Overview on Diabetes Mellitus (Type 2)

Bassam Abdul Rasool Hassan

Clinical Pharmacy Discipline, School of Pharmaceutical Sciences, University of Sains Malaysia, 11800, Minden, Penang, Malaysia

Introduction

It is a medical condition characterized by an elevation of blood glucose level, this metabolic disorder will take place as a result of either insulin resistance and/or insulin deficiency. This medical condition consider as one of the most predominant type of diabetes since it represent 90% of diabetic cases.

Moreover, this medical condition required a chronic monitoring and treatment throughout patient life, the treatment will involve several aspects like self-care measures, lifestyle changes (dietary modification) and in some cases medications (metformin and/or insulin). It has been observed during the past 50 years, the rate of incidence of this type of diabetes has markedly increased in parallel with obesity.

This medical problem i.e., high blood sugar when remain for long time this will mainly cause heart disease, strokes, diabetic retinopathy all these will lead to renal failure.

Main Causes for its Incidence of Type 2 Diabetes Mellitus

Many factors play critical role in the incidence of this medical problem, like gender (female), age (increasing age), diet, obesity, lack of sleep, nutritional supplement received by the mother during pregnancy. But the main critical factors that play role are: lifestyle, genetic factors and other medical problems.

Lifestyle

This part will include many factors which are: obesity, stress, poor diet, high waist-hip ratio, high consumption of sweets (drinks and food) and lack of motivation and exercises.

Genetic

It has been found that several genes responsible for or related with incidence of type 2 diabetes, even so these genes still not consider as the main critical factor in incidence of this type of diabetes.

Other medical problems

This part include two subdivisions i.e., two factors associated with incidence of type 2 diabetes the first one include the use of some medications like [diuretics (thiazides)], antihypertensive treatment (beta-blockers) and antipsychotic treatments. The second division include patients who sufferance from other diseases like gestational diabetes, Cushing's syndrome, hyperthyroidism and glucagonomas.

Diagnosis for Type 2 Diabetes

There are several tests used to detect this disease and these tests include the following:

Urine and blood test

In the normal cases i.e., healthy person the urine will not contain sugar but within diabetes patients glucose will overflow through the kidneys and as a result of that urine will include glucose and as a result of that urine test will show positive result. As a result of that blood test show positive result.