

EFFECT OF NON MEDICINAL THERAPY OF UNANI MEDICINE IN WEIGHT AND DYSLIPIDEMIA MANAGEMENT

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ABSTRACT

The Unani System of Medicine (USM) offers treatment of diseases related to all the systems and organs of the human body. It offers four types of treatment modalities e.g. Regimenal Therapy (*'Ilājbi'l-Tadbīr*), Dietotherapy (*'Ilājbi'l-Ghidhā'*), Pharmacotherapy (*'Ilājbi'l-Dawā'*) and Surgery (*'Ilājbi'l-Yad*). However, the first preference of treatment is given to regimenal therapy and dietotherapy, pharmacotherapy and surgery are used as per requirement. Regimenal therapy (*'Ilājbi'l-Tadbīr*) and Dietotherapy (*'Ilājbi'l-Ghidhā'*) comprises of non-medicinal procedures, along with lifestyles and diet modification for preservation of health and treatment of disease. Unani scholars have advocated for mixed approach of treatment in cases of

complex diseases. In this case study, a 23-year-old presented with the complaints of heaviness in chest, palpitation, listlessness, constipation, numbness in hand and legs and severe sweating occasionally, with dyslipidemia was treated with non-medicinal (*riyazat* and change in diet) procedures of USM for two months. After two months of change in diet pattern in terms of quality and quantity and *riyazat* his lipid profile comes to normal and he loses 11.5 kg weight and feel healthy. By this observation it may be concluded that the concept of dieto-therapy and *riyazat* in UMS have strong base to prove safe and effective in the weight and dyslipidemia management.

KEYWORDS: Dyslipidemia, obesity, Regimenal Therapy, *'Ilājbi'l-Tadbīr*, Dietotherapy, *'Ilājbi'l-Ghidhā'*, weight management.

INTRODUCTION

Unani system of medicine (USM) is one of oldest system of medicine catering health services based on Hippocratic theory of humour and temperament through its regimenal Therapy (*'Ilājbi'l-Tadbīr*), dietotherapy (*'Ilājbi'l-Ghidhā'*), pharmacotherapy (*'Ilājbi'l-Dawā'*) and surgery (*'Ilājbi'l-Yad*).^[1] Unani scholars emphasizes on non-medicinal procedures initially for the management of diseases through regimenal Therapy (*'Ilājbi'l-Tadbīr*) and dietotherapy (*'Ilājbi'l-Ghidhā'*). Pharmacotherapy (*'Ilājbi'l-Dawā'*) and surgery (*'Ilājbi'l-Yad*) are used whenever these two therapies fails to combat the situation.^[2-3] *'Ilājbi'l-Tadbīr* (regimenal therapy) comprises of more than fifteen non medicinal components with sub divisions for various indications. Usually the complex diseases do not respond to simple approach of treatment, that requires combination of two or more than treatment modalities. e.g. change in diet and adoption of suitable component from *'Ilājbi'l-Tadbīr* e.g. physical exercise, lifestyle modification.^[2-4] These changes, may leads to eliminate the morbid humours (*tanqiya*) from the body.^[5-7] Great Unani physicians, e.g. Hippocrates, Galen, Rhazes, Avicenna, Albucasis etc. have described various regimens for the management of diseases, either independently or in combination with other therapies. Hippocrates stated that “let food be your medicine, and medicine be your food”, and “leave your drugs in the chemist’s pot, if you can heal the patient with food”.^[8] According to Unani, change in dietary pattern (dietotherapy) is necessary to restore the imbalance in the body caused by unhealthy lifestyles.^[3,5] The principle aim of *'Ilājbi'l-Ghidhā'* (dietotherapy) is to maintain nutritional needs according to demand of the body. Drug is not considered to be part of the body and can produce adverse reactions, which are why pharmacotherapy is to be avoided.^[9]

The genetic basis of complex diseases depends on the environmental conditions and lifestyle of a person. It is not possible to change genes, however; lifestyle and environment can be changed to prevent or delay the onset of disorders.^[10]

Dyslipidemia is a condition of abnormality of lipid levels measured in the blood, which includes either over production or deficiency of lipoproteins or both.^[11-13] It may mark as rise of total cholesterol or triglyceride or both, or low-density lipoprotein (LDL) and decrease in high density lipoprotein (HDL) concentration.^[13] If dyslipidemia left untreated for long duration, it may affect the overall health status of an individual leading to cardiovascular disease and diabetes mellitus type 2.^[14-16] It is estimated that about 2.6 million Indians will be affected by cardiovascular disease related disability and death in next decades.^[16-18] In Unani

Medicine the lipids in the blood have been described as *Dusumat-e-Dam* and their ill effects with management have been elaborated.^[14,19-22]

Saman-e-Mufrit (obesity) has also been discussed extensively and managed in Unani medical system (UMS) since centuries.^[20,23] According to philosophy of UMS, when oily substances of blood reach to different organs of the body, due to *barid mizaj* (cold temperament) of those organs, they start to deposit there in the form of fat (*Shaham*).^[20,23-28] This deposition of fat in the organs due to cold temperament falls under the category of *amraz-e-balghamiya*.^[23-26] The common sign and symptoms mentioned in conventional Unani medical system of dyslipidemia are palpitation, atherosclerosis, stroke, breathlessness, coma and sometime sudden death.^[14]

The management of dyslipidemia in allopathic system of medicine is effective but not safe due to the adverse/side effects of the medicines, hence researchers are inclined towards alternative system of medicine e.g. Unani, Ayurveda yoga etc.

MATERIAL METHOD

Case presentation

A 23 years old male ex-sportsman visited the institute with the complaints of heaviness in chest and shoulder, palpitation, constipation, numbness in hands and legs, constipation, listlessness and severe sweating occasionally. He was not having history of smoking, alcohol and no family history of diabetes, hypertension and dyslipidemia. He confessed that he had to quit physical activity three years ago on account of his studies. His weight increased gradually.

The parameters of physical examination such as height, body weight, blood pressure (BP), temperature, pulse rate, basal metabolic Index (BMI), waist circumference (WC), waist-hip-ratio (WHR), sagittal abdominal diameter (SAD) and laboratory investigations parameters i.e. lipid profile, kidney function test, liver function test, hemogram, blood sugar (F), were recorded, the values was as shown in column 3 (baseline) of Table-I & II. On the other hand, his complaints i.e. listlessness, leg pains, heart burn, fullness of stomach, breathing difficulty and sleep apnea were also recorded on VAS scale at baseline as shown in table- II.

Patient's food intake was assessed in comparison to its physical activities and after counseling, patient agreed to adopt change in his lifestyle and diet patterns. After his consent,

the benefits of *riyazat* (physical exercise) and dietotherapy of Unani system were discussed in details. He was advised to walk daily atleast of 5 km and aerobics exercise for 20 minutes daily 5-6- times in a week. Patient was also advised to quit motorcycle and encouraged to use bicycle for his daily need of travel.

The detailed dietary chart and daily physical activity chart were prepared. Patient was asked to come for follow-up fortnightly. On every visit patient was counseled to continue the non medicinal procedure of USM for weight & dyslipidemia management.

RESULT AND DISCUSSION

It is well documented in UMS that non medicinal procedure and pharmacotherapeutic treatment of Unani system has a major role in modulating the disease pattern and preventing the health.^[2-3,19-20,29-46] In the pathogenesis of *dasumat/shaham-ud dam* dieto-therapy play an important role to manage the fat content and weight management.^[13] The patient visited to the institute fortnightly and no adverse or uneven complaints were noticed. Patient felt reduction in breathlessness, heaviness in shoulders and chest & relaxed by following the non medicinal procedures of USM. Dieto-therapy detoxifies the body by eliminating the toxic and morbid matter from the body and manages to metabolise the excess fat and take the energy from the body depots. The remarkable reduction in anthropometric parameters, e.g. weight, waist circumference, waist hip ratio, BMI, blood pressure, blood glucose fasting, total cholesterol, triglycerides, LDL, VLDL were recorded along with enhance in HDL level as shown in table-1. The possible mechanism of action of dieto-therapy is to regulate the cholesterol levels and also normalization of hepatic synthesis of endogenous lipoprotein.

It is reported that non medicinal procedures of treatment mentioned in unani classical literature *riyazat* (physical exercise) and '*Ilājbi'l-Ghidhā*' (dietotherapy) positively effect on the total cholesterol and HDL.^[7,13,47-48] In this study it is also observed that non medicinal procedure effectively reduces the weight, BMI, Serum cholesterol, triglycerides, LDL, VLDL, WC, WHR & SAD and enhances the HDL levels as shown in table 1 and 2.

Table 1: Patient's biochemical and hemaotological parameters.

Parameters	Base line	After 8 weeks
Serum Cholesterol mg/dL	250.9	149.3
Serum Triglycerides mg/dL	324.8	101.6
Serum HDL mg/dL	19.80	47.74
Serum LDL mg/dL	166.92	81.24

Serum VLDL mg/dL	64.98	20.32
Blood Sugar (F) mg/dL	81.31	82.57
Bilirubin mg/dL	0.65	0.78
SGOT mg/dL	32.35	35.36
SGPT mg/dL	38.20	40.66
Alkaline phosphatase mg/dL	167.21	56.11
Heamogram gm/L	13.1	13.2
TLC microL	8930	7990
Polymorphs %	80	78
Lymphocytes %	17	18
Eosinophils %	03	03
Monocytes %	00	01
Basophils %	00	00
ESR mm	32	30

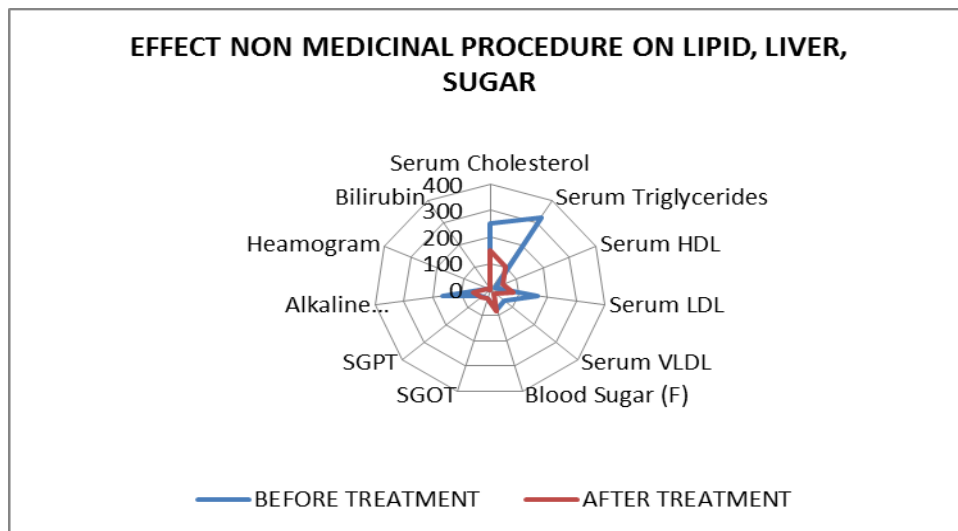


Figure 1.

Table 2: Patient's anthropometric parameters and other sign & symptoms.

Parameters	Base line	After 8 weeks
Weight (Kg)	113.1	101.5
Height (cm)	169.3	169.3
BMI (m²)	39.5 (II)	35.4 (II)
Blood Pressure (mmHg)	114/71	120/72
Pulse rate (/min)	85	79
WC (cm)	119	110
WHR	1.0	0.95
SAD (cm)	29	27
Listlessness	+++	+
Legs pain	++	-
Heartburn	++	-
Fullness of stomach	+++	+
Breathing difficulty	+++	+
Sleep apnea	+	-

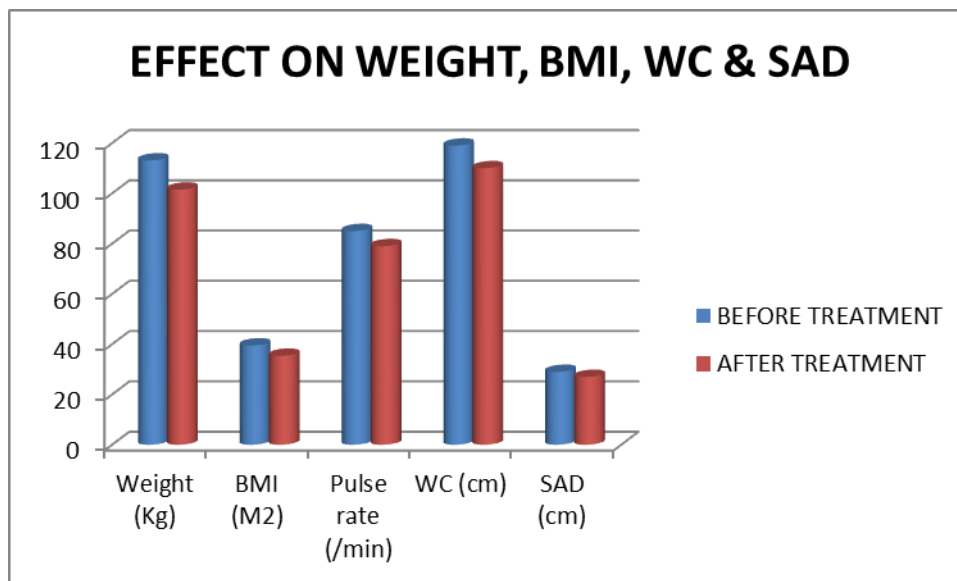


Figure 2.

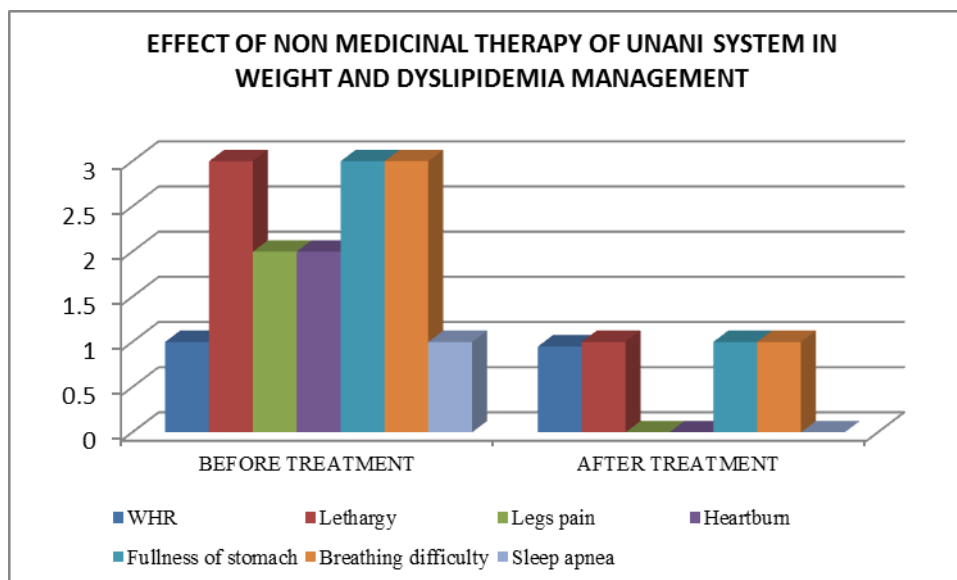


Figure 3.

CONCLUSION

Reduction in all the parameters, sign and symptoms in comparison to baseline to end of the treatment (8 weeks) e.g. serum cholesterol, serum triglycerides, serum LDL, serum VLDL, weight (Kg), BMI (M^2), blood pressure (mmHg), pulse rate (/min), WC (cm), WHR, SAD (cm), listlessness, legs pain, heartburn, fullness of stomach, breathing difficulty, sleep apnea and enhancement in serum HDL showed the positive result of non medicinal procedure of Unani medicine in management of dyslipidemia and weight/obesity. These results proved the claims of Unani philosophers of non medicinal approach of treatment for better health and well being.^[21,23,49-51] In an earlier study '*Ilājbi'l-Ghidhā*' (dietotherapy) successfully control

the weight and dyslipidemia in a case study.^[13] We can conclude that dietary modification along with exercise exerts beneficial effect as normalization of deranged lipid profile, body weight, BMI etc. There was no complained by the patient during the therapy. In a nutshell we can say that non medicinal procedure of unani system is having the almost similar effect as in pharmacotherapy. It is recommended that non medicinal therapy is safe, effective free from any adverse reaction of medicine. This is a safe and cost-effective therapy to manage the patient of obesity, diabetes, hypertension, coronary heart disease, etc.

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