DEPICTING PRAMEHA WITH DIABETES AND PREDIABETES

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ABSTRACT

Diabetes is fastest growing metabolic disorder. It is also the biggest health challenge which is increasing in number day by day. The latest data states that around 463 million people in world are suffering from Diabetes. Diabetes if undiagnosed, Untreated leads to multiple complications and even premature death. Main factor causing increase in number of patients is lack of awareness and its progress which can lead to irreversible changes in body. Diabetes can be managed and its ongoing complications can be avoided if detected early. In Diabetes carbohydrate, fat and protein metabolism are hampered. According to National Urban diabetes survey the estimated prevalence of Prediabetes is 14 % in India. Prediabetes is condition where blood glucose level is higher than normal but not high to be labeled as Diabetes. This is many times a reversible condition from where the further progress of the disease can be arrested and normal metabolism can be achieved. Before the onset of Diabetes type 2 most of the people always in stage Prediabetes condition where Blood sugar levels are higher than normal but not yet that high to be diagnosed as Diabetes. This condition is also referred as Impaired glucose tolerance (IGT) or Impaired fasting Glucose (IFG).

Ayurved has mentioned Prameha of twenty types. All the brihatrayee have mentioned the treatment for the Prameha. Its clear from the statement that Prameha is reversible and can be cured. Further Madhumeha, a Vataj Prameha has been clearly said to be Asadhya. Our Samhitakars knew the stage of Prediabetes which has been recently declared by World health organization.

KEYWORDS: Prameha, Poorvarupa, Prediabetes

INTRODUCTION

Today, India has about 50 million diabetes patients and this number is expected to increase to 79.4 million by the year 2030 Diabetes is a metabolic disorder of multiple etiology characterized by chronic hyperglycemia with disturbance of carbohydrate, fat, and protein metabolism. Improper lifestyle such as reduced physical activity and poor dietary practices continue to increase the affected number of people. Early detection of Prediabetes stages and awareness of treatment can give better control on the increasing number of patients and also lower the mortality and morbidity. Ayurveda medicines have good compliance to treatment of Prediabetes and alleviate its further arising complications
A Clinical stage of Impaired fasting glucose and Impaired glucose tolerance has been introduced to classify individuals who have fasting glucose values above normal range, but below those diagnostic of diabetes.From the above WHO classification it's clear that Pre-diabetic stage is different from Diabetes.

AIMS & OBJECTIVES:

To review the Prediabetic Stage from Ayurvedic Aspects and effort to diagnose and elaborate Premeha. To create the awareness regarding the reversible of blood sugar levels in Pre diabetic stage. Early diagnosed, early treated with Ayurved medicines desists the further complications.

DISCUSSION:

Ancient Samhitas clearly states that a person who follows healthy lifestyle with healthy dietary habits remains disease free.[1].
A person, who has good appetite followed by good digestion, has good evacuation of stool, urine, flatus, has proper good sleep and awakens normally has good immunity balance with good state of mind and body are termed healthy. [2]
Ayurved has a concept of Viruddha ahara described elaborately. It can be said as incompatible diet.[3] Recent time's disease profile is changing to life style disorders/disease. Reduced Physical activities, over consumption of fast food, alcohol are main cause of developing life style diseases

Meaning of word "Meha" is to flow. It is Sanskrit word which means micturate. Mehanam in Sanskrit means urination.[4] Prefix of "Pra" means in excess can be refered to as both quantity and frequency. Prabhuta mutrata and Avila Mutrata. Acharya Vagbhata describes Prameha as frequent and copious urine with turbidity "Prabhutavila mutrata". Acharya Sushrut has described as characteristic type of urine in Prameha which is cloudy or turbid. Doshas Dushyas play major role in imparting various colors to urine. Description of clinical signs and symptoms in detail tell us that ancient vaidyas had clear understanding of sugar presence in urine. Atharveda also names Prameha as "Ashrava". Charak has mentioned "It is one of these diseases which started by the time of historical disruption of Yojnas organized by Daksha prajapati in ancient time. This is related to the eating of "Havisha" a special type of food, made of sugar, milk rice used of offering in Yajnas".

Samhitakars have mentioned 20 types of Prameha. Kaphaj Prameha 10 types, Pittaj prameha 6 types and Vataj Prameha 4 types. [5]Etiology and pathology of all are different. It's obvious that the treatment will also be different. Prognosis of each type also varies accordingly. Kaphaj Prameha being Sukh sadhya whereas Madhumeha , type of Vataj Prameha asadhya. Description of Prameha types can be associated with modern termonolgy, for example Udaka Meha as to be diabetes insipidus, sandrameha as chyluria, sukra meha as spermatorrhoea, sikata meha as lithuria, kalameha raktameha and manjistha meha as haematuria Haridra meha –biluria etc., Ikshumeha sheeta meha and madhumeha have been equated with elementary glycosuria renal glycosuria and diabetes.

While discussing the causes of Prameha Acharya Charak has mentioned the kapha karak hetus. [6,7] Eating of fatty food, sleeping in day time, too much consumption of madhur rasa food like rice, jaggery, eating lot of curd and particularly having a sedentary lifestyle and not doing any kind of exercise are the main causes of Prameha. In Charak Samhita Nidan sthan 4/5 elaborately mentions the food items. Vitiated doshas causes pathology in Rasa, Rakta, Maumsa, Meda, Majja dhatu and along with this dhatus Vasaa, Udak and Oja also get vitiated. [8]

This is the onset of disease.

Patient exhibit following signs and symptoms:[9]

Bahu mootrata,

Naktamootrata,

Mootra avilta,

Atishudha ,

Atisweda pravruti,

Mukhmadhuraya,

Trushna,

Hastpadtal daha,

Klam/Fatigue,

Agnimandya.

With a worldwide population of 387 million (8.3% of world population) predicted to reach 592 million by 2035. Diabetes mellitus is a fastest-growing public health challenge of the 21st century. It's the burning issue for world. Diabetes is also labeled as Silent killer. Due to Morbidity, mortality and progressive nature of the disease is gaining attention by scientific community. Current scenario the medical fraternity is unable to arrest the progression of disease and its arising complications. Recent studies have categorized Diabetes under Lifestyle disorders. Thereby realistic way would be total prevention of causative factors. Many awareness programs educating the warning signs developed during the onset of disease. This would help patients to get diagnosed as early as possible. Screening at early stage is very essential. And Ayurveda can help it to do so. Profound description of Purvarupa in Prameha. Purvarupa are indicative, explanatory and subtle features pin pointing the ongoing disease which is going to cause irreversible pathological changes in near future. Recently this has been the point of interest of researchers to identify the high risk suspected patients and arrest the ongoing pathogenesis. Many studies related to Diabetes have converged to lifestyle behavior and has been identified that food habits are as critical points to be accessed. Acharya Charak has already stated Virudhara can lead to Madhumeha.[10] They had knowledge of the ill effects of poor dietary habits and its consequences. Concept of Ama and Agnimandya are given elaborately. Be it related to Dhatu or Jatharagni all signs and symptoms are very well dictated. Type 2 diabetes precipitates through a complex multi factorial process incorporating multiple lifestyle and food-related factors. Prediabetes is an intermediate state of hyperglycemia with blood sugar levels above normal but low to be labeled as diabetic.[11] The World Health Organization (WHO) has defined prediabetes as a state of intermediate hyperglycemia using two specific parameters, impaired fasting glucose (IFG) defined as fasting plasma glucose (FPG) of 6.1-6.9 mmol/L (110 to 125 mg/dL) and impaired glucose tolerance (IGT) defined as 2 h plasma glucose of 7.8-11.0 mmol/L (140-200 mg/dL) after ingestion of 75 g of oral glucose load or a combination of the two based on a 2 h oral glucose tolerance test (OGTT)[12]. The American Diabetes Association (ADA), on the other hand has the same cut-off value for IGT (140-200 mg/dL) but has a lower cut-off value for IFG (100-125 mg/dL) and has additional hemoglobin A1c (HbA1c) based criteria of a level of 5.7% to 6.4% for the definition of prediabetes[13] Its believed that HbA1C represents the average 90 days blood sugar levels but its not a true, it is not reliable tool[14,15] Rather Impaired Glucose Tolerance and Impaired Fasting Glucose are indicative of ongoing pathological changes in body. Presence of both these signifies disorder in Carbohydrate, Fat and protein metabolism. As discussed earlier life style plays a important role. Prediabetes patients are seen having BMI more than 25.It has been observed that Life style interventions are safe and have positive effect in control of Diabetes still there is increasing need of Pharmacotherapy which will safe and donot have side effects and same time reverse the Prediabetes stage.

CONCLUSION:

Diagnostic criteria for Prediabetes may not be uniform but complications evolving from it cannot be ignored various studies have shown the association of Prediabetes with complications of Diabetes like nephropathy, neuropathy retinopathy and high risk of cardiovascular diseases. At present modern medicine has no concrete treatment or clinical guidelines for the treatment of Prediabetes. Life style intervention, Obesity management is only treatment. Whereas Ayurved has clearly mentioned the Purvarupa in Prameha. Also it is stated that if treated early 10 types of prameha are Sadhya. A definite line of treatment is advised for this stage. Systematic evaluation of prediabetes ie Purvarupas of prameha is very essential. Its correlation with Purvarupa needs to be studied in detail. Along with lifestyle intervention Ayurved pharmacotherapy can not only stop the progression of Prameha but also be reversed bringing the carbohydrate, Fats and Protein metabolism to normal

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