J Metabolic Synd 2017, 6:3(Suppl)
DOI: 10.4172/2167-0943-C1-006

PREVALENCE OF SOME CARDIOVASCULAR RISK FACTORS AMONG TYPE 2 DIABETIC OUTPATIENTS WITH OR WITHOUT CORONARY RISK IN TEACHING HOSPITAL IN KUMASI

Odeafo Asamoah-Boakye[a]
[a]Kwame Nkrumah University of Science and Technology, Ghana

Cardiovascular diseases are associated with type 2 diabetes, and concurrently responsible for 68% cause of mortality among these populations. The study aimed to determine cardiovascular disease risk factors, among Type 2 Diabetic Outpatients with or without coronary risk. A cross sectional study was conducted on 152 subjects. The BMI, waist circumference, fasting blood glucose, glycated haemoglobin, serum total cholesterol, triglyceride, high density lipoprotein, and low density lipoprotein were determined. Sociodemographic data were collected with questionnaire. Data were analysed using SPSS version 23. Out of 152 subjects, 37 (24.3%) were males and 115 (75.7%) were females. The prevalence of hyperglycemia, obesity and abdominal obesity were 74.3%, 66.4% and 72.3% respectively. The prevalence of single dyslipidemia, combined dyslipidemia and mixed dyslipidemia were 63.8%, 15.8%, and 1.3% respectively. Additionally, 35.3% of subjects had high coronary risk, and 5.3% had high atherosclerosis risk. Hypercholesterolemia, hypertriglyceridemia and high LDL-C were higher among high coronary risk Type 2 diabetics (75.9 %, 7.4%, 87.0%,) than those without coronary risk (22.4%, 4.1%, 13.0% respectively) (TC: $p<0.0001$, TG: $p=0.003$, LDL-C: $p<0.0001$). Cardiovascular risk factors were high among study subjects, and significantly associated among high coronary risk type 2 diabetics. High Cardiovascular risk factors may predispose type 2 diabetics at high risk of cardiovascular diseases.

RECENT AND ADVANCED THERAPEUTIC AND DIAGNOSTIC STRATEGIES FOR TYPE 2 DIABETES AND GENE THERAPY APPROACH AS ULTIMATE TYPE 2 DIABETES TREATMENTPAMELA GEORGINA AVILA LAMADRID

Rasoul Salehi[a], **Ahmad Raza Salehi**[a], **Moosa Rahimi**[a], **Nasimeh Vatandoust**[a] and **Sedigheh Momenzadeh**[a]
[a]Isfahan University of Medical Sciences, Iran

It has now become obvious that the pathophysiological defects leading to type 2 diabetes (T2D) is much more complex than thought before. Insulin resistance is an early event in the course of T2D development. The transition from normoglycemy to prediabetes is usually a gradual phenomenon that occurs over 5-10 years during which the disease remains undetected. Among the routinely practiced T2D screening criteria, like FPG, IFG, IGT or HbA1c, still the issue of a preferable one is debated. Here I present more precise non-invasive presymptomatic diagnosis and risk assessment strategies including noncoding RNAs signature in peripheral blood.

Life style changes with addition of metformin, sulphonylureas, glinides, α-glucosidase inhibitors, thiazolidinediones and/or exogenous insulin are recommended as the present treatment options. These treatments offer improvement in glycemic control, but in many instances produce significant adverse side effects. Various novel incretin-based therapies like prolonging GLP-1 receptor agonists action, orally GLP-1 receptor agonists, GLP-1 secretion by activating GLP-1-producing intestinal L-cells, synthetic engineered peptides as co-agonists stimulating more than one receptor, etc. are discussed here.

I also present our experiences regarding development of successful gene therapy using intestinal K-cells which are specialized for GIP production. Engineering these cells to produce insulin in response to the ingested carbohydrates successfully achieved. Oral gene delivery to these cells using nanoparticles with appropriate protective coats as well as plant exosomal gene delivery to the stem cell precursors of K-cells located at the base of intestinal crypts resulted in long lasting insulin expression by gut K-cells and pronounced treatment of T2D.