Prevalence of Glycemic Status, Obesity & Waist Circumference in Punjabi Type 2 Diabetics

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Abstract

Aim-To observe the prevalence of glycemic status, obesity and waist circumference in Punjabi male Type 2 Diabetics. **Materials** & **Methods-**Two hundred forty type 2 diabetics Punjabi males with age ranging from 30 to 70 years volunteered to participate in this study as subjects. The glycemic status (fasting blood sugar & glycated haemoglobin, HbA1c), obesity (BMI) & waist circumference (WC) were recorded with standard procedures. WHO criteria determined BMI and WC categories. The statistical analysis was done by using SPSS version 16.0 and the level of significance was <.05. **Results-**The mean age, height, weight, fasting blood sugar (FBS), glycated haemoglobin (HbA1c), body mass index (BMI) and waist circumference (WC) of studied type 2 diabetics were 50.75±11.4 years, 166.69±7.6cm, 75.88±11.8Kg, 146.37±28.6 (mg/dl), 7.34±1.2 (%), 27.29±3.6 and 102.82±8.0 (cm) respectively. Based on fasting blood sugar, 10.4% studied type 2 diabetics had normoglycemia (FBS≤120mg/dl), 89.6% were hyperglycemia (FBS≥120mg/dl). Based on glycated haemoglobin (HbA1c), 25.4% studied type 2 diabetics had good control of blood sugar (HbA1c≤6.5), 30.4% were average control (HbA1c 6.5-7.5), 26.7% were poor control (HbA1c 7.5-8.5) and 17.5% were morbid control. Based on BMI, 26.7%, study type 2 diabetics were normal, 55% wer overweight, 14.5% was obese Class I, 3% were Obese Class II and 1.8% were Obese Class III. Based on waist circumference of the sample population of type 2 diabetics 10.9% were obese, 24.1% had increased risk for metabolic syndrome [action level I (WC ≥ 94cm)] and 61.7% had substantially increased risk [action level II (WC ≥102cm)]. **Conclusion-**it was concluded that prevalence of poor glycemic control and obesity exist but obesity and overweight were more prevalent in Punjabi Type 2 diabetics.

Keywords: FBS, HbA1c, BMI.

Introduction

Diabetes mellitus is a chronic metabolic condition characterised by persistent hyperglycaemia with resultant morbidity and mortality related primarily to its associated complications. Despite the association of obesity with poorer glycemic control and cardiovascular morbidity and mortality less attention has been given to its management relative to the attainment of glycemic targets. The diabetes mellitus is becoming more and more prevalent in Indian society. In India, it is estimated that approximately 2% of the population, 15 million people have diabetes *(Swami, 1984)*. The number of cases is said to be rising by 5%-6% each year and an estimated 300,000 people die from diabetes and its related complications *(Herman et al., 1984)*. There are about 3.5 crore diabetics in India and the figure will rise to about 5.2 crores by 2025. Every 5th patient visiting a consulting physician is a diabetic, and, every 7th patient visiting a family physician is a diabetic. Keeping in view the alarming increase in the incidence and prevalence of diabetics in India, WHO has declared