|| ISSN(online): 2589-8698 || ISSN(print): 2589-868X ||
International Journal of Medical and Biomedical Studies
Available Online at www.ijmbs.info
NLM (National Library of Medicine ID: 101738825)
Index Copernicus Value 2020: 79.44
Original Research Article
Volume 6, Issue 01; January: 2022; Page No. 149-151

STUDY OF CLINICAL PRESENTATION OFNEWLY DIAGNOSED DIABETES MELLITUS IN INDIA

Dr Chetan Anantrai Patel

MD Medicine Associate Professor, Pacific Medical College & Hospital, Udaipur (Rajasthan)

Article Info: Received 02 December 2021; Accepted 18 January 2022
DOI: https://doi.org/10.32553/ijmbs.v6i1.2541
Corresponding author: Dr Chetan Anantrai Patel
Conflict of interest: No conflict of interest.

Abstract

Introduction: Diabetes mellitus- fast gaining the status of a potential epidemic in India with more than 62 million diabetic individuals currently diagnosed with the disease.

Methodology: The study was conducted at our Department for one year. 100 patients were included in present study. Informed written consent was obtained from all patients and prior consent was obtained from the ethics committee. Sample size was estimated from experts. Cases of diabetes mellitus have been thoroughly investigated by careful history, clinical examinationand blood investigation reports.

Results: In the current study, the mean age of patients was 42.55 years from 18 to 68 years of age. The majority of patients in the current study were found to be in the age group of 41 – 50 years (46%). The number of female and male patients was 38 and 62 respectively. Frequent urination was most common clinical presentation seen in 78% patients , followed by extreme hunger 73 % ,increased thirst 65 % ,fatigue in 61%,irritability 58 % and blur vision 52 % patients were observed.

Conclusion: In conclusion, diabeties mellitus is found to be one of major health burden with majority cases are asymptomatic. Frequent urination is the most common clinical presentation seen in patients, followed by extreme hunger, increased thirst, fatigue, irritability and blur vision etc.

Introduction

Diabetes is rapidly develpoing a potential epidemic in India with over 62 million diabetics who are currently diagnosed with the disease. . This requires a thorough understanding of how new patients present in the clinic in a situation where vigorous diagnosis is often unavailable.[1,2] Major advances in the diagnosis, treatment and care of type 2 diabetes seen in high-income countries are currently inaccessible in many countries ofasia. Diagnosis of type 2 diabetes is based on blood sugar tests using the Oral Glucose Tolerance Test (OGTT), Fasting Plasma Glucose (FPG) or GlycatedHemoglobin (HbA1C). The criteria of the diagnosis were described by the World Health Organization (WHO) and the American Diabetes Association (ADA) 3

Evidence shows that most people with diabetes in India arrive late, at the same time having irreversible problems[3] However, our current knowledge of the clinical features of newly diabetic patients presenting in primary care facilities is insufficient. One of the few studies that described the clinical presentation of newly diagnosed diabetic patients showed that many patients had chronic symptoms of diabetes and severe hyperglycemia1.[4,5]

The purpose of this study was to describe the clinical presentation of newly diagnosed diabetic patients at a rural district hospital in India.

Methodology:

The study was conducted at our Department for one year. 100 patients were included in present study.

Informed written consent was obtained from all patients and prior consent was obtained from the ethics committee. Sample size was estimated from expert.

Cases of diabetes mellitus have been thoroughly investigated by clinical examination, careful history and blood investigation reports.

A total of 100 patients were taken for study.

Inclusion criteria:

The following patients were included in the study:

• All patients coming to OPD having any diabetes related issue.

• The patient's age should be between 15 and 70 years.

Exclusion criteria:

• Patients with other medcialillness.

According to Proforma, detailed history based on name, age, gender, occupation, residential address, major complaints, medical history, features of diabetes mellitus.

Results:

A total of 100 patients were included in the study and their clinical profile and evaluation were noted.

In the current study, the mean age of patients was 42.55 years from 18 to 68 years of age. The vast majority of patients in the current study were found to be in the age group of 41 – 50 years (46%).

Table 1: Age wise distribution of patients

Age range	Number of patients	Percentage
15 - 30	18	18
31-40	22	22
41-50	46	46
>60	14	14

The number of female and male patients was 38 and 62 respectively.

Table 2: Gender wise distribution of patients

Gender	Number of patients	Percentage
Male	62	62
Female	38	38

Table 3: BM index wise patient distribution

BM index	Number of patients	Percentage
< 25	16	16
25 -30	60	60
> 30	24	24

Table 4: Clinical features wise patient distribution

Clinical features	Number of patients	Percentage
Frequent urination	78	78
Increased thirst	65	65
Extreme hunger	73	73
Blur vision	52	52
Irritability	58	58
Fatigue	61	61

Frequent urination was most common clinical presentation seen in 78% patients , followed by extreme hunger 73 % ,increased thirst 65 % ,fatigue in 61%, irritability 58 % and blur vision 52 % patients were observed.

Discussion:

In the current study, the mean age of patients was 42.55 years from 18 to 68 years of age. The vast majority of patients in the current study were found to be in the age group of 41 – 50 years (46%). The number of female and male patients were 38 and 62 respectively. Frequent urination was most common clinical presentation seen in 78% patients , followed by extreme hunger 73 % ,increased thirst 65 % ,fatigue in 61%, irritability 58 % and blur vision 52 % patients were observed.

Diabetes aetiology in India has many characteristics and includes genetic factors associated with environmental impact such as obesity related to rising living standards, continuous urban migration, and lifestyle changes. Yet despite the incidence of diabetes in India, no nationwide and relatively few studies have been conducted on the prevalence of diabetes and its complications. The research that has been done and is prone to possible errors as the diversity of the Indian people in terms of culture, race, socio-economic conditions, means that the increase in regional results may give negative national estimates.6,7

Obesity is one of the major risk factors for diabetes, yet there has been little research focusing on this risk factor throughout India.12 Despite low rates of obesity , India has a high rate of diabetes compared to western countries suggesting that diabetes may be present. at a much lower body mass index (BMI) for Indians compared to Europeans.12,13 Therefore, thin Indian adults with lower BMI may be at the same risk as those who are obese.6 In

addition, Indians are genetically predisposed to diabetes, that diabetes should be carefully monitored regardless of the age of the patient, within India.8

In order to reduce the burden of diabetes in India, appropriate governmental intervention and concerted efforts from all health care workers are required.2 Physicians may be directed to facilitate early implementation of screening and diagnosis programs, diabetes prevention, and self-management counseling and the management of diabetes treatment in accordance with appropriate local guidelines, forms the basis for managing the predicted diabetes epidemic. Early diagnosis and diagnosis of prediabetes (especially for pregnant women, 26 children and adults with a BMI ≥25) may produce positive public health outcomes.27 Continuing regular physician education programs may provide the necessary "inertia" to begin adherence in the system and may be a major step towards achieving glycemic target levels and preventing disease complications. Aggressive clinical measures regarding early insulin initiation combined with appropriate doses of oral hypoglycemic agents and appropriate lifestyle modification can also have positive long-term effects on disease control.3,7

Conclusion:

In conclusion, diabeties mellitus is to be found one of major health burden with majority cases are asymptomatic. Frequent urination is the most common clinical presentation seen in patients, followed by extreme hunger, increased thirst, fatigue, irritability , and blur vision etc.

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