Available online on 15.09.2021 at http://jddtonline.info

Journal of Drug Delivery and Therapeutics

Open Access to Pharmaceutical and Medical Research

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Case Study

Prophylactic Role of Mandukasan and OM Chanting Patients Who Survives with Diabetes

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Article Info:

Article History:

Received 07 July 2021
Reviewed 17 August 2021
Accepted 23 August 2021
Published 15 Sep 2021

Cite this article as:

Menariya R, Singh H, Tank R, Menaria J, Prophylactic Role of Mandukasan and OM Chanting Patients Who Survives with Diabetes, Journal of Drug Delivery and Therapeutics. 2021; 11(5):5-7
DOI: http://dx.doi.org/10.22270/jddt.v11i5.4976

Abstract

Diabetes Mellitus is one of the most chronic non-communicable diseases in the enire world. Yoga is an part of Indian culture which doing ancient times by our rishi munis. Nowadays science has been considered yoga for management of various diseases i.e. hypertension, diabetes, asthma. In this case study had been conducted to understand effect of yoga in type 2 diabetics. Yoga group were put through mandukasanasana and mandukasan with OM chanting for 40 days. Biochemical parameters was performed i.e. FBG, PPBG and HbA1C. It can be concluded that mandukasan with OM chanting has been helpful as an adjunct to medical therapy to minimize the biochemical parameters. Yoga therapy helpful for the status of diabetics in terms of reduction of drug doses, physical and mental alertness and prevention of various complications related to diabetes.

Keywords: Mandukasan, OM Chanting, Diabetes

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INTRODUCTION

It is currently predictable that out of a total of an around 410,000 plant genus that survive in nature, over 248,100 varieties of higher plants have been identified, and of these 12,100 species are known to have medicinal property. However, less than 8-10% of all the plants species have been investigate from a pharmacological potential find out [1].

The crossing to drug discovery and development start from ethno medicine assessment and farming of significant crops for investigate natural invention chemistry, profiling of resources and constituent, preclinical assessment and scale ups via isolation and synthetic [2].

Diabetes mellitus is chronic cause of morbidity and mortality in human. It is a syndrome characterize by hyperglycemia and polyuria polydipsia. It causes complications to various body organs. The clinical results and maturity of diabetes repeatedly fluctuate significantly between country and moreover between ethnic groups inside a country.

It is predictable that internationally, the number of population will climb from 150 million in the year 2005 to 220 million by the year 2009, and to 290 million by 2022. DM is becoming increasingly frequent in worldwide population. The incidence of type 2 diabetes doubled between 1982 and 1990. This amplify can be accredited to many factors, including a stressful lifestyle as well as improper dietary habits. This is of economic concern as the disease requires life-long treatment and is also associated with high morbidity from the resulting complications.

The National Diabetes Data Group of the National Institutes of Health recommends the following criteria for diagnosing diabetes:

a. Fasting venous plasma glucose concentration greater than or equal to 140 mg/dL on at least two separate occasions.

b. Venous plasma glucose concentration equal to 180 mg/dL at 2-h post-ingestion of 75 g of glucose and at least one other sample during the 2-ht [3-5].

Carbohydrates in food are rehabilitated within a hours to the monosaccharide, the principal carbohydrate originate in blood and worn by the body as stimulate. The most exceptions are fructose, disaccharides and all more complex polysaccharides. Insulin is unrestricted into the blood by beta cells (β-cells) originate in the Langerhans in the pancreas. In response to rising levels of blood glucose level. [6].

Lowered glucose levels consequence both in the abridged liberate of insulin from the beta cells and in the overturn adaptation of glycogen to glucose when glucose level falls. This is mostly proscribed by the hormone glucagon which acts in an conflicting mode to insulin. Glucose thus improved by the liver re-enters the bloodstream; muscle cell require the essential export mechanism[7].

Most luggage of type diabetes can be prohibited and the somber complication of diabetes can be avoid through well lifestyles and living environment that cheer and ease healthy behavior. The key communication of the crusade aim to elevate consciousness of how the vigorous choice can be the

effortless choice and the different steps that folks can take to make learned decision about what they eat. Special spotlight will be positioned on the significance of preliminary the day with a fit breakfast[8].

Hence, the complete trouble has to be tackle by plummeting the velocity at all level where the fighting is transfer from the mind to the corpse level; the primary alteration being at the brain stage as that is the root reason. As this illness model propose that all existence disease begin in the intellect in the form of unrestrained violent emotion that gather sufficient energy to suggest violent change in the prana and the corporeal structure ensuing in chronic familiarized patterns of neurochemical response, it show a opportunity of absolute setback[9].

The ancient Indian skill of Yoga is proving to be the unsurpassed in treat one of the oldest known ailment of 'Diabetes'. The antique scriptures by Sushrutha and Charaka mention of this diabetic situation.

MATERIAL AND METHOD:

The comparative study of diabetes patients and yoga mandukasan therapy was conducted at Yoga and Narturopathy Medical College, mangalwar, Chittorgarh. The institutional committee had approved the study protocol and design.

Selection of Subjects:

60 patients of Type 2 Diabetes Mellitus (NIDDM), with a history of diabetes for 0-10 years, in the age group of 35 – 70 years, were selected.

Inclusion Criteria

Male and female subjects between the ages of 35 and 70 years, comprehensive, with Type 2 DM.

Exclusion Criteria

History/presence of clinically significant cardiovascular, respiratory, hepatic, renal, gastrointestinal, neurological or infectious disorders capable of altering the absorption, Known allergy to human insulin excipients contained in these products. Regular alcohol intake greater than 28 units/week (male) or 21 units/week (female). Treatment with s.c. insulin injections.

Methodology:

The patients were divided into three separate groups. Group I (n = 20, Male=10, Female=10) who already on allopathic medicine,Type 2 (n = 20, Male=10, Female=10) allopathic medicine with mandukasan, Type 3 (n = 20, Male=10, Female=10) Allopathic medicine, mandukasan with OM chanting. All these patients performed yoga asana and pranayama for approximately 30 minutes. Per day for 40 days under the supervision and guidance of a yoga expert in the All the patients were of Hindu religion, so they do not hesitate to do Om chanting.

Yoga Protocol:

All the subjects with in the yoga group were taught Yoga asana and pranayama. The duration of practice was for 30 to 40 minutes from 7:00A.M. to 9:00A.M. It was advised to keep bowel and bladder emptied prior to yogic practice. The duration of asana was 15 minutes approximately and that of pranayama was 15 minutes approximately. Taking mental awareness particularly the parts of the body being activated in an asana is very important. This relaxes the mind during the yoga session. While care was taken regarding individual body make up and limitations they were advised not to strain too much in order to attain the correct posture. The body gets gradually tuned, with regular practice.

Biochemical parameters: The basal parameters included in the biochemical investigations are Fasting Blood glucose (FBG), Post Prandial Blood Glucose (PPBG), Glycosylated Hemoglobin (HbA1C). Glycosylated Hemoglobin (HbA1C) was analyzed by indirect ELISA method. Biochemical Parameter was estimated on day 1 and day 40.

Statistical Method:

Student's paired t-test was done to compare the changes in biochemical parameters at the beginning and end of the study in case and control group respectively. Then a comparison between the changes of respective parameter in both group (case and control) was done by Independent t-test. P value <0.05 is considered significant.

RESULTS

Observation:

Table 1: Observation of Patients

S.No.	Allopathic Medicine	Allopathic+Mandukasan	Allopathic+Mandukasan+Om Chanting
Male	10	10	10
Femala	10	10	10

The study population included 30 male and 30 female. Patients has been divided into 3 groups i.e. Allopathic Medicine , Allopathic+Mandukasan, Allopathic+Mandukasan+Om Chanting.

Age Distribution

Table 2: Age distribution

Age Distribution	Allopathic Medicine	Allopathic+Mandukasan	Allopathic+Mandukasan+Om Chanting
35-45	08	07	08
46-55	07	05	05
55-70	05	08	07

Diabetic population included in the research belongs to 35-70 year age group. Mostly group contain 20 subjects. Patients have been divided into 3 groups i.e. Allopathic Medicine, Allopathic+Mandukasan, Allopathic+Mandukasan + Om Chanting.

1st day FBG PPBG and HbA1C

Table 3: Day 1st Blood Glucose

S.No.	Allopathic Medicine ±S.D.	Allopathic+Mandukasan ±S.D.	Allopathic+Mandukasan+Om Chanting ±S.D.
FBG (mg/dl)	145.45 ±42.54	140 ± 40.25	156.25 ± 56.10
PPBG (mg/dl)	200.2± 75.56	220.5 ± 72.50	182.4 ± 75.10
HbA1C	10.5±2.0	11.2±2.4	12.4±10.5

Fasting blod sugar and PPBG Was measured all the patients on day 1 before enrolling in the study. Patients have been divided into 3 groups i.e. Allopathic Medicine, Allopathic+Mandukasan, Allopathic+Mandukasan+Om Chanting. These three groups patients has been performed serum level GBG, PPBG and HbA1C for enrolling in study all parameters Mean with S.D mentioned in table.

40th day FBG PPBG and HbA1C

Table N4: Day 40th Blood Glucose

S.No.	Allopathic Medicine ±S.D.	Allopathic+Mandukasan ±S.D.	Allopathic+Mandukasan+Om Chanting ±S.D.
FBG (mg/dl)	142.45 ±40.54	98.5 ± 8.50	106.25 ± 06.05
PPBG (mg/dl)	190.2± 65.56	145.5 ± 32.50	132.4 ±85.30
HbA1C	9.8±2.5	7.5±1.8	6.9±1.6

There was a decrease in the fasting blood glucose (FBG) in Group II 140 to 98.5 after comparison day 1st to 40. Also compared Group III FBG level day I 156.25 to 106.25.

Postprandial Blood Glucose level in Group II 140 to 98.5 after comparison day 1st to 40. Also compared Group III FBG level day I 145.5 to 132.4. HbA1C in Group II 11.2 to 7.5 after comparison day 1st to 40. Also compared Group III level day I 12.4 to 6.9. There was decrease significant value of FBG, PPBG and HbA1C,

DISCUSSION:

Diabetes is a chronic disease of extensive heterogeneity. The occurrence of diabetes universal will see an boost of 40-42% between the years 2000 and 2025. Prevalence statistics are significant to show the usefulness of the present wellbeing programs. This study carried out in chittorgarh, Raj, India. The main objective of the study was to determine the prophylactic role of yoga in diabetes patients.The basal parameters included in the biochemical investigations are Fasting Blood glucose (FBG), Post Prandial Blood Glucose (PPBG) and Glycosylated Hemoglobin (HbA1C).

From the statistical analysis of the results obtained in the present study and their comparison with other published reports, it may be concluded that yoga helps in decreasing blood sugar level and keep the diabetes in control.

The observations suggest that the performance of mandukasanas and Om chanting led to increased sensitivity of the B cells of pancreas to the glucose signal. The increased sensitivity seems to be sustained for long time resulting in a progressive long term effect of asanas. The study is significant because, it has for the first time attempted to probe the mechanism by which yogasanas reduce blood sugar. In the present study there was a significant fall in the fasting blood glucose levels in the yoga groups[10].

So yogic practice have a role in both primary and secondary prevention in diabetes mellitus. Therefore, mandukasan and Om chanting therapy may be considered as a beneficial adjuvant for management of type 2 diabetes mellitus

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