

Parent/Carer/Patient advice sheet Sweat Test

How we determine if a child might have Cystic Fibrosis

What is a Sweat Test?

A sweat test measures the amount of salt (Chloride) that is in the sweat. It does not involve any needles and does not hurt, though it can feel a little strange. The test is carried out in the Paediatric Department and the sweat sample is sent to the Biochemistry Department. The collection process usually takes about 1 hour.

Why do a Sweat Test?

Sweat tests are usually carried out on children who are having recurrent chest infections, having problems gaining weight or growing problems or as a follow up to the newborn bloodspot screening programme. It can also be requested if there is a family history of Cystic Fibrosis. There are other rarer reasons for a sweat test that would be explained to you by your Doctor.

How is the test carried out?

An area of the arm or leg is cleaned carefully with alcohol and then water to remove any oil or residual salts from the skin. Two discs containing a chemical called Pilocarpine that stimulates sweat production are then placed on the area and secured in place with straps. These discs are connected to a medical device which then passes a small electric current through the discs and the skin to further stimulate the sweat production.

The test is not painful although a tingling sensation may occur at this point. This part of the test takes 5 minutes then these discs are removed. There should be a red mark where the chemical Pilocarpine has stimulated the skin. This is normal and will fade within a few hours. The skin is again washed with sterile water and carefully dried. A plastic collecting disc is then placed over the stimulated area and this is secured with a strap. The disc contains a small, coiled tube and has a dot of blue dye on the back which helps us to see the sweat as it is produced.

Once sweat is observed to be collecting a timer is set for 30 minutes, the disc is covered with a light bandage and the child is then free to play and eat and drink, although salty foods such as crisps should be avoided to minimise any risk of contamination. After 30 minutes the amount of sweat is measured, the tubing is removed from the disc and the sweat carefully placed in a container to be sent for analysis in the laboratory.

Does the test hurt?

Some people experience a tingling sensation in the skin around the discs. The discs need to be fastened firmly so the straps do appear quite tight, but this is necessary, and any marks left will disappear within a few hours. The hand or foot below the test site can sometimes look a bit dusky due to the straps but this will resolve as soon as the discs and straps are removed. Very rarely (1 in 25,000 cases) minor skin burns have been reported. Where this has happened, the patients showed no sign of pain or discomfort during the test and the burn was only discovered when the discs were removed from the skin. The burns heal completely within one to two weeks with little or no scarring. It is highly unlikely that your child will suffer a burn during the test.

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Results

The results are normally available within 24 hours of the test. Someone from the Paediatric Department will contact you with the result and the Doctor who referred your child for the test will then contact you to discuss implications and next steps. Sometimes the test might need to be repeated if inconclusive or if not enough sweat was collected.

Further questions?

If you have any further questions regarding the process of the sweat test or if you need to cancel or rearrange the appointment, please contact the Paediatric Department on **01494 425506** Monday to Friday 08:00 – 18:00.

If you have further questions regarding the need for a sweat test, please contact the Doctor who has referred you for the test.

How can I help reduce healthcare associated infections?

Infection prevention and control is important to the well-being of our patients and for that reason we have infection prevention and control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to and after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser as hand sanitisers are not suitable for use when dealing with patients who have symptoms of diarrhoea.

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Patient Advice Sheet

If you would like a copy of this information on audiotape, in large print or translated, please speak to the nurse in charge or call the Patient Advice Liaison Service on 01296 316042

Legal Notice

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible, but please note that it is subject to change. Please therefore always check specific advice on any concerns you may have with your doctor.

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