

Yogic Effect on Diabetic Disorder

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Abstract: *Diabetes is a chronic non - communicable disease which generally start over a period of long period of time and even in the absence of any symptoms that's why it is called as silent killer. It is a life threatening disease which has no permanent cure. A diabetic patient is always dependent on medicine and insulin. Yoga is a means of balancing and harmonizing the mind, body and emotions. Full of restrictions and an incurable disease, diabetes can be controlled by yoga if practiced regularly. There are medicine in the market which can control diabetes but there is no medicine which can cure the functioning of the pancreas. But with yoga we can improve the functioning of the pancreas and it also helps control mental stress which is also one of the main cause of diabetes.*

Keywords: Diabetes, Yogic Diet, Asanas, Pranayams and Meditation.

I. INTRODUCTION

1.1 Need of Study

Diabetes is a common but a life threatening disease which is spreading rapidly worldwide. Due to lack of physical work, changing life style and no proper intake of good food, our organs don't work properly due to insufficient nutrition. In 2005 about 1.5 million people aged above 20 were diagnosed with diabetes. Medicine intake is no permanent cure for this disease. The practice of yoga absorbs glucose from the blood and also help in proper functioning of pancreas and liver and regulates the blood sugar levels in the body the aim of this study is to bring to knowledge of people that yoga practice can help control diabetes without being dependent on life long medicine.

Research in Cardiovascular outcome trials in type 2 diabetes : what have we learned from the past and present ?

There is a wealth epidemiological data which shows that type 2 diabetes significantly increase the risk of cardiovascular events. The evidence from earlier trials have demonstrated that improvement in glycated haemoglobin will reduce the risk of micro vascular disease but there is lack of robust evidence to suggest whether improvement in glycaemic control will have similar beneficial outcomes on macro vascular disease. In the last few years there have been a paradigm shift by which cardiovascular trials relating to therapy in type 2 diabetes are being conducted as every new drug needs to demonstrate cardiovascular safety as per the requirements set by several health regulatory authorities. This has led to alteration in study designs, duration for which they are conducted and end points which are being assessed. As a result, the intended risks and benefits relating to these newer agents are insufficiently explored which may have potential implications in long term management of a chronic disease like type 2 diabetes. This article provides a comparison between past and present cardiovascular outcome trials focussing mainly on oral agents used in type 2 diabetes and also explores the challenges encountered in conducting such trials.

Treatment persistence behaviours in patients with type 2 diabetes (T2DM) after initiation of basal insulin : An exploratory analysis from a Spanish real - world sample.

Conclusion The benefits of basal insulin therapy motivated continuers to persist with the treatment, whereas experienced or anticipated side effects and injection concerns contributed to interruption and discontinuation. Understanding factors affecting persistence patterns among Spanish patients with T2DM may help clinicians improve successful continuation of basal insulin therapy.

HYPOTHESIS

Yoga therapy will be helpful to control and maintain the normal glucose level. It was hypothesis that yoga therapy will improve the functioning of abdominal gland including pancreas which on whole cures diabetes as well.

Diabetes is a disorder of metabolism. It is a disease which occurs when our blood sugar level is too high. Before describing about diabetes we must know about the role of insulin and insulin.

GLUCOSE: Glucose is the main source of energy for the cells that make up muscles and other tissues

- Glucose comes from two major sources food and liver.
- Sugar is absorbed into the blood stream where it is used by the cells and liver stores glucose as glycogen.
- Liver breaks down the stored glycogen into glucose to keep our glucose level in a normal range

INSULIN: Insulin for glucose to get into cells insulin must be present. Insulin is a hormone produced by the Pancrease.

- When we eat the pancreas automatically produce the right amount of insulin to move glucose from our blood into our cells
- But in a diabetic patient pancreas produce either little or no insulin or the cells do not respond properly to the insulin.
- Glucose remain in the blood and over flow and passes out through blood in the urine. Hence the body losses glucose. (energy)

Yoga is a chain of physical, mental, spiritual balance or unity that originated in ancient India over 5000 years ago. Yoga has been utilized as a therapeutic tool to gain healthy life and to cure diseases like Diabetes, Asthama, Obesity and Depression.

The practice of yoga and following yogic diet stress levels can be decreased and blood sugar levels can be maintained

1.2 Types of Diabetes

- Diabetes mellitus
- Diabetes insipidus
- Gestational Diabetes
- Pre - Diabetes

There are 2 types of diabetes mellitus: type 1 & type 2

TYPE 1: It is a autoimmune disease. It occurs when our immune system attacks or destroys our insulin producing beta cells in the pancreas. The pancreas then produce little or no insulin. So hence a person suffering through type 1 diabetes should take insulin daily to live. It is also called insulin dependent diabetes.

Symptoms:

Type one usually develops over a short period although beta cells destruction may begin years earlier Some symptoms are:

- Increased thirst
- Frequent urination

Some women develop gestational diabetes late in pregnancy which usually disappear after the birth of baby and 20 to 50 % chance of developing type 2 diabetes. This may effect the baby's health.

Causes

- During pregnancy
- Placenta makes hormones that cause glucose to build up in blood.
- If someone's body cant make enough insulin or stop using insulin as it should, blood sugar levels rise and get gestational diabetes.

Symptoms

- Thirstier than usual
- Extreme hunger
- Pee more than usual

Risk Factors

- Over weight
- PCOS (polycystic ovary syndrome)
- High blood pressure and cholesterol
- Miscarriage

Pre - Diabetes

- Pre - diabetes occur when our blood sugar is high than normal, but not high enough for the diagnosis of diabetes.

Solution

- We can prevent or delay diabetes if we have pre - diabetes by loosing 5 to 7 % of our weight through diet and by doing physical activity.

Diabetes Insipidus

Diabetes insipidus causes our body to make a lot of urine that is insipidus or colorless or odorless.

Symptoms

- Uncontrolled craving of water
- Irritability
- Excessive thirst
- Dehydration, high fever
- Dry skin
- Delayed growth
- Bed wetting (in children)
- Extreme hunger.
- Blurred vision
- Weight loss (unintended)
- Fatigue, irritable and mood swings

Causes

- Genetics
- Exposure to viruses.
- Environmental factors

Complication

- Nerve damage
- Kidney damage
- Eye damage Foot damage.

TYPE 2

This is a condition they insulin production is sufficient but for some reason the body cannot use blood sugar for energy efficiently. Mainly because cells become insensitive to insulin (also known as insulin resistance). This type of diabetes is also know as non - insulin depend diabetes.

Symptoms

- Fatigue
- Frequent urination
- Increased thirst and hunger
- Weight loss and blurred vision
- Slow healing of wounds and sores
- Tingling or numbness in feet
- Dark skin under armpits

Causes

- Genetic and family history
- Over weight
- Insulin resistance
- Unhealthy eating
- Insufficient physical exercise
- High stress

Gestational Diabetes

- It occurs when body cant properly balance body fluid level

Note: A hormone called anti diuretic hormone (ADH) helps control the level of fluid secretion. It is made in the hypothalamus and stored in the pituitary gland. The imbalance of this hormone causes diabetes insipidus.

II. YOGIC IMPACT ON DIABETIC DISORDER

Diabetes can be prevented not be cured. To control blood sugar the intake of high amount of medicine or insulin is not a permanent cure. But by the practice of yoga we can harmonized our body physically as well as mentally, it also regulates the correct bowl movement during our digestion which eventually prevent as well as cure diabetes.

For diabetic patient choosing the wrong diet could harm health. Excess weight may make it harder for a diabetic patient to control his / her blood sugar level. So he / she should pay attention on talking high fiber, less processed carbs, fruit and vegetables and low fat products.

2.1 Some Yogic Practices Are

- **OM CHANTING:** Om is traditionally chanted at the beginning and at the end of yoga sans. People suffering problem in the area below navel they should extend the saar of " M " while chanting of OM and those suffering from problems above the navel should extend the saar of " O ".
- **ASANA:** Asana are beneficial to cure diabetes. Due to various twists, stretches and strains in the body, the internal organs are stretched and gain more strength which increases the blood supply, oxygen to organs to do their work in a better way.
- **PRANAYAM:** Pranayam in diabetes it is important to pay more attention at blood pressure and obesity. Which can prevent by managing blood sugar level by doing breathing exercise called pranayama (prano ka aayam) or (prano ka vistar)
- **MEDITATION:** Meditation is a powerful rhythmic breathing technique. The practice of meditation is associated with reduction in stress and negative emotions and improvement in patient attitude and cure health issues like diabetes

YOGIC PRACTICE	TIME	BENIFIT
OM CHANTING	2 MINS	Om can produce positive vibrations and influence on health .
ASANAS :		
1) LEG UP THE WELL POSE	5 to 15 mins	Helps lower stress , blood pressure and blood sugar .
2) ARTHMATSYENDRA ASANA	3 mins	Stimulates abdominal organs which lower blood sugar level
3) MANDUK ASANA	3 mins	Exerts pressure on pancreas and imprives functioning of organs
4) VRIKSHASANA	2 mins	Stimulates hormonal secretion of pancreas
PRANAYAM :		
1) BHASTIKA	2-4 min	Controls insulin action
2) KAPAL BHATI	3 mins	Improves pancreas for better insulin production
3) ANULOM VILOM	5 mins	Increase circulation of oxygenated blood to brain of diabetic patient
MEDITATION	08 mins	Reduces cell damage and relaxes the body mentally as well as physically and helps cooping up with stress and high blood glucose level
TOTAL :	45 mins	

III. CONCLUSION

As diabetes is chronic and deadly disease spreading rapidly from kids to young and old. Nowadays there is no permanent treatment for diabetes there is only a temporary solution and people get use to intake of drugs for curing their diabetes. But this is not a proper treatment or cure for diabetes. Instead of drug intake, yoga is proved as a wonder medicine or treatment for diabetes. Yoga practice is both for wellness as well as for illness. It promotes health and manage diabetes with a lot of benefits.

Yoga practice such as om chanting, asanas etc. help in relaxation and are known to reduce blood glucose level and help in controlling other diseases and other conditions associated with diabetes. All our hypothesis have been proved to be true that is yogic practice maintain blood sugar level and improves abdominal and pancreatic glands.

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