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Introduction

Prediabetes is an asymptomatic condition preceding diabetes including both Impaired Glucose Tolerance (IGT) and Impaired Fasting Glucose (IFG) and refers to blood glucose level higher than normal but not reaching the level at which diabetes is diagnosed [1,2]. IFG is defined as fasting plasma glucose (FPG) values of 100 to 125 mg/dl. (Normal fasting glucose level <100 mg/dl) IGT is defined as 2 hours postprandial plasma glucose (PPG) of 140 to 199 mg/dl. (Normal 2 hours postprandial glucose level <140 mg/dl)

The progression from normal glucose tolerance to type 2 diabetes is characterized by dual defects; insulin resistance that means decreased tissue sensitivity to insulin secretory defects by pancreatic Beta cell dysfunction [3]. The first glucose abnormality that is detected is increased MACE "Major Adverse Cardiac Events" in percutaneous coronary intervention (PCI) and coronary artery bypass grafting (CABG). Very recently fasting blood glucose was found to be an independent risk factor for poor long term outcome and was associated with enhanced platelet reactivity and low response to clopidogrel in

(50% stenosis) according to ACC/AHA guidelines. All patients were subjected to detailed medical history taking, clinical examination and performed ECG, laboratory analyses including fasting blood sugar, 2 hours post prandial blood sugar and serum creatinine and coronary angiography was done for them using the standard techniques. All patients gave informed consent and that the protocol was approved by the institutional review committee.

Inclusion criteria

- (1)Patients referred for coronary angiography either a er acute ischemic event or suspected to have chronic ischemic heart disease.
- (2)Non diabetic patients (no previous diagnosis of diabetes or prediabetes).
- (3)Patients are diagnosed as having coronary artery disease if a significant coronary artery disease]

Exclusion criteria

- (1)Frank diabetic patients (previously diagnosed).
- (2)Individuals with normal coronaries.

Results

Patients were classified into 4 groups according to the results of their FPG after fasting for 8–10 hours and PPG 2 hours after 75 gm oral glucose intake, based on 2007 ADA guidelines as group I: Isolated IFG (FPG 100–125 mg/dl and PPG<140 mg/dl), group II: Isolated IGT (FPG 100–125 mg/dl and PPG 140–199 mg/dl), group III: combined IFG and IGT (FPG 100–125 mg/dl and PPG 140–199 mg/dl) and group IV: normal glucose tolerance (FPG<100 mg/dl and PPG<140 mg/dl).

It was noticed that 23% of the included patients had prediabetes. Group I (IFG) included 48 patients (4.8%), group II (IGT) included 123 patients (12.3%), group III (IFG and IGT) included 59 patients (5.9%). The prediabetic male patients were 146 [29 in group I, 72 in group II and 45 in group III] representing 21.43% of total number of males (681 patients) while prediabetic female patients were 84 [19 in group I, 51 in group II and 14 in Group III] representing 26.33% of total number of females (319 patients). This shows that females are more significantly affected than males (p=0.001).

based national survey of the Australian general population aged 25 years residing in 42 randomly selected urban and rural areas, which revealed that among 1515 Australian men and women, 4.2% had IFG and 10.5% had IGT in the year 2004 [8]. However, in the China Heart Survey aimed at characterizing the glucometabolic state of patients with CAD in China, the results were different. is multicentre study

