

ROLE OF YOGA TO GET RID OF DIABETES MELLITUS**Dr. Yashwant Singh^{*1}, Dr. Sunayana² and Dr. Ritu Kumari³**

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Article Received on
20 Nov. 2019,

Revised on 10 Dec. 2019,
Accepted on 30 Dec. 2019,

DOI: 10.20959/wjpr20201-15879

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ABSTRACT

Diabetes represents a cluster of metabolic diseases characterized by high levels of blood glucose. India, the second most popular country of the world, has been severely affected by the global diabetes epidemic. Poor life style choices & inadequate reliefs of chronic stress are key contributors in the development & progression of diabetes. The science of *yoga* is an ancient one. *Yoga* has considered all aspects of diabetes (physical, emotional & mental). The aim of the *yogic* treatment in the management of diabetes is two folds: (a) to stimulate the pancreatic cells to produce adequate amount of insulin. (b) To reduce the insulin resistance. All these suggest that *yogic* practices have an important role in prevention of diabetes.

KEYWORDS: Diabetes mellitus, Metabolic disorder, *Yoga*.

INTRODUCTION

Diabetes mellitus, is a group of metabolic diseases in which the person has high blood glucose (blood sugar)/ hyperglycaemia either because insulin production is inadequate, or because the body's cells do not response properly to insulin, or both. The problem of diabetes has grown enormously in the last two decades. In 2014, around 387 million people had diabetes with a prevalence of 8.3%; by 2035 this will rise to 592 million. The International Diabetes Federation (IDF) currently states that the top 5 countries with highest numbers of diabetic patients are China, India, United States, Russia and Brazil. The number of people with type2 DM is

increasing in every country. Primary prevention of Diabetes by life style modification is a feasible solution to arrest the rising epidemic of the disease. Government and non-government organizations should create awareness about the disease among public and also teach them way to self-care and benefits of lifestyle modification.

TYPES

1. Type1 Diabetes Mellitus(T1DM) –Insulin dependent DM
2. Type2 Diabetes Mellitus (T2DM) – Non-Insulin Dependent (NIDDM)
3. Gestational Diabetes

RISK FACTORS

Diabetes may result due to a lot of genetic-environmental interactions. The growing incidence of diabetes is mainly attributable due to the increasing rates of urbanization, migration from rural to urban areas and adoption of sedentary life style and unhealthy diet habits. Risk factors for diabetes are as follows:

- Obesity
- Lack of physical activity
- High fat cholesterol diet
- Stress
- Smoking
- Sedentary life style

COMMON SYMPTOMS OF D.M.

- Frequent urination (Polyurea)
- Extreme hunger (Polyphagia)
- Excessive thirst (Polydipsia)
- Unexplained weight loss
- Tingling or numbness in the hands or feet
- Wounds that are slow to heal
- Fatigue

DIABETES IN AYURVEDA

In *Ayurveda*, diabetes is corelated with *Prameha* and *Madhumeha*. In *Charak Samhita*, *Nidanasthana* 4th and *Chikitsasthana* 6th chapter, the etiological factors, pathogenesis, symptoms, complications and treatment of *Prameha* are described in detail. In *Susruta*

Samhita, Nidanasthana 6th chapter gives detail about *Prameha*. He used 'Ksaudrameha' synonym to *Madhumeha* in this chapter.

- *Prameha* is a disease caused by vitiation of *kapha* and *meda*.
- Total twenty types of *prameha* have been described in three broad groups i.e. *Vataj, Pittaj* and *Kaphaj pramehas*.
- *Madhumeha* is considered as a subtype of *Vataj prameha*.
- Specific lakshana of *madhumeha* have been described as "*Mutra abhidhavanti pipalishcha*".
- Diabetes is also considered as a *Maharoga* (Major disease) because it affects most of the systems of the body.
- The term 'Diabetes' means the condition in which a large volume of urine is passed and 'Mellitus' means the condition in which urine is sweet in taste. Thus, Diabetes Mellitus means a condition in which sweet urine passes in large volume.
- According to *Aacharya Charak*, *madhumeha* is a disease in which patient passes the urine similar with *Madhu* having *Kashaya* and *Madhura* taste, *Pandu* colour and *Ruksha guna*. And *aacharya Sushruta* used the term '*Ksaudrameha*' which is a variety of *Madhu*.

YOGIC MANAGEMENT

The word yoga is derived from the Sanskrit word '*Yuj*' meaning union of the body, breath and mind. Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional and spiritual dimensions of the individual.

The aim of the yogic treatment in the management of diabetes is two folds -

- (a) To stimulate the pancreatic cells to produce adequate amount of insulin.
- (b) To reduce the insulin resistance.

YOGA THERAPY FOR DIABETES

Exercise: - It is important to use up the excess blood sugar by regular exercise. Walk whenever possible and slipping or swimming are good adjective to *yoga* therapy. Physical activity refers to a behaviour, specifically a body movement that occurs from skeletal muscle contraction and results in increased energy expenditure above resting metabolic rate. Regular physical activity can retard the progression of pathogenesis of diabetes from one stage to another.

Diet

- a) Regular small meal with complete carbohydrate.

- b) Avoid refined foodstuff and junk food.
- c) Take lots of green vegetables, Salads, bitter gourd and neem.
- d) Maintain good hydration

SURYANAMASKAR

Performance of three to six rounds of Suryanamskar helps to utilize the excess glucose and also to help speed up metabolism and weightless.

AASANAS

➤ **Twisting poses**

Standing: - Trikonasana, ardhakati chakrasana.

Sitting: - Vakrasana, ardha matsyendrasana, bharadwajasana, shashangasana.

Reclining: - Jatarapariivartansana.

➤ **Abdominal pressure poses**

Sitting:- Utkatasana, janushirasasana, pashchimottanasana, navasana, yogamudrasana, stambhan asana and mayurasana.

Reclining:- Pavanamuktasana, dhanurasana, bhujangasana, shalabhasana, noukasana.

PRANAYAMAS

➤ Vibhaga and pranava Pranayamas with special emphasis on Anam Pranayamas and AAA sound.

➤ Bhastrika Pranayamas to utilize the blood glucose.

➤ Savitri Pranayamas, Chandra anuloma Pranayamas, nadi shuddhi Pranayamas for stress reduction

Kriyas:- Kunjal, nauli, kapalabhati, agnisara, shankha prakshalana.

Mudras and Bandhas:- Viparita karani and mahamudra, Uddiyana, moola and jalandhara bandhas.

Relaxation:- Shavasana, makarasana and kayakriya.

Dharana:- Mandala dharana on all chakras with emphasis on manipura chakra and the sound of RAM (RUNG).

BENEFITS OF YOGA IN DIABETIC PATIENTS

➤ **Rejuvenation of cells of the pancreas:-** Yoga postures that help relax (asanas) stretch the pancreas that can stimulate Production of insulin-producing beta cells.

- **Exercises for the muscles:-** As with other types of exercise, yoga enhances glucose uptake by muscle cells, which in turn, helps to reduce blood sugar levels, improve blood circulation and reduce the risk of cardiovascular disease.
- **Promote weight loss:-** Yoga helps to reduce weight and improve weight control, which is important for protection against diseases such as type 2 diabetes, cancer and heart disease.
- **Improve mental attitude:-** Regular yoga practice can help focus the mind and create the right psychological approach to dealing with diabetes.
- **Reduce stress:** Stress is an important cause in increasing glycogens in blood stream. Regular practices of Aasana reduces adrenaline, noradrenalin and cortisol in blood, which are termed as stress hormones. Thus, effectively reduces stress resulting in reducing glucagon and possibly improving insulin action.

CONCLUSION

Yoga is an ancient discipline designed to bring balance and health to the physical, mental emotional and spiritual dimensions of the individual. A comprehensive yoga therapy has the potential to enhance the beneficial effect of standard medical management of DM and can be used in an effective complementary integrative therapy. The improvement in various biochemical indices and stress reduction by practicing yoga can enable a person with a better healthy living.

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