

Overview on Diabetes Mellitus (Type 2)

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Introduction

It a medical condition characterized by an elevation of blood glucose level, this metabolic disorder will taken 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.

Glucose tolerance test

This test (GTT) and oral glucose tolerance test (OGTT), used to detect whether your body is having a problems processing glucose. The main result of this test will indicate whether the patient is suffering from impaired glucose tolerance or diabetes.

Prevention of Type 2 Diabetes Mellitus Disease

The incidence of this critical disease can be either delayed or prevented by organization of dietary nutrition (high in green leafy vegetable) and regular exercise (the main benefits of exercise will be gain even if the person does not loss weight). Moreover, it has been proven that the combination of these two points diet and exercise are very effective in preventing incidence of type 2 diabetes mellitus disease and/or regulation of blood sugar within those patients even more than the effect of diabetic treatment i.e., metformin.

Treatments Used For Type 2 Diabetes Mellitus Disease

The management of type 2 diabetes diseases will include different parts, which are as follow:

Changing lifestyle

This will include proper diet which will leads to weight loss and a significant improvement in blood sugar level, and aerobic exercise which will lead to reduction in the HbA1C and improved insulin sensitivity.

Medications:

This part will include several types of treatments as follow:

- ✓ Metformin.
- ✓ Sulfonylureas.
- ✓ NonSulfonylureas and other types.
- ✓ Insulin injection may either be add to oral treatment or used alone.

Conclusion

Therefore it is a very important point for the open access journals to encourage researchers and clinicians to work hard in order to clarify the main problems associated with type 2 diabetes mellitus and the proper treatment used to treat this medical problem.

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