

Diagnosing Diabetes

Introduction

Diabetes is a condition due to high blood glucose levels, which result from an inability of the body to cope with sugar. Insulin is a hormone (a 'messenger'), which is responsible for controlling the level of sugar in your body. Diabetes is usually due to insufficient production of this hormone or your being less sensitive to prevailing amounts in your system. High glucose levels cause the symptoms and many of the complications of diabetes.

What symptoms should I look out for?

Too much sugar in the blood gives you the following symptoms

- tiredness
- excessive thirst
- frequent urination, especially at night
- thrush or genital itching
- weight loss despite a good appetite
- tingling and numbness in hands and feet,
- blurred vision

Because these are symptoms that many may suffer from time to time, it is necessary to do some tests to establish what is going on. If you feel that you have any of these symptoms happening on a regular basis, consult your doctor, who will discuss testing with you. The earlier your Diabetes is uncovered, the easier it is to help.

How is it diagnosed?

The diagnosis is made by demonstrating a high sugar concentration in your blood.

You may be required to have a fasting blood sample taken. Less commonly you may need to undergo a glucose tolerance test.

Is Urine testing useful?

Testing of urine for sugar is a useful test for screening large numbers of people, however, a positive test is not diagnostic of diabetes. Confirming the diagnosis always requires a laboratory blood glucose test

Who should have a blood test?

Studies have shown that certain factors may place you at higher risk of developing diabetes than others. These include:

- Increasing age
- Being overweight
- High blood pressure
- High cholesterol
- Family history of diabetes
- Personal history of heart attack, angina or stroke

If you have any symptoms of diabetes, or if you feel you are at risk and should have a blood test to exclude diabetes, discuss this with your GP or Practice Nurse.

Is a finger prick blood test adequate?

For the purpose of making a diagnosis, it is important that the test result is accurate as possible and this requires a blood sample from your arm.

Blood testing

The level of sugar in your blood varies throughout the day. A blood sample taken first thing in the morning before breakfast would yield a 'fasting glucose' concentration.

A 'Random Glucose' can be taken at any time and takes into account that you have eaten recently.

These tests have to be repeated on two different days for a diagnosis to be reached.

Results that indicate that you have diabetes:

Fasting Glucose greater than 7.0 mmol/l

Random Glucose greater than 11.1 mmol/l

What is a Glucose Tolerance Test?

If your fasting blood glucose results are not high enough for you to have Diabetes, but higher than 6.0 you may have an early form of the disease ('Impaired Glucose Tolerance'). A further test, the 'Glucose Tolerance Test' is sometimes used to measure how good your body is at dealing with sugar. In this test, your sugar levels are measured two hours after you

have been given a sugary drink, which contains 75 gm of glucose. As with the 'Random blood Glucose' test, a sugar greater than 11.1 mmol/l is used to confirm diabetes.

Is an HbA1c useful in diagnosis?

This is a test that is used to assess how well your diabetes is controlled once you are on treatment. It is not useful for making a diagnosis.

What next?

Diabetes is a condition that needs to be controlled throughout your life. The longer you have sugar levels that are too high, the greater the risk of damage to your kidneys, eyes, nerves and blood vessels. These days there are many ways to control diabetes and minimize this risk. These include changes to lifestyle and diet to insulin injections and tablets. Not all people with diabetes need insulin injections.

If tests confirm that you have diabetes, your Doctor will discuss the appropriate treatment options with you and introduce you to a team of people who will help you manage your Diabetes.

West Suffolk Diabetes Service

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