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# SCOPE OF HOMOEOPATHY IN TYPE 2 DIABETES MELLITUS

Patranu Parui<sup>1</sup>, Neelavna Dey<sup>2</sup>

<sup>1</sup>Junior Research Fellow (H), Regional Research Institute for Homoeopathy, Siliguri.

<sup>2</sup>PGT, Dept. of Practice of Medicine, The Calcutta Homoeopathic Medical College & hospital, Kolkata, West Bengal.

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## **Abstract**

With increase of obesity, sedentary lifestyle, unhealthy eating habit, type 2 diabetes mellitus, as well as other non-communicable diseases have become the source of modern-day epidemic. Patient present with diabetes in hospitals are just the tip of icebergs, with much more undiagnosed patients and pre diabetic patients in society. These causes significant burden inavailable healthcare facilities, which prompts the necessity of an alternative treatment. Homoeopathy is a holistic mode of treatment used in diabetes for centuries and this could bridge the gap between increasing number of patients of this modern-day epidemic and limited resources of conventional treatment.

**Keywords:** Non-Communicable Disease, Lifestyle Disorder, Type 2 Diabetes Mellitus, Insulin Resistance, Homoeopathic Approach, Miasmatic Background, Homoeopathic Medicines.

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## \*Corresponding Author

Dr. Patranu Parui

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# Introduction

Non communicable diseases (NCD) are the cause of modern-day epidemics. In order to prevent and control major non communicable diseases Govt. of India has launched the National Program for prevention and Control of Cancer, Diabetes, Cardiovascular Disease, and Stroke (NPCDCS) in 2010. From 2023 NPCDCS renamed into National Program for prevention and Control of Non-Communicable Disease (NP-NCD). This program focuses on health promotion through behavioral and lifestyle changes, building Capacity including human resources development, early diagnosis and management of this disease with integration with primary health care system [1]

Now, an essential component of non-communicable diseases is type 2 diabetes mellitus (T2DM). It is a condition of hyperglycemia due to relative or absolute deficiency of insulin. In this article we will focus on disease pathology of diabetes mellitus, its clinical presentations, and corelate that from homoeopathic perspective.

## **Epidemiology**

According to the data of International Diabetes Federation 8.8% of world population has diabetes. Among these most of all type 2 DM [2]. In 2013, International Diabetes Federation estimated that almost 382 million people, age between 20-70 were suffering from type 2 DM and 80% of them were from lower economy class [3]. Type 2 diabetes in adults who belong to a low family income have twotime higher chance in India [4]. It was found that T2DM more in population with irregular food habit, less physical activity. Men are more prone to this type than women [3]. According the total number of diabetic patients, India is the second largest country worldwide. Around 74 million people diagnosed with diabetes in 2021 and the estimated data shows that the number can reach up to 124 million by 2045. A recent survey conducted by Health Ministry shows that 15.3% Indian has pre-diabete [5].

# Diagnostic criteria [6]

- Random Blood Glucose (RBS)/ 2 hrs after 75 gms glucose load ≥ 11.1 mmol/L or 200 mg/dl
- Fasting Blood Glucose (FBS) ≥ 7.0 mmol/L or 126 mg/dl
- 3. HbA1C  $\geq$  48 mmol/mol or  $\geq$  6.5

In asymptomatic patient 2 diagnostic tests required to confirm diagnosis.

Pre-diabetes
 Impaired Fasting Glucose WHO- 6.1-7.0 mmol/L or 110-126mg/dl
 ADA- 5.6 -7.0 mmol/L or 100-126mg/dl
 Post prandial blood sugar (PPBS)

7.8-11.1 mmol/L or 140-200mg/dl

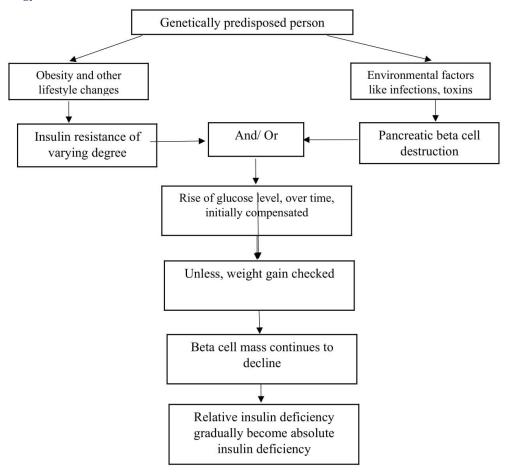
HbA1C-

NICE- 42-47 mmol/L or 6-6.5% ADA- 39-47 mmol/L or 5.7- 6.5%

#### **Risk Factors**

- 1. Genetic predisposition
- 2. Environmental factors like infections, toxins, Vit- D deficiency [6].
- 3. Lifestyle factors- obesity, alcoholism, smoking, insulin resistance
- 4. Age- Increasing age
- 5. Ethnicity- the threshold of weight gain at which T2DM occur is lower in south-east Asians [6].

# **Pathophysiology**



## **Clinical Presentation**

Clinical presentation of diabetes varies widely. Classical presentation of polyuria, polydipsia, polyphagia is less common in T2DM, rather most cases are asymptomatic or presents with picture of complications from hyperglycemia. Central obesity, repeated infections, ulcer taking long times to heal, skin eruptions etc. can be the presenting features. In case of female, history of delivering big baby, repeated urethritis could be due to hyperglycemia. In many cases family history of diabetes may also be found.

## **Complication**

## **Acute Complications**

1. Hypoglycemia

- Hyperglycemic hyperosmolar state- Much common in T2DM
- 3. Diabetic keto acidosis- less common in T2DM
- 4. Lactic Acidosis- Less common

## **Chronic Complication:**

- 1. Cardiovascular system
  - a. Atherosclerosis
  - b. Stable Angina
  - c. Painless myocardial infraction.
  - d. Intermittent claudication of pain
  - e. Diabetic gangrene
- 2. Eyes
  - a. Simple retinopathy/ Background retinopathy- Micro aneurysm

Increased capillary permeability

Capillary closure and dilatation

Retinal edema and hemorrhage

AV shunt

Venous dilatation

Hemorrhage- ophthalmoscopic features-

Dott's and blot's spot

 $Hard\ and\ soft\ exudate-\ cottonwool\ spot$ 

Cotton wool spot+ flame hemorrhage- Roth spot

# b. Proliferative retinopathy

Neovascularization

Retinitis proliferance

Pre retinal hemorrhage

Atrial hemorrhage

Vitreous hemorrhage

Retinal detachment

c. Non- retinopathic complication-

Recurrent chalazion, styes

Pseudo Argyll-Robertson pupil

Senile cataract

Frequent change of refraction

Glaucoma

## 3. Diabetic Neuropathy

## a. Peripheral neuropathy

Distal, symmetrical, sensory-motor mixed polyneuropathy

Acute mononeuropathy (foot drop, wrist drop)

Radiculopathy

 $A symmetrical\ mononeuritis\ multiplex$ 

## b. Autonomic neuropathy

Hypoglycemic unawareness

Gustatory sweating

Palpitation

Postural hypotension

Impotency

Charcot joint

#### 4. Gastro-Intestinal System

- a. Recurrent acalculous cholecystitis
- b. Nocturnal diarrhea
- c. Chronic gastritis
- d. Constipation

# 5. Diabetic Nephropathy

- a. Microalbuminuria
- Nodular glomerulosclerosis- Kimmelstielwilson lesion
- c. Diffused glomerulosclerosis
- d. Recurrent UTI
- e. Chronic renal failure

# 6. Skin complications

- a. Recurrent Boil, carbuncle, abscess etc.
- b. Delayed wound healing
- c. Diabetic foot
- d. Candidiasis
- e. Vulval moniliasis

## 7. Obstetric Complication

- a. Fetal malformation- renal agenesis, caudal regression syndrome, cardiac malformation
- b. Big baby
- c. Increased risk of birth trauma of the fetus
- d. Increased risk of surgical intervention during labor

#### **Management**

Lifestyle modifications like diet, exercises, avoiding risk factors are the most important factor to prevent and control diabetes. The 5 tools that often use to prevent and for management diabetes are- education, exercise or activity, diet, oral medication and insulin [7].

Dietary Approach-The recommended diet should include 50%-60% carbohydrates, 25%-45% fibers, up to 30% fat, 1 gm/kg/day protein, half plate vegetables, oil not more than 3 teaspoon/day, less than 6 gm/day sodium.6 Different variation of foods is recommended. The recommended calorie intake for obese and non-obese diabetic persons should be 20 kcal/kg and 22-25 kcal/kg respectively. Alcohol, smoking and sweetened food should be avoided [8].

Exercise-Physical exercise is must for a DM patient and activity should be practice every day for 1 hour. Three recommended activities that patient can practice are aerobics, flexibility workout and muscle strengthening exercises i.e., treadmill walking, stationary jogging and cycling etc.8 Weekly minimum 2.5 hours of moderate intensity exercise or 75 minutes of vigorous intensity exercise associated with improvement [6].

## Homoeopathic Approach

Holistic approach of homoeopathy holds a very special place in prevention and management of diabetes. Homoeopathic medicines when based on totality of symptoms of the patient can improve hyperglycemic status of patient. In case of patient with impaired glucose tolerance, homoeopathic treatment can delay, even prevent diabetes. In case of patients with positive family history, constitutional homoeopathic treatment is very much beneficial to prevent diabetes from developing.

## Miasmatic Background

If we go through the pathogenesis, T2DM is mainly caused by insulin resistance, rather than deficiency of insulin. So, in co-ordination become the sole pathology here, indicating Sycoticmiasm. Again, in cases where there is destruction of pancreatic beta cells, syphilis becomes predominant miasm. However, eating junk food, sedentary lifestyle which causes obesity can be a risk factor for T2DM, which is attributed to psora in background. When psychological factors like continuous stressful life become main responsible factor, psora become predominant miasm. Master Hahnemann in his 'Chronic Disease' classified diabetes as Psoricmanifestation [9], so if we go

through the above discussion, it becomes evident that psora is the basic miasm upon which other miasms act and present their features.

# Repertorial Approach Kent's Repertory [10]

Chapter- Urine

Sugar

Chapter- bladder

Frequent

Urging

# **Boericke's Repertory [11]**

Chapter- Urinary System

Diabetes: sugar

Urinary flow: constant desire **Synthesis Repertory [12]** 

Chapter- generals-Diabetes mellitus

Kimmelstiel-wilson syndrome

Laboratory findings, blood, glucose, increased

Chapter- Urine

Sugar

# **Homoeopathic Therapeutics [13-16]**

In homoeopathic literatures there are two types of medicines which act beneficially in diabetes mellitus. First kind are small medicines which are not well proved in other systems but shows marked improvement in decreasing blood glucose level. And second kinds are polychrest remedies which helps to control diabetes in long run, prevents diabetes in patients with impaired tolerance and prevents and complications. First kind of short acting medicines are-Abroma Augusta, Cephalandra Indica, Gymnema Sylvestre, Syzygium Jambolanum, MonordicaCharantia, Longa, Absinthium, Chionanthus Virginica, Pterocarpus Marsupium, Uranium Nitricum, Alloxan, Tinospora Cordifolia, Papaver Somniferum.etc.

Second kinds are polychrest remedies like *Lycopodium*. *Phosphoric acid, Fluoric acid, Medorrhinum*, or any other remedies according to totality of symptom of the patient.

## **Discussion and Conclusion**

Diabetes is a metabolic disorder characterised by hyperglycaemia. Sedentary lifestyle, unhealthy eating habit, socio-economic shifting of modern society, constant stressful life all contributes to the rapid increase in the number of diabetic patients in today's society. The number of patients seeking medical attention for diabetes are just the tip of iceberg, in society total number of patients are much greater. One of the cornerstones for prevention and control of diabetes is lifestyle modification through diet, exercise, avoid smoking and alcohol etc. Along with these, medicinal approach is also needed. These increased number of patients causes huge burden in already crumbling health care system of India, especially in rural areas. These necessitates an alternative approach. Homoeopathy being a holistic mode of treatment can

easily fit into this scenario. In pre diabetic patients if homoeopathy can prevent the development of diabetes, then this only can reduce the burden of disease in society. From homoeopathic literatures we find various medicines for diabetes. Homoeopathic medicines have shown wonder in treatment of diabetes for centuries with very minimum side effects. So, homoeopathy can definitely meet the increasing demand of health care attention from diabetic patients.

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