty liver etc.

Hyperlipidemia itself can be a cause of hypertension by forming atheroma in the arteries.

In case of predominant hypercholesterolaemia, signs such as xanthelasma, corneal arcus, extensor digitorum and pre-patellar xanthomas, aortic stenosis, etc. can be seen.

While in predominant hypertriglyceridemia, signs such as lipaemia retinalis, hepatosplenomegaly, eruptive xanthomas, etc.are commonly present.^[4]

Risk factors

Risk factors can be divided into modifiable and non-modifiable risk factors.

I. Non-Modifiable risk factors

- a. Age and gender: Higher the age, greater is the risk of having hyperlipidemia. Men tend to have lower amount of HDL than the women. While women tend to have lower level of LDL than men until their menopause.
- b. Positive family history: People who have a family history of hyperlipidemia and heart disease are at greater risk thanthose who do not.

II. Modifiable risk factors

a. Smoking and alcoholism: Smoking tends to raise LDL levels of the blood which is directly related to formation of plaques inside the arteries. While alcoholism tends to decrease HDL in the blood and raises LDL and triglycerides in the blood whose raised levels are harmful for our vessels.

- b. Sedentary life-style: Sedentary life-style can increase the risk of hyperlipidemia as well as heart disease and stroke.
- c. Diet rich in saturated fat and trans-fat is directly proportional in increasing the risk of hyperlipidemia.
- d. Health conditions such as obesity and Type 2 diabetes mellitus increases the risk of hyperlipidemia and heart disease. Obesity is related to high triglyceride levels and low HDL levels. While Type 2 Diabetes mellitus is related to raised LDLlevels and low levels of HDLs.^[6]

Management

Management of hypelipidemia is primarily concerned with lowering the blood lipids level according to the risk factors of the patients. In general, total cholesterol should be <190mg/dL during treatment and <150mg/dL in high risk patients. Persons at high risk of cardio-vascular disease should be screened first and avoid all the modifiable risk factors including life-style modifications. Dietary management plays a major role in its treatment. Some of the major dietary interventions and life-style modifications are mentioned below:

- Decrease consumption of saturated and trans-unsaturated fat to less than 7-10% of total energy.
- Decrease consumption of cholesterol to <250mg/day
- Reduction in carbohydrate and fat rich food like soft drinks and increase physical activity.
- Include exercise in your daily schedule preferably aerobic exercises.
- Limit alcohol consumption or try to avoid it completely especially when associated with hypertension, centralobesity, etc.
- Increase consumption of dietary fibre, plant sterols, omega-3 fatty acids, unrefined carbohydrates, fish, legumes, pulses, etc. [4]

Homeopathic management

Most of the times its an occasional finding without any symptoms or there may appear signs and symptoms of hyperlipidemia, such as xanthelasma, xanthomas, etc. It can be treated with individualized homeopathic medicines along with dietary and life-style modifications. Homeopathy offers a significant scope in reducing the risk of cardio-vascular diseases and stroke by diminishing the effects of hyperlipidemia in terms of atheromas or plaque formation in the arteries, hypertension, etc. In such cases following rubric can be taken as eliminating rubric while selecting the remedy:

- **Rubric:** Generals, hyperlipidemia: All-s., Aur., Calc., Calc-f., *Chel.*, Chin., *Chion.*, Chol., Chr-ac., Colch., Cortiso., Ferr-i., *Hydr.*, *Lec.*, Lyc., Mag-m., Med., Nux-v., Perh-m., Stront-c., Sulph., *Tarax.*, Thuj., *Thyreotr.*, *Vanad.*, Zing. [7]
- **Rubric:** Generals, Tumors, atheroma, steatoma: *Agar.*, Ant-c., Antraci., Arg-n., *Bar-c.*, *Bell.*, benz-ac., brom., *Calc.*, Caps., *Carb-v.*, Caust., Clem., *Con.*, Crat., **Graph.**, *Guare.*, *Hep.*, Kali-br., *Kali-c.*, Kali-i., Lac-ac., Lach., *Lob.*, Lyc., M-arct., Mez., Nat-c., *Nit-ac.*, *Ph-ac.*, *Phyt.*, Plb., Rhus-t., *Sabin.*, *Sil.*, Spong., Staph., *Sulph.*, Thuj., Vanad. [7]

Indications of some of the commonly used medicines for hyperlipidemia management are given below:

- *Allium sativum:* Suited especially to fleshy people with dyspesia and catarrhal affections. For people who eat agreat deat more, especially meat, than they drink.^[8]
- Baryta carbonica: It corresponds to atheromatous condition of the heart and blood vessels. It is suited to scrofulous, dwarfish and old people who have a tendency to take cold frequently.^[10]
- *Calcarea carbonica:* For people who are disposed to grow fat, corpulent and unwieldy. Especially when there is tendency to obesity in youth. [9] Along with the above mentioned disposition its prescribing points are their disposition to take cold, profuse perspiration over head especially while sleeping and longing for eggs. [8]
- *Chionanthus virginica:* When liver is affected due to hyperlipidemia, i.e., becomes fatty liver, this remedy should be thought of. For hypertrophy of liver which becomes enormous in size. This accompanies with soreness in the liver region, clay-colored stools and jaundice. These may accompanied with pancreatic affections as well. Other related remedies which act on fatty degeneration of liver are Chelidonium majus, *Lycopodium clavatum*, *Mercurius solubilis*, *Phosphorus*, etc. [7]
- Strontium carbonicum: Suited to persons having arteriosclerosis with high blood pressure. With this, their face is flushed with pulsating arteries and threatened to apoplexy. [8] For sycotic eruptions on face and elsewhere in mouthwhich itch and burn. [10]
- *Strophanthus hispidus:* Useful in failing compensation dependent upon fatty heart. For arteriosclerosis, especially for rigid arteries of aged. It helps in restoration of tone of a brittle tissue, especially of the heart muscle and valves. Suited to corpulent persons. [8]
- *Thuja occidentalis:* One of the chief anti-sycotic remedy which is suited to fleshy persons of lymphatic temperament.^[9] Can be used as an inter-current medicine in sycotic cases where the symptoms are very few.

Vanadium metallicum: It acts as an oxygen carrier and is used especially in degenerative
conditions of liver and arteries. For arteriosclerosis with sensation as if heart was
compressed. Atheroma in arteries of brain and liver.^[8]

CONCLUSION

Hyperlipidemia is a condition in which the plasma lipid levels increase beyond their normal limit. This condition itself is not a disease but can give rise to many conditions, including cardio-vascular disease and stroke, which can result in disability and even in death. The cause of hyperlipidemia can be primary or secondary depending upon its origin. This condition can be modified by adapting changes in diet and including exercises and more physical activities in the daily routine schedule. Early screening and adaptation in life-style in those having a positive family history can subsequently result in improved quality of life and lessen the disability adjusted life years. It is a sycotic condition as per the Homeopathic miasmatic classification and so is insidious in origin and progress. Hence regular its monitoring should also be done by asking for serum lipid profile test to the patient. Apart from the life-style adaptations, Homeopathy helps by balancing the production of lipids within the normal range and offers to modify the body tendency of producing atheroma and obesity. It also helps in reduction of the effects of hyperlipidemia in advanced stages where the arteriosclerosis, fatty liver and other effects begin to appear in the body. Best Homeopathic treatment for this condition is individualized Homeopathic medicines which can be selected after a thorough case taking and case evaluation. In cases which are presented as one-sided disease conditions, treatment can be started with the specific remedy best suited to the patient.

REFERENCES

- 1. Shattat G. F. A Review Article on Hyperlipidemia: Types, Treatments and New Drug Targets. Biomed Pharmacol J., 2014; 7(2).
- 2. WHO | Raised cholesterol [Internet]. Who.int. 2020 [cited 10 May 2020]. Available from: https://www.who.int/gho/ncd/risk_factors/cholesterol_text/en/
- 3. Nelson R. Hyperlipidemia as a Risk Factor for Cardiovascular Disease [Internet]. ncbi.nlm.nih.gov. 2012 [cited 10 May 2020]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3572442/
- 4. Walker B, Colledge N, Penman I, Ralston S. Davidson's principles and practice of medicine. 22nd ed. London: Elsevier Saunders, 2014.
- 5. Sankaran R. The soul of remedies. 1st ed. Bombay: Homoeopathic Medical Publishers,

1997.

- Knowing Your Risk: High Cholesterol [Internet]. Centers for Disease Control and Prevention. 2020 [cited 11 May 2020]. Available from: https://www.cdc.gov/cholesterol/risk_factors.htm
- 7. Schroyens F. Radar 10. Belgium: Archibel Homoeopathic Software, 2009.
- 8. Boericke W. Boericke's New Manual of Homeopathic Materia Medica with Repertory. New Delhi: B. JainPublishers (P) LTD., 2013.
- 9. Allen H.C. Keynotes and Characteristics with Comparisons of Some of the Leading Remedies of the Materia Medica with Bowel Nosodes. 8th ed. New Delhi: B. Jain Publishers (P) LTD., 2014.
- 10. Clarke J.H. A Dictionary of Practical Materia Medica. New Delhi: B. Jain Publishers (P) LTD., 2015.