Homoeopathy in the management of Dyslipidemia: A short review

Rupali D. Bhalerao*, Raj K. Manchanda, Varanasi Roja

ABSTRACT

The importance of high serum total cholesterol and high level of low-density lipoprotein cholesterol, as a risk factor for coronary artery diseases is well established. Statin is the first-line of treatment for dyslipidemia and there are known side effects of statin therapy. This study reviews the existing information available in Homoeopathy (research and traditional knowledge) for managing dyslipidemia. No rigid inclusion has been kept due to scarcity of evidence-based literature. Preclinical and clinical studies (case records to controlled trials) are included. A comprehensive search from major biomedical databases including National Medical Library (PubMed), AYUSH PORTAL, EMBASE, and the Cochrane Library was conducted using the search term “dyslipidemia,” “atherosclerosis,” “arteriosclerosis,” “atheroma” along with “Homoeopathy.” In addition, efforts were made to search authoritative texts of authors, such homoeopathic Materia Medica, repertory, etc. Relevant research was categorized by study type and appraised according to study type and design. Four preclinical, three observational studies, and two case records were identified. From literary search, medicines commonly used in Materia Medica and drugs of Indian origin were noted. There are positive leads in managing patients suffering from dyslipidemia. However, more well-designed studies are warranted to generate effectiveness/efficacy of Homoeopathy.

Keywords: Arteriosclerosis, Atherosclerosis, Cholesterol, Dyslipidemia, Homoeopathy, Lipid

INTRODUCTION

Noncommunicable diseases (NCDs) are chronic diseases with slow progression and continued to evolve slowly with morbidity until it is intervened. Globally, 38 million people die each year from NCDs. World Health Organization’s Country Profiles (2014) for India estimates 60% of the deaths annually due to NCDs.1 The four main identified NCDs, by the World Health Organization, are cardiovascular diseases (CVDs) (such as heart attacks and stroke), cancer, chronic respiratory disease (such as chronic obstructed pulmonary disease and asthma), and diabetes mellitus (diabetes).

Dyslipidemia is a modifiable risk factor of CVD, manifested by alteration of lipoproteins and a major cause of morbidity and mortality worldwide. Its prevalence is increasing in many developing countries due to westernization of diet, obesity,
aging, reduced physical activity, and other adverse lifestyle changes.[3] In 1980s, hyperlipidemia term was included in medical subject headings which refers to conditions with excess lipids in the blood. Further, it was referred as hyperlipoproteinemia which means condition with abnormally elevated levels of lipoproteins in the blood. The term “Dyslipidemia” was introduced in 2006, denoting derangements of one or more of the lipoproteins in blood, such as total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C), and/or triglycerides (TG), or low levels of high-density lipoprotein cholesterol (HDL-C) alone.[3]

Subsequently, LDL-C levels were positively correlated with CVD risk, whereas HDL-C levels were inversely correlated.[4] A great advance was made in 1973 with the discovery of the LDL receptor by Brown and Goldstein, who further identified deficiency of LDL receptors in patients with familial hypercholesterolemia.[3] A major turning point in the evolution of lipid hypothesis occurred in 1976 by a Japan biochemist isolated a factor known as statin from the fungus *Penicillium citrinum* that is identified as competitive inhibitor of 3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA). It is hypothesized that the inhibition of HMG-CoA reductase by statin decreases intracellular cholesterol biosynthesis in liver thus causing reduction in blood LDL-C which results in decrease of atherogenesis. The first statin to be approved was lovastatin in 1987.[2]

These are the most widely prescribed by physician, and average dosage of prescribing are increasing day by day.[6] Despite all the positive research and trial about its effectiveness for modifying cholesterol, patients show poor compliance due to muscle problems.[7] Further suspension of statins leads to a rebound impairing of vascular function and increasing morbidity and mortality in patients with vascular diseases.[8] Withdrawal of statin results in a rapid return to endothelial dysfunction, amplification of oxidative and inflammatory processes, which may increase cardiac and cerebrovascular risks. Continuous and prolong use of statins (>1 year) is required to achieve the vasculoprotective effects, but studies have showed that approximately 50% of patients discontinued medication within 6 months. The cardiovascular outcome benefits from statin use outweigh the diabetes menace. However, patients at risk for the development of diabetes should be prescribed statins with caution.[9]

Adult Treatment Panel III – National Cholesterol Education Program (NCEP)[10] recommends a multifaceted lifestyle approach to reduce risk for CHD. This approach is designated as therapeutic lifestyle changes (TLC). Moderate changes such as a TLC diet reduce LDL cholesterol by only about 5–10% in most patients. In a recent study, the TLC diets failed to lower LDL cholesterol significantly unless combined with exercise. Many patients, perhaps most, can achieve the therapeutic goal of LDL <100 mg/dl without lipid-lowering drugs if they make changes in diet and lifestyle that are more intensive than the NCEP panel recommends. These intensive changes in diet and lifestyle reduced LDL cholesterol by 40% (from an average LDL of 143.8–86.56 mg/dl) after 1 year in ambulatory patients who were not taking cholesterol-lowering drugs.[11] Patient often consults homeopaths and computer-aided manufacturing physicians to avoid long-term treatment with statins and to avoid its side effects. In such scenario, mind always revolves around question, “Is there any homeopathic treatment for dyslipidemia? If yes, is it effective treatment modality in dyslipidemia? For finding out an answer to this question, homeopathic literature searches from all possible sources were made. This short review explores the possibilities of management of dyslipidemia in Homoeopathy.

**METHODS**

**Search Strategy**
A comprehensive search for both preclinical and clinical studies on dyslipidemia and Homoeopathy was carried out.

**Databases Searched**
National Library of Medicine (Medline/via PubMed), The Cochrane Library and database, Central Council for Research in Homoeopathy library, Medscape, Biomed Central, AYUSH research portal, EMBASE, and nonpeer-reviewed publications were also searched manually. Materia Medica and Repertories have also been searched from Radar version 10 of archibel homeopathic softwares.[12]

**Search Terms**
The basic search terms for Homoeopathy included “Homoeopathy,” or “homoeopathic drugs,” or “homoeopathy.” The basic search terms for dyslipidemia included...

Selection of Studies and Literature
All types of studies have been listed; no rigid inclusion criteria have been adopted. Observational studies, case records, case series, randomized control trial (RCT), and non-randomized control trial were included. Articles in English language were included. Reference lists of identified review articles and RCTs were rechecked to look for other potentially eligible studies.

RESULTS

Types of Study and Number Identified
• Systematic reviews and controlled clinical trials
  1. No systemic reviews and controlled clinical trials specifically on the topic of Homoeopathy in dyslipidemia were identified
• Preclinical studies (04)
  1. In vitro study on monkey[13]
  2. Effect of Syzygium jambolanum in diabetic rat[14]
  4. Dose-dependent effect of Baryta carbonicum and Baryta muriaticum in chicken[16]
• Observational clinical studies (03)
  1. Observational study on lipoproteinemia[17]
  2. Homoeopathy in hypercholesterolemia[18]
  3. Baryta carbonica 6X or 30C used in arteriosclerosis[19]
• Case records (02)
  1. Case records of atherosclerosis[20]
  2. Cases treated with Cholesterinum 3X and 6C[21]
• Keyword search from encyclopedia homoeopathica (Radar 10 repertory software) and number of references found: After keywords search, atherosclerosis 51, atheroma 393, arteriosclerosis 6769, cholesterol 234, lipid 28, lipidemia 0, and hypercholesterolemia 6.

Brief Summary of each Study
The summary of studies is given in Table 1. In one of the in vitro animal study on monkeys,[13] three groups A, B, and C were made and were Cholesterinum 3X, clofibrate, and no medication, respectively. It was found that Cholesterinum lowers the cholesterol, phospholipids levels significantly. Keeping in view the outcome of this study, clinical trial on human subjects may be considered.

Study of Fucus vesiculosus for its antiobesity activity[15] tested in Wister rats. Obesity was induced in adult female Wistar albino rats (100–120 g) by feeding the rats with cafeteria diet for 42 days in diet-induced model and by administration of single intraperitoneal injection of Triton X-100 in chemical induced model. Feeding cafeteria diet for 42 days resulted in significant increases in the body weight, TC, TG, LDL, and very low-density lipoprotein (VLDL) levels and a reduction in the HDL level. Further, the locomotor activity was found to be reduced significantly. Treatment with Fucus vesiculosus significantly protected the cafeteria diet-fed animals from all these changes and helped to maintain normal locomotor activity.

Preclinical study on chickens showed reduction in lipid parameters using Baryta carbonicum and Baryta muriaticum.[16] Another study on diabetic rats, an attempt had been made to investigate the remedial effect of homoeopathic drug S. jambolanum[14] on carbohydrate and lipid metabolic disorders on streptozotocin-induced diabetic rat. Homoeopathic drug, S. jambolanum (mother tincture), has a protective effect on diabetic induced carbohydrate and lipid metabolic disorders. In one of the early papers published on hypercholesterolemia,[18] combination of Phosphorus 6, Calcarea carbonica 6, and Thuja 30 was tried on 57 patients. Remedies in dilution were mixed in equal proportion, and resultant solution was used to medicate the blank sugar pills. Patients included in the study were those who had blood cholesterol level between 250 and 350 mg%. After this treatment, cholesterol level of all patients came down below 250 mg%. Patients were followed up for 2 years with 6 monthly estimation of blood cholesterol and were found static.

In another observational study on lipoproteinemia,[17] wherein 322 patients were given individualized homoeopathic treatment treated out; of which 290 patients were improved. Inclusion criteria were TC more than 200 mg/100 ml, TGL > 170 mg/100 ml, HDL < 35 mg/100 ml, LDL > 150 mg/100 ml, and VLDL > 50 mg/100 ml. Predisposing factors for dyslipidemia such as diabetes mellitus, hypothyroidism, liver diseases, dietary factors, family history, and genetic factors were also recorded during this study. Lycopodium clavatum, Calcarea carbonica, Pulsatilla, Rhus tox, Sulphur, and Nux vomica were found useful in treatment. Not only pathological parameters improved but also associated symptoms of patients improved.
### Table 1: Summary of studies

<table>
<thead>
<tr>
<th>Study Design</th>
<th>Aim/objective</th>
<th>Sample Size</th>
<th>Outcome Parameters</th>
<th>Intervention</th>
<th>Results</th>
</tr>
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<tbody>
<tr>
<td>Dixit</td>
<td>Preclinical</td>
<td>To evaluate the role of <em>Cholesterinum</em> and clofibrate in correcting increased lipid levels</td>
<td>15 monkeys</td>
<td>In vitro study on monkey. Three groups, A, B, C in which group A received Cholesterinum, group B received clofibrate, and group C was control group. Cholesterinum 3x given at 12 h, 24 h, and 48 h</td>
<td><em>Cholesterinum</em> 3x-trituration (a homoeopathic preparation) lowers the increased VLDL-cholesterol levels to an extent of 32% within 48 h. While total C/P were significantly reduced (62% and 45%, respectively, ( P &lt; 0.001 ))</td>
</tr>
<tr>
<td>Maiti et al.</td>
<td>Preclinical</td>
<td>Effect of mother tincture of <em>Syzygium jambolanum</em> on carbohydrate and lipid metabolic disorders in streptozotocin-induced diabetic rat</td>
<td>Serum lipid profile level</td>
<td><em>Syzygium jambolanum</em></td>
<td>Homoeopathic drug <em>Syzygium jambolanum</em> (mother tincture) has a protective effect on diabetic induced carbohydrate and lipid metabolic disorders in STZ-induced diabetic animal</td>
</tr>
<tr>
<td>Korukanti</td>
<td>Preclinical</td>
<td>Evaluation of antiobesity activity of <em>Fucus vesiculosus</em></td>
<td>48 Wister rats</td>
<td><em>Fucus vesiculosus</em></td>
<td><em>Fucus vesiculosus</em> treatment prevented the rats from becoming obese and the biochemical and physical parameters were maintained to normal levels</td>
</tr>
<tr>
<td>Nandi</td>
<td>Preclinical</td>
<td>Dose-dependent effect of <em>Baryta carbonicum</em> and <em>Baryta muriaticum</em> in homoeopathic trituration on experimentally induced high serum lipid concentration in chickens</td>
<td>54 chicken</td>
<td>Serum TC, phospholipid, TG, total lipids and total C/P ratio</td>
<td><em>Baryta carbonicum</em> and <em>Baryta muriaticum</em> Concentration of various serum lipids was experimentally increased in chickens. Feeding <em>Baryta carbonicum</em> and <em>Baryta muriaticum</em> resulted in reduction of serum TC, phospholipid, TG, total lipids, and total C/P ratio. Results obtained with various doses of <em>Baryta carbonicum</em> and <em>Baryta muriaticum</em> were compared with a standard hypocholesterolemic drug, clofibrate</td>
</tr>
<tr>
<td>CCRH</td>
<td>Clinical study</td>
<td>To clinically evaluate the efficacy of homoeopathic medicines in lipoproteinemia</td>
<td>322</td>
<td>Predefined parameters were cured: When patient is asymptomatic and lipid profile touched normal level and there is no recurrence for 3 years. Improvement as marked, moderate and mild</td>
<td>In most of the cases, remedy was selected on the basis of presenting complaints and reportorial totality. Homoeopathic medicine selected after proper evaluation of cases were found to be effective in improvement of clinico-pathological findings and associated complaints in 290 out of the 322 reporting cases of lipoproteinemia. Out of 293 cases, 77 cases (26%) have shown marked improvement, 113 cases (39%) moderate improvement, 100 cases (34%) mild improvement, and 3 cases (01%) were having no improvement. It has also been observed that the medicines are not only effective in relieving their clinico-pathological findings but also in relieving their associated complaints and restoring the general health of patients</td>
</tr>
<tr>
<td>Pay</td>
<td>Clinical study</td>
<td>Role of Homoeopathy in hypercholesterolemia</td>
<td>57</td>
<td>Assessment of laboratory parameters of serum cholesterol values</td>
<td><em>Calcarea carbonica 6, Phosphorus 6, and Thuja 30</em> combined in one bottle and then dispense in twice daily dose of 2 pills for 8-10 weeks in 36 cases and from 10 to 12 weeks in 21 cases. Values of serum cholesterol are reduced below 250 mg% in all patients. Author followed patients for 2 years with investigations at 6 months interval; normal levels were maintained throughout the study period</td>
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*Contd...*
A case paper discussed three cases of atherosclerosis and has recommended remedies such as *Lolium temulentum*, *Plumbum iodatum*, *Allium sativum*, *Antimonium Arsenicum*, *Aurum iodatum*, *Baryta carbonica*, and *Capsella bursa-pastoris*. Another record of two cases published in which *Cholesterinum* 3X and 6C was prescribed for hyperlipidemia and found useful. Twelve cases of arteriosclerosis were treated with *Baryta carbonica* 6X and 30C and found useful for patients.

**Materia Medica**

Drugs of Indian origin are traditionally used in crude extract for reducing cholesterol levels; their use in potentized form is not fully explored in Homoeopathy. These drugs in mother tincture along with constitutional treatment can be utilized. They are also mentioned in homoeopathic Materia Medica, but their properties after potentization do not fully reflect the indications which they show in crude form. Some of the drugs are *Rauvolfia serpentina*, *Terminalia chebula*, *Terminalia arjuna*, *Allium sativum*, *Terminalia chebula*, *Terminalia arjuna*, *Allium sativum*, etc.

Other known homoeopathic medicines such as *Plumbum metallicum*, *Baryta muriatica*, *Kreosote*, *Vanadium metallicum*, *Aurum metallicum*, *Calcarea Carbonica*, *Kali carbonicum*, *Arsenicum album*, *Lachesis mutans*, *iodum*, *lithium carbonicum*, *Adrenalinum*, *Glonoina*, *Cactus grandiflorus*, *Strontium carbonicum*, and *Strophanthus hispidus* also play a positive role in management of lipid disorders.

For lipid metabolism disorders, *Curdlipid*, another new medicine, prepared from the fat of fat-tailed sheep has been in use in Russia. *Curdlipid* was investigated by different ways. The first method was the traditional homoeopathic proving and the second clinical trials. After clinical trials, *Curdlipid* 6C was found more effective in patients with disturbances connected with consequences of ischemic insult, acute brain bloodstream disturbance, atherosclerosis of blood vessels, and arterial hypertension. Clinical indications of this drug are ovarian dysfunction, endocrine infertility due to obesity, lipid metabolism disorders, such as dyslipidemia, obesity, and atherosclerosis.

**Repertory**

Homoeopathic Repertory is unique which indexes the symptoms systematically for easily finding the remedy. In homoeopathic repertory, the term “arteriosclerosis” had been used which means thickening and loss of elasticity of the walls of arteries of all sizes. There are many forms of this classified by the types of lesions and arteries involved, such as atherosclerosis with fatty lesions in the arterial intima of medium and large muscular arteries.

Repertory has rubric as arteries sclerosis, atheroma, arteriosclerosis which denotes atherogenic changes in arteries which are known risk for CVDs. Study of rubric arteriosclerosis from Synthesis Repertory is shown in Figure 1. This rubric is studied to understand the source books of homoeopathic
Bhalerao, et al.: Dyslipidemia and Homoeopathy

medicines listed against rubric “arteriosclerosis” from Synthesis Repertory.[27] This Repertory mentions 77 medicines for arteriosclerosis which include 20 medicines for 2 marks and 57 medicines for 1 mark. On further study of this rubric, it was found that medicines such as Ammonium iodatum, Arnica, Arsenicum iodatum, Glonoine, Kali iodatum, Natrum iodatum, Plumbum iodatum, Polygonum aviculare, and Strontium iodatum were noted as italics in Boericke repertory,[28] but this rubric or symptoms is not found in Materia Medica literature of these medicines in Boericke Materia Medica.[28] It means this symptom is frequently verified clinically, but it is not included in Materia Medica. It is of further interest that Arnica was mentioned in Boenninghausen’s Therapeutic Pocket Book (BTPB).[29]

Similarly, medicines such as Calcarea Carbonica, Cuprum metallicum, tabacum, and Viscum album were mentioned in BTPB and were verified by Stauffer. Plumbum iodatum is the only medicine which is mentioned in Clarke Materia Medica and also in Repertory whereas Plumbum metallicum is mentioned in all other source books of rubric except Clarke Materia Medica and Repertory.[30] Out of these 20 medicines of second-grade Synthesis repertory, 11 medicines are from mineral kingdom and 7 are having iodium element in their combination this observation is in sync with the current finding that increasing level of TSH was associated with less favorable lipid concentrations.[31]

Recent repertories in Homoeopathy such as “Complete repertory” mentions the rubric “Cholesterol increases” with 11 medicines against it.[32] The reference of these medicines as shown in Radar 10 Repertory software is Dr. J.T. Kent but exact source book is not mentioned. Moreover, if we check medicines mentioned, such as thyrotropinum and insulinum, were written which were not available at the time of Dr. Kent. Such newly added rubrics need further verification for its authenticity and acceptance in profession.

**DISCUSSION**

Despite the wealth of data supporting the beneficial effects of pharmacologic therapy on cardiovascular risk, patients often express a desire to accomplish similar goals with diet alone. In one of the study from low-fat vegetarian diet plus exercise, stress management and group support have numerous additional benefits beyond lowering LDL cholesterol by 40%. These comprehensive lifestyle changes caused a 91% reduction in angina and significant improvements in myocardial perfusion and ventricular function after only 1 month as compared to control group.[11]

TLC for dyslipidemia patients are recommended, if these changes are enough to reduce LDL

![Study of Rubric Arteriosclerosis](image)

**Figure 1:** Diagram depicting sourcebooks of medicine listed against rubric arteriosclerosis from Synthesis repertory. R: Repertory; BTPB: Boenninghausen's Therapeutic pocket book; MM: Materia Medica
cholesterol to desired ranges without cholesterol lowering drugs, then that is all needed for patients. However, if this TLC therapy does not improve the cholesterol, then instead of going for lipid lowering drugs directly intensive changes in diet and lifestyle may be given as choice to patients. The study suggests that intensive changes will reduce cholesterol than TLC therapy. Role and benefits of diet and exercise are often neglected over lifelong statin therapy in treatment of dyslipidemia. All medications, including lipid-lowering drugs have side effects, known and unknown. In contrast, it costs virtually nothing additional to eat a healthful diet, walk, meditate, and quite smoking and only side effects of these behaviors are beneficial ones.

In Homoeopathy, auxiliary management of diseases is advised along with individualized treatment. Although the emphasized on TLCs has increased in last 10–15 years, Hahnemann, the pioneer of Homoeopathy 100 years before, foresighted the importance of lifestyle in management of diseases. Homoeopathy along with lifestyle changes can offer comprehensive approach toward treatment of dyslipidemia.

Future research should be of pragmatic design and include qualitative studies. Individualistic approach of Homoeopathy along with lifestyle modification and making use of mother tinctures in treatment of dyslipidemia can be explored in future clinical trials. Repertoires of recent origin with combination of various repertories needs verification for its rubrics mentioned and their medicines included. Very few clinical studies are available which have group of effective medicines that can be included in repertories for use to profession. Further research is warranted in this direction also.

**CONCLUSION**

A comprehensive search demonstrates that the evidence on the benefit of Homoeopathy in dyslipidemia is limited. On the basis of this review, it is not possible to draw firm conclusions; though positive leads are available, further well-designed studies are warranted.

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**Conflicts of Interest**

There are no conflicts of interest.

**REFERENCES**


23. Maruthappan V, Shree KS. Hypolipidemic activity of


Homeopatía en el tratamiento de la dislipidemia – Revisión breve

RESUMEN

Fundamento: Se ha establecido claramente la importancia de un aumento del colesterol sérico total y un nivel elevado de las lipoproteínas de baja densidad, como factores de riesgo de las coronariopatías. Las estatinas constituyen el tratamiento de elección en la dislipidemia, pero tienen efectos adversos conocidos. En este artículo, se revisa la información disponible sobre el tratamiento de la dislipidemia con remedios homeopáticos (investigación y conocimiento tradicional).

Métodos: Debido a la escasez de bibliografía basada en evidencias, no se establecieron criterios de inclusión estrictos. Se incluyeron estudios preclínicos y clínicos (informes de casos clínica a ensayos controlados). Se realizó una búsqueda completa en las principales bases de datos clínicos incluyendo PubMed (National Medical Library), AYUSH PORTAL, EMBASE y Cochrane Library aplicando los términos de ‘dyslipidemia’, ‘atherosclerosis’, ‘arteriosclerosis’ y ‘atheroma’ junto con ‘homoeopathy’. Además, se efectuaron búsquedas en textos acreditados de autores, como la materia médica homeopática, el repertorio, etc. La investigación relevante se clasificó por tipo de estudio y se evaluó conforme al tipo y diseño del estudio.

Resultados: Se identificaron cuatro estudios preclínicos, tres estudios observacionales y dos informes de casos clínicos. A partir de la búsqueda en la bibliografía, se registraron los remedios habitualmente utilizados en la materia médica y de origen de la India. El grupo de los remedios habitualmente utilizados se ha presentado con el estudio detallado del rubro de ‘arteriosclerosis’.

Conclusiones: Existen ejemplos positivos sobre el tratamiento de pacientes con dislipidemia. Sin embargo, hay que realizar más estudios bien diseñados para obtener evidencias sobre la efectividad / eficacia de la homeopatía.