



UNANI HERBS AS EFFECTIVE REMEDY FOR TREATING DYSLIPIDEMIA: A REVIEW

Yousuf Khalil Hussaini^{1*}, Shaista², Ghazala Mulla³, Danish Jahan⁴ and Sufiya Fatima⁵

¹Pg Scholar Dept. of Moalijat Jamia Tibbiya Deoband Uttar Pradesh.

²Hod Dept. of Moalijat Jamia Tibbiya Deoband Uttar Pradesh.

³Reader Dept. of Moalijat Tibbiya College Pune.

⁴Pg Scholar Dept. of Ilmul Qabalat Wa Amraze Niswan Nium Bengaluru.

⁵BUMS, H.S.Z.H Unani Medical College Bhopal Madhya Pradesh.

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***Correspondence for
Author**

**Dr. Yousuf Khalil
Hussaini**

Pg Scholar Dept. of
Moalijat Jamia Tibbiya
Deoband Uttar Pradesh.

ABSTRACT

Dyslipidemia is a disorder of lipoprotein metabolism, including lipoprotein overproduction or deficiency. Dyslipidemia may be manifested by elevation of the total cholesterol, low-density lipoprotein cholesterol (LDL-C), triglyceride (TG) concentrations, and decrease in high-density lipoprotein cholesterol (HDL-C) concentration in the blood. It is an increasing health problem worldwide. Dyslipidemia is one of the major risk factor for coronary heart disease (CHD), stroke and other atherosclerotic vascular events, Caused by genetic and environmental factors that leads to enzyme deficiency or due to faulty diet and life style. In unani literature *samne*

muftrat is one of the cause of dyslipidemia. *Samne muftrat* is related to *fasaad* of *hazme kabidi*, excessive *buroodat* in *kabid* causes *ghalbae balgham* in blood which leads to disturbed metabolism. *Samne muftrat* causes reduction in *hararate ghariziya* and narrowing of blood vessels. Ibn Sina described that excessive intake of diet and sedentary lifestyle are the important causes of *samne muftrat*. Unani system of medicine is sanctified with number of drugs which are being used in the treatment of *samne muftrat* e.g. *Afsanteen*, *Ajwaeen*, *Ailwa*, *Asaroon*, *Anisoon*, *Filfil siyah*, *Kishneez*, *Lehsun*, *Zanjabeel* etc. these drugs are *mulattif*, *muftteh sudad* and *musakhin* in property hence effective in treating dyslipidemia.

KEYWORDS: *samne muftrat*, dyslipidemia, *hazme kabidi*, CHD.

INTRODUCTION

The term dyslipidaemia is the impairment of lipid metabolism, in which abnormal level of triglycerides and cholesterol in the plasma is consequent to excess of substrate leading to more production, defective transport, delayed peripheral clearance, reduced utilization of lipoproteins or their intermediates or a combination of these abnormalities. The causes responsible for such lipid disorders could be primary, and more commonly secondary to diabetes mellitus, nephrotic syndrome and hypothyroidism etc.^[1] It is a disorder of lipoprotein metabolism, including lipoprotein overproduction or deficiency. Dyslipidemia may be manifested by elevation of the total cholesterol, the low-density lipoprotein cholesterol (LDL-C) and the triglyceride (TG) concentrations, and a decrease in the high-density lipoprotein cholesterol (HDL-C) concentration in the blood.^[2]

In unani literature there is no description about dyslipidemia but *samne maufrat* (obesity) is described well. *Samne muftrat* is a disease caused by *sue mizaj* of *balgham*, *Samne muftrat* is related to *fasaad* of *hazme kabidi*, excessive *buhoodat* in *kabid* causes *ghalbae balgham* in blood which leads to disturbed metabolism.^[3,4,5] Pathological changes mentioned under the obesity are same as dyslipidemia. Unani physicians have clearly mentioned that all the white and colorless fluid of the body comes in the category of *balghami khilt*, when this *balghami khilt* became abnormal in quality and quantity this will lead to *balghami amraz* and will cause pathological changes in the body.^[6] In *samne muftrat hararate ghariziya* reduces and leads to less supply of *rooh* to the vessels.^[4] The causes responsible for *samne muftrat* are same which are responsible for dyslipidemia, these are heredity, *martoob ghiza*, *kasrate ghiza*, *rahat*, lack of exercise, *martoob roghaniyat*, intake of excessive alcohol especially after meal.^[4,7,8,9] Razi described the importance of dieto therapy in the management of *samne muftrat*.^[9]

Ibne sina has mentioned the importance of *istifragh* in the management of obesity, he said that the drugs which are diuretic and laxative reduces the body weight by hindering the digestive process via inhibiting the absorption of digested food.^[10]

Usoole ilaj

1. Treat the cause
2. Rectify the mizaj
3. Use *mudir*, *muhallil*, *haar*, *musakhin*, *muarriq* and *mufatteh sudad adviya*.^[9,10]

Drugs used in treatment of *samne muftrat* are as follows

Afsanteen- (*atrimisia absinthium*)

Mizaj(temperament)- Hot and dry

It is a bitter aromatic herb found abundantly in Afghanistan, Iran, and Kashmeer, In unani system its actions are *muhallil*, *muarriq*, *mulattif*, *muftteh sudad*, and beneficial in *balghami amraz*.^[11,12,13,14] in modern system of medicine it is known as worm wood. It's constituents are volatile essential oil and an extractive matter 'absinthin' , tannin, resin, succinic acid, malates and nitrates of potassium etc. its actions in modern medicine are proven as febrifuge, deobstruent diaphoretic and antioxidant.^[15,16]

Anisoon(*pimpinella anisum*)

Mizaj- Hot and dry

It is an annual grassy herb native of Egypt but is cultivated in Persia, U.P, Punjab, Orissa and various other parts of the world.^[15] it is *multtif*, *muhallil*, *muftteh sudad* for liver and spleen, and *munaffite balgham*.^[11,12,13,14] In a study by Rajeshwari et al. it is proven that anisoon seed powder is hypolipidemic, antidiabetic, and its ethanolic extract is having antioxidant properties.^[17]

Asaroon (*asarum europaeum*)

Mizaj- Hot and dry

Aromatic root of a plant which is indigenous to the northern parts of southern europe cultivated in united states.^[11,12,14,15] its action in unani system of medicine are *muharrike asab* and *mudire boul*. It excretes out the *balgham* from the body hence beneficial in *balghami amraz* it is also a liver corrective and useful in liver diseases.^[13]

Filfil siyah (*Piper nigrum*)

Mizaj- Hot and dry

This perennial climbing shrub is indigenous to Malabar and travancore coasts.^[15] its action in unani system of medicine are *muqawwie jigar wa meda*, beneficial in *balghami amraz*, and *mudire boul wa haiz*.^[11,12,13,14] Piper nigrum contains a pungent substance called piperin which posseses various pharmacological actions including antihyperlipidemic, antioxidant, and hepatoprotective activity. It influences liver and metabolic functions. Black pepper used to cure various digestive disorders.^[18,19,20]

Kishneez khushk (*Coriander sativum*)

Mizaj- Cold and dry

Coriander is a glabrous, aromatic, herbaceous annual plant extensively cultivated in all parts of India for its seeds.^[15,21] Its actions in unani system of medicines are *Mufarreh wa muqawwie qalb*.^[11,12,13,14] Several pharmacological and phytochemical studies on the different parts of coriander sativum have revealed its potential as a medicinal plant. It has antioxidant, antidiabetic, cholesterol lowering and hepatoprotective activity. Coriander decreases the uptake and enhances the breakdown of lipids, so coriander can be used as preventive and curative herb for hyperlipidemia.^[21,22]

Lehsun (Alium sativum)

Mizaj- Hot and dry

Garlic is probably one of the earliest known medicinal plants, which used from ancient time to cure different disease conditions in human.^[23] In unani system of medicine its actions are *musakhin, muqattae akhlate ghaliza* and *munaffise balgham*.^[11,12,13,14] Garlics current principle medicinal uses are to prevent and treat cardiovascular diseases by lowering blood pressure and cholesterol. Pooled data from numerous randomized trials suggest that garlic lowers total cholesterol concentration by approximately 10% and favorably alters HDL/LDL ratios. Randomized trials also support garlic's effectiveness as a mild antihypertensive which lowers blood pressure by 5-7%. Garlic prevents the onset and development of atherosclerotic lesions and also regresses the lesion present on artery wall, hence it has antiatherogenic and antiatherosclerotic effects.^[23]

Zanjabeel (zingiber officinale)

Mizaj- Hot and dry

Ginger is a creeping perennial with thick tuberous rhizome which spreads underground.^[15] It is beneficial in *balghami amraz* and it is digestive and gastrotonic.^[11,12,13,14] In a study ethanolic extract of ginger has been used to treat cholesterol fed rabbits. The marked rise in serum and tissue cholesterol, serum triglyceride, serum lipoprotein and phospholipid followed by 10 weeks of cholesterol feeding was significantly reduced by the ethanolic ginger extract. The result indicates that ginger is definitely an antihyperlipidemic agent.^[24]

Ajwain desi (Ptycotis ajowan or carum copticum)

Mizaj- Hot and dry

Ajwain grows and largely cultivated in Eastern India, and is particularly abundant in and around Indore and the Nizam's Dominions.^[15] Also known as *nankhwah*. Its main functions are *musakhin, muhallil, musakkin, mujaffif* and *mufateh sudad*.^[11,12,13,14] Lipid-lowering effect

of *C. copticum* seeds has been studied in rabbit. In these studies, methanolic extract of the plant (2 g/kg) significantly decreases total cholesterol, triglycerides, and LDL-cholesterol (71%, 53%, and 63%, resp.) and increased HDL up to 60% which was comparable to the effect of simvastatin (0.6 mg/kg). It was also suggested that antilipidemic effect of the plant is possibly due to enhanced removal or catabolism of lipoproteins and inhibition of HMG COA reductase.^[25,26]

Ailwa (Aloe barbadensis)

Mizaj- Hot and dry

Aloe vera has a long history as a medicinal plant with diverse therapeutic applications. Its actions mentioned in unani system of medicine are *mulaiyan*, *mushil*, *muqawwie meda wa jigar*.^[11,12,13,14] Several preclinical and clinical trials showed a blood glucose and lipid lowering effect of *aloe vera* gel preparations.^[27] Ethanolic extract of *aloe vera* leaf gel in streptozocin induced diabetes rats for a period of 21 days resulted in a significant reduction in fasting blood glucose, hepatic transaminase, plasma and tissue cholesterol, triglycerides, free fatty acids and phospholipids and a significant improvement in plasma insulin. Result of the present study shows that *aloe vera* possess antihyperlipidemic and antidiabetic properties.^[28]

CONCLUSION

In short, the management of dyslipidemia is approached with therapeutic lifestyle changes followed by addition of pharmacotherapy with these unani herbs which are proved to be effective in treating dyslipidemia since ancient time. It is mentioned in unani literature the eminent unani physicians were treating *samne mufrat* with these herbs.

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