

Having a sweat test

Information for families

**Great Ormond Street Hospital
for Children NHS Trust**

Child's name:

Date of the test:

Time of the test:

If you are unable to attend this appointment, please telephone us as soon as possible on 020 7405 9200 and ask for extension 5009.

This information sheet explains about the sweat test and what to expect when your child comes to Great Ormond Street Hospital to have one.

What is a sweat test?

A sweat test is carried out to collect and measure the amount of salts (chloride) in sweat. This helps us to assess whether your child might have cystic fibrosis, a genetic condition that affects the lungs and the digestive system. It is used because people with CF have a higher amount of salt in their sweat than normal.

Why does this need to be carried out?

This test is carried out on babies or children who get a lot of chest infections, those who have frequent and unexplained loose and pale poo and those who are having problems gaining weight or growing properly. Such children may have cystic fibrosis. It is important to diagnose this as soon as possible so that the best treatment can be started. It is also undertaken following suspicious results on the newborn screening testing for CF. These babies may be symptomless and already have had their bloods taken.

Who does this test?

It is carried out by a member of staff from the biochemistry laboratory, who is experienced in doing this test on children of various ages.

Does the test hurt?

No, although some children say that it causes a tingling sensation on the arm or leg where the sweat is collected. You will be able to stay with your child throughout the test.

What happens during the test?

Special pads, soaked in a chemical called pilocarpine to stimulate sweat production, are placed on your child's lower arm or leg. These are secured in place and a small painless electric current is passed through the pads from a battery box. The current is applied for five minutes and then the pads are removed. There will be a red mark where the pilocarpine has stimulated the skin. This is normal and usually fades within about 24 hours.

The skin is then washed with ultra pure water and carefully dried. A sweat collector is placed over the stimulated area, secured in place using a strap. This process is then repeated on the other arm or leg. Your child will have to wait for 30 minutes while the sweat is collected. During this waiting time, they can play and eat normally, although salty foods such as crisps should be avoided to minimise any risk of contamination. The sweat collector is then removed and sent to the laboratory for analysis.

What does the result mean?

To get an accurate result, enough sweat must be collected, so sometimes the test needs to be repeated. If the levels of chloride salts are low then cystic fibrosis is unlikely. If the levels are high then your child will probably need to have a blood test to confirm the diagnosis of cystic fibrosis. Sometimes, even with enough sweat, the result can be hard to interpret and the sweat test has to be repeated.

How long will it take to get a result?

If your child is an inpatient at GOSH when they have the sweat test or if you are known to the cystic fibrosis team, then the result should be available the following day. If the result has to be sent to your local consultant or GP then it may take up to a week for you to be told the result.

Further questions

If you have further questions, please speak to the doctor who referred your child for the sweat test.

Notes

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Compiled by the Chemical Pathology department
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