



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Sweat Tests

Information for patients, relatives and carers

① For more information, please contact:

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This booklet has been produced to provide information for people who have been referred for a sweat test. In addition, it explains what the results may mean and how you can get the results of your test.

What is a sweat test?

A sweat test measures the amount of salt (as chloride) that is in the sweat.

Why does this need to be carried out?

The test is carried out on children or adults:

- Who have recurrent chest infections.
- Who have frequent and unexplained pale stools.
- Who have problems gaining weight or growing properly.
- As part of a screening programme.
- Other less common indications.

A positive result may mean that the child, or you (if you have had the test) have cystic fibrosis (CF) but a final diagnosis will take into account other symptoms, clinical findings and test results. People with CF have a high amount of salt in their sweat. A normal result can be helpful in ruling out CF. It is important to diagnose this condition as soon as possible in order to begin appropriate treatment.

Who does this test?

A Registered Biomedical Scientist will carry out the test in the Child Assessment Unit in York or Children's Outpatient Department in Scarborough (children) or Out Patient Department in York Hospital (adults).

During the test

You must stay with children for the duration of the test. You may wish to bring a favourite book or toy to entertain children during the test.

Please allow one hour for the procedure to be carried out.

Please bring a warm jacket / jumper with loose sleeves.

How is the test carried out?

- Special gel pads soaked in a chemical called pilocarpine that stimulates sweat production are placed on the lower arm or leg.
- These are secured in place by disposable straps and a small electric current is passed through the pads from a battery box to further stimulate the sweating process.
- The test is not painful, although a tingling sensation may occur.
- The pads are left in place for five minutes and then removed.
- There should be a red mark where the pilocarpine has stimulated the skin. This is normal and should fade within a few hours.
- The skin is then carefully washed with pure water and dried.
- A plastic coil is placed over the stimulated area and secured.
- You will then be asked to wait for about 30 minutes for the sweat to be absorbed into the coil device.

- During that time, you (or the child) are free to read, play or eat, although salty foods such as crisps should be avoided to minimise any risk of contamination.
- The coil is then removed and taken to the laboratory for analysis.
- There may be a blue spot left on the skin. This is a vegetable dye, used to colour the sweat, and will fade with time.

Does the test hurt?

Some people experience a tingling sensation on the arm or leg where the sweat has been collected.

No needles are involved.

Are there any risks in having a Sweat Test?

There is a very little risk of complications from this test. The electric current may cause skin redness and excess sweating for a short time after the test is done.

What are the benefits in having a Sweat Test?

This test helps doctors to make a decision about whether symptoms are likely to be caused by CF, along with other investigations and tests.

Is there an alternative to having a Sweat Test?

Currently there is no alternative to having a sweat test.

The results

In most cases the results will clearly show either a high (abnormal) or normal salt level in the sweat. Sometimes the results can be borderline and the test will need to be repeated. In a few cases, the test may need to be repeated for technical reasons, for example if not enough sweat has been collected. The repeat test is generally performed on another day so as not to cause undue distress and inconvenience for you or the child. If not enough sweat has been collected this does not indicate CF. Some doctors like to confirm an abnormal sweat test with a second sweat test.

How long will it take to get the results?

Sweat samples are analysed in the laboratory and results are reported to the Doctor who requested the test usually within 48 hrs

Who will inform me of the results?

The doctor who asked for the test to be carried out will inform you about the results of the test.

When the test has been performed on a child in York, a nurse from the Child Assessment Unit will usually tell you the result of the test.

When the test has been performed on an adult, the doctor who asked for the test to be carried out will write to you about the result of your test, or will discuss the results with you at your next appointment.

Further questions

If you have questions about the process of doing the sweat test:

Mrs Rachel Navin, Senior Biomedical Scientist on telephone number 01904 721312 (adults).

If you have further questions regarding the need for a sweat test on yourself or the child, please speak to the doctor who has referred you for this test as they can give you further information.

Additional information on the sweat test procedure and what the results may mean can be obtained from the Lab Tests Online website:

<http://labtestsonline.org/understanding/analytes/sweat-chloride/tab/glance>

Additional information on Cystic Fibrosis may be obtained from www.cysticfibrosis.org.uk

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Ms Alison Jones, Consultant Biochemist, Department of Clinical Biochemistry, The York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725786.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email pals@york.nhs.uk.

An answer phone is available out of hours.

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