

Role of Preksha Meditation on Blood Chemistry of Adults

Uttam Nikita¹ and Pradyumna Singh Shekhawat²

1. Presenting author and Research scholar, Dept. Yoga and SOL, JVBI, Ladnun

2. Head, Dept. Yoga and SOL, JVBI, Ladnun

Abstract

Introduction- Preksha Meditation is not just for achieving physical, mental, and emotional well-being but a key to spiritual treasure trove. Today, eminent doctors, specialists, and general practitioners have agreed that mediation is a powerful complementary therapy. Meditation can help us in healing and sustenance of good health. It can cure and even protect us from several psychosomatic disorders that result from mental stress and tension.

Objective of the study- To determine the role of Preksha meditation on blood chemistry of adults.

Method and materials- The study was carried out on 40 healthy adults which were enrolled in one-month Preksha Meditation camp organized by Jain Vishva Bharati Institute from 20th May 2015 to 21st June 2015 on the occasion of 1st International Yoga day. All the subjects are having similar socio-economic status and are in between the age group of 20 to 35. All the parameters i.e. Glucose, Urea, Creatinine. Total cholesterol, Triglyceride were tested on set of experiment and after one month of Preksha Meditation intervention. All the data was collected before onset of study and after 1 month and analyzed statistically with student 't' test.

Results- Glucose, Urea, Creatinine. Total cholesterol, Triglyceride were significantly decreased in subjects after undergoing one-month Preksha Mediation camp.

Conclusion- Preksha Meditation may be used as a non-pharmaco therapeutic and safe modality as an effective lifestyle adjunct to medical treatment to improve quality of life of patients. It is to be emphasized that it is very effective for prevention as well as management of all pervading stress and stress related disorders.

Keywords: Preksha Meditation, Glucose, Urea, Creatinine. Total cholesterol, Triglyceride

Introduction

Life style disorders like cardiovascular diseases, diabetes, obesity, urological and livers function diseases represent a major health problem of society, counting as one of the main causes of death. In the respect, a large number of investigations have consistently linked high blood lipid, glucose, urea and creatinine concentrations to the development of life style disorders. In fact, an increase in the mortality risk from these disorders has been found to be associated with elevated concentrations of triglycerides, total cholesterol, glucose, urea and creatinine [1-2].

On the other hand, the important implications of stress generating situations

on changes in blood lipid levels have been widely documented [1-3]. In this regard, Stoney et al. recently reviewed different studies indicating the importance of psychosocial stressors on increased triglyceride and cholesterol levels in humans. Psychological stress has therefore been reported to cause augmentation of the concentration of total cholesterol, LDL, and triglycerides in healthy individuals [4] and in those with a greater risk of suffering from cardiovascular diseases [5].

Apart from its relationship with blood lipid levels, cardiovascular risk has also been related to specific serum enzymes [6,7] and renal function parameters [8,9]. The serum enzymes GOT (glutamic-

oxaloacetic transaminase), and GGT (gamma-glutamyl transferase) are often part of the blood tests used to assess hepatic function. Increased value of these biochemical parameters was typically associated with liver pathologies; however, they do not specifically measure hepatocyte function, but rather hepatocellular damage [10]. Similarly, serum levels of urea and creatinine are generally considered to be indicators of renal function, although these measures may also be altered in liver [11,12]. and muscle disease, respectively. Interestingly, serum levels of enzymes and urea, aside from pathological condition, may be modulated by behavior[13,14].

There are many scientific evidence confirming that a reduction of stress through different types of behavioral or psychosocial interventions can decrease the concentrations of several biochemical parameters of clinical interest and help diminish the risk of cardiovascular disease[15,16]. In particular, the behavioral approach has been reported to be effective in reducing blood lipids, especially high cholesterol levels [17].

Given the potential clinical implications of the aforementioned approach, in recent years considerable interest has been directed towards examining the effects that various ancient eastern psychosomatic techniques can exert on biochemical parameters of relevance to physical health [18]. Thus traditional oriental methods such as Preksha meditation, yoga and various specific forms of meditation have been studied for their potential clinical use, particularly for their positive effect on the life style disorders. In the sense, decreases

Material and Methods

The study was carried out on 40 healthy adults which were enrolled in one month Preksha Meditation camp organized by Jain Vishva Bharati Institute from 20th May 2015 to 21st June 2015 on the occasion of 1st International Yoga day. All

in blood pressure, heart rate [19,20], and cardiovascular reactivity have been reported in subjects who practiced meditation. Various forms of meditation have also been found to be effective in reducing stress symptoms in subjects with diverse physical and psychological pathologies [21], including cancer patients. Meditation is a word that has been used in variety of ways but all of them define it as thinking contemplation, concentrating mind on an object, paying attention etc. but in the tenet propounded by Lord Mahaveer “*Perceive and know*” is given more prominence because perception is strictly concerned with the phenomenon of the present, neither past nor future. He stated “*Sampikkhaeappagamappaenam*” means ‘see you thyself’ or perceive and realize yourself, which later becomes the principle of the Jain yoga tradition, and formulated as Preksha Meditation by Late Acharya Tulsi and Acharya Mahaprajna

The word Preksha is derived from the root *iksa*, which means 'to see'. When the prefix '*pra*' is added, it becomes *pra + iksa = preksa*, which means to 'perceive carefully and profoundly'[22]. Here 'seeing' does not mean external vision, but careful concentration on subtle consciousness by mental insight. Preksha Dhyana is the system of meditation engaging one's mind fully in the perception of subtle internal and innate phenomena of consciousness.

The study was carried out at meditation center of Jain Vishva Bharati Institute to study the effect of Preksha Meditation practices on hematological parameters such as Glucose, Urea, Creatinine. Total cholesterol, triglyceride.

the subjects are having similar socio-economic status and are in between the age group of 20 to 35. All the parameters i.e. Glucose, Urea, Creatinine. Total cholesterol, Triglyceride were tested on set of experiment and after one month of Preksha Meditation intervention. The

following intervention were given to the subjects.

1. Yogasana 30 min
2. Pranayama 10min
3. Preksha Meditation 20min

The intervention was given by researcher herself under the guidance of senior yoga teacher

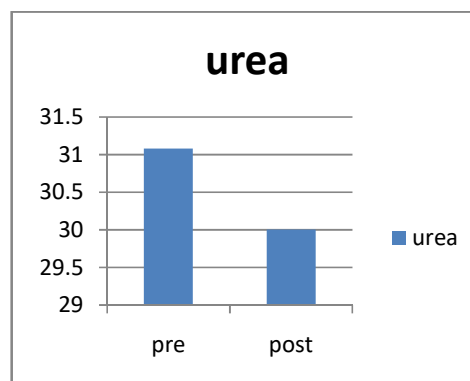
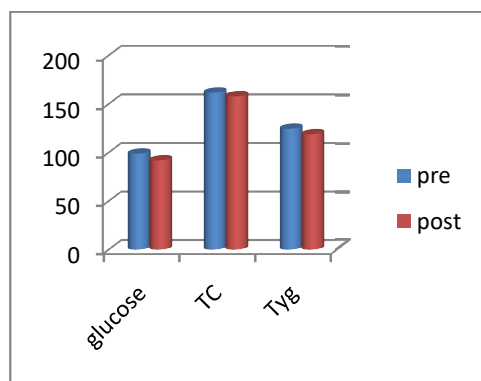
Statistical analysis

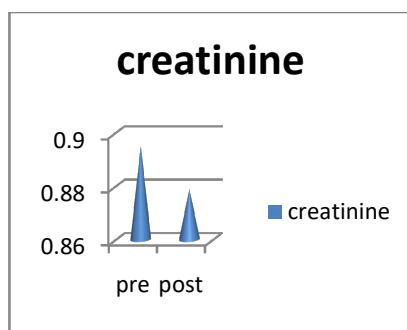
The obtained data were analyzed statistically by using student ‘t’ test and $P < 0.05$ were considered as significant.

Result

The obtained data were analyzed statistically, and we found as significant decreased in mean value of Glucose, Urea, Creatinine, Total Cholesterol, Triglyceride after practice of our experimental intervention from 98.9219 ± 1.5847 , $31.0813 \pm .5532$, $.8947 \pm .0098$, 161.7156 ± 2.6789 , 124.6031 ± 2.1573 to 92.0781 ± 1.8962 , $30.0031 \pm .4641$, $.8788 \pm .0085$, 158.1281 ± 2.6584 , 118.8938 ± 2.2808 .

Sr. no.	parameters	Duration	Mean	SD	Co-relation	t	P
1.	Glucose	pre	98.9219 ± 1.5847	8.96440	.354	3.432	0.01
	Glucose	post	92.0781 ± 1.8962	10.72662			
2.	Urea	pre	31.0813 $\pm .5532$	3.12951	.658	2.518	0.05
	Urea	post	30.0031 $\pm .4641$	2.62549			
3.	Creatinine	pre	.8947 $\pm .0098$.05582	.793	2.632	0.05
	Creatinine	post	.8788 $\pm .0085$.04858			
4.	Cholesterol	pre	161.7156 ± 2.6789	15.15431	.962	4.874	0.01
	Cholesterol	post	158.1281 ± 2.6584	15.03839			
5.	Triglyceride	pre	124.6031 ± 2.1573	12.20398	.916	6.233	0.01
	Triglyceride	post	118.8938 ± 2.2808	12.90231			





Discussion

The present study indicate improvement in biochemistry of blood towards positive health through the practice of Preksha Meditation and Yoga. In previous studies we found strong scientific evidences indicating that yoga has promotive, preventive as well as curative potential.

Several studies have reported that the practice of exercise and even a prolonged lack of muscular activity, can cause increase in blood urea. Given that yoga and Preksha meditation training frequently entails a series of slow physical movements with a strong focus in the mind, this peculiar psychosomatic approach could explain the lower biochemical values observed in the study group. In addition, since deep breathing is generally considered a fundamental effect of Preksha meditation, the variation in breathing pattern naturally induced by our experimental intervention could also have been involved in the marked reduction of blood urea levels that we found in our study. In fact, a link between changes in breathing and urea concentrations has been reported by Desay and Garote, who observed that Kapalabhati practice, a breathing technique of Hatha yoga, diminished urea concentrations. The washing out of CO₂ and the promotion of decarboxylation and oxidation mechanisms whereby quieting of respiration centers is achieved, have been suggested to play a key role in the effects

on urea induced by this yoga breathing technique [23].

Practice of Yogasana improves biochemical profile indicating anti-stress and antioxidant effect, important in production of degenerative disorders [24]. The study showed beneficial effect of Yogasana on blood glucose level and cholesterol levels. Earlier studies have shown that practice of Yoga is associated with significant decrease in cholesterol among subjects with cardiovascular diseases, atherosclerosis, angina, hypertension and Type 2 Diabetes Mellitus at different duration of Yoga [25,26].

Stress has been reported to play a key role in the changes of blood biochemical parameters, particularly of those related to hepatic and renal function. Numerous experimental studies have in fact pointed out the detrimental effects of stress on the physiology of these organs [27]. In this context, the practice of various forms of meditation, besides reducing stress symptoms, has been suggested to affect hepatic and renal metabolism. Jevning et al [28] for instance, found that transcendental meditation decreased hepatic blood flow. This diminution of blood flow in the liver of this organ and has been said to occur owing to a blood flow redistribution, particularly affecting the brain and skin. In our study, the marked reduction in serum urea and creatinine may have occurred by means of a similar process, i.e. by a diminution of blood flow into the liver. The improvement in lipid profile parameters after yoga could be due to increased hepatic lipase and lipoprotein lipase at cellular level which affects the metabolism of lipoprotein and thus increase the uptake of triglycerides by adipose tissues. Better ability to overcome stress can be cited as a possible mechanism for improvement in lipid profile [29,30].

Conclusions

Preksha Meditation may be used as a non-pharmaco therapeutic and safe modality as a effective lifestyle adjunct to medical

treatment to improve quality of life of patients. It is to be emphasized that it is very effective for prevention as well as management of all pervading stress and stress related disorders.

Reference

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