

## DIABETES :DIOGNOSIS AND CARE

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**D**iabetes or Diabetes mellitus (DM) – is a disease that affects almost **one in every five people in the world**. It means that the level of blood sugar in the individual blood is much higher than the normal levels. This increased blood sugar causes increased thirst, frequent urination and increased hunger. The cause of increased levels of sugar in the blood is because of a decrease or absence of the hormone insulin. Insulin is responsible for lowering the level of sugar by converting the excess sugar to other products. Another cause of high sugar is the inability of the various cells in the body are unable to use the hormone.

Diabetes can affect a person at any age.

Diabetes are of three types :type I, type II & Gestational diabetes.

Type I) Diabetes results from the body's failure to produce insulin.

Type II) Diabetes result when cells fail to use insulin.

Gestational diabetes occurs in pregnant ladies because of increase of glucose in the body.

**Diagnosis of DM:** - When the blood sugar level, after 12 hours of fasting, is more than 126 mg% or if the random sample of blood shows a sugar level of more than 200 mg % the diagnosis is diabetes .

Whenever there is a doubt, an oral glucose tolerance test is done. In the test, 75gms of glucose is mixed with 250-300 ml of water and consumed. A blood sample is collected after 2 hours. If the blood glucose level is more than 200 mg % the diagnosis is diabetes .

The best way to control blood sugar in type I Diabetes is through insulin injections.

In type II Diabetes, medications, and Life style changes and (in some cases) insulin may be used for control of blood sugar.

### **Complications arising in Diabetes**

The increased sugar levels in the blood can cause damage to the blood vessels - both large and small blood vessels -in the body thereby decreasing the blood flow to major organs of the body affecting the brain, heart, kidneys and eyes .It is generally after 10-20 years of uncontrolled or badly controlled diabetes, the dangerous effects of diabetes are observed .

The dangerous affects of Diabetes are :

It doubles the risk of heart attack and stroke.

Diabetes retinopathy, affects the blood vessels in retina of the eye, leading to reduced vision and blindness.

Diabetic nephropathy causes damage to kidneys resulting in chronic kidney disease leading to dialysis.

Diabetes neuropathy caused damage to nerves, causing numbness of feet, resulting in untreatable ulcers and sometimes amputation.

**Early care for preventing complications:** - To prevent these complications it is necessary to keep a strict control of blood sugar levels at all times along with control of blood pressure and maintaining of low Cholesterol levels. Early detection of diabetic complications by routine screening of eyes, kidney, heart, blood vessels of feet is recommended.

Life style measures to prevent complications should include dietary modifications – which include using good oil containing polyunsaturated fatty acids instead of saturated fat, in limited quality;

substituting high sugar content food with food that has lower sugar content, increasing fiber content and reducing salt intake-

Regular exercise & cessation of smoking help in preventing complications.

Follow the old adage : *prevention is better than cure* .Develop a healthy Life style .