

Cystic Fibrosis Related Diabetes (CFRD) factsheet

Information for patients

What is Diabetes Mellitus?

Diabetes Mellitus is a condition where the amount of glucose (sugar) in the blood is too high. A hormone called insulin, which is produced by the pancreas, controls the amount of glucose in our blood. Insulin is needed to move glucose from the bloodstream into the body's cells to use as energy.

What is Cystic Fibrosis Related Diabetes (CFRD)?

In most (85%) people with Cystic Fibrosis (CF) the pancreas doesn't work properly ('pancreatic insufficiency') leading to poor absorption of fat. Inflammation and scarring of the pancreas, with time can also prevent the effective production of insulin, resulting in CFRD.

How do we screen for CFD?

Every year, as part of the annual review blood test, we test for HbA1C, which measures the amount of glucose carried by the red blood cells in your body. From the age of 10 years, we do a yearly Oral Glucose Tolerance Test (OGTT). During this procedure a glucose solution is drunk then blood samples are taken at regular intervals to measure glucose levels. If either of these tests are abnormal, you will be referred for a Continuous Glucose Monitoring Sensor (CGMS).

What is a CGMS?

CGMS stands for Continuous Glucose Monitoring Sensor. A small sensor is placed under the skin on the lower abdomen, a small recording device is attached and it is secured with tape. The sensor measures glucose between the cells and gives a trend over a number of days. The data is sent to a receiver which must be kept within 6m of the sensor at all times and must be kept charged. The sensor stays in for 5-7 days. During this time, we ask you to complete a food diary and return this with the sensor and receiver.



Receiver



Sensor with recording device attached

Who will insert the CGMS?

The CF CNS will insert the CGMS, either during a CF clinic or a home visit. Whilst the CGMS is in place you should eat as usual and take part in any usual activities. The CGMS can be worn whilst swimming and showering but you should avoid contact sport whilst wearing it in case it falls out. The sensor and receiver need to be returned to the CF CNS to upload – please keep them safe.

Will it hurt?

Inserting the CGMS may feel slightly uncomfortable but is over very quickly. It is quicker and much less painful than a blood test! Once the CGMS is in you can forget about it.

Where can I get more information?

Cystic Fibrosis Trust:

<https://www.cysticfibrosis.org.uk/>

Diabetes UK:

<https://www.diabetes.org.uk/diabetes-the-basics/other-types-of-diabetes/cystic-fibrosis-diabetes>

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS:

Tel: 020 3299 3601

Email: kch-tr.palsdh@nhs.net

You can also contact us by using our online form at www.kch.nhs.uk/contact/pals

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND

Tel: 01689 863252

Email: kch-tr.palspruh@nhs.net

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.

www.kch.nhs.uk