Appendix B

Example of Sweat Test information leaflet

Introduction.

This leaflet has been developed to provide information on the sweat test that has been prescribed for you or your child. Here, we explain what the sweat test is, why it is required, what it consists of, what the different test results can mean and how to get the test results. This information leaflet is available in other languages on request.

What is a sweat test?

The sweat test is used to measure the amount of salt (usually chloride) in the sweat. The test is normally completed in less than 1 hour.

Why is the test performed?

The test is requested by the doctor to confirm or rule out the diagnosis of cystic fibrosis (CF) in children or adults who have symptoms that suggest this disease. The symptoms that most frequently lead the doctor to request the sweat test are: in the child, recurrent respiratory infections, chronic diarrhea, poor growth, severe dehydration in the summer; in adults, chronic or recurrent pancreatitis, male infertility, chronic rhinosinusitis, recurrent or chronic lung infections. It is important to diagnose this condition in order to establish the most suitable and effective treatment. Furthermore, the test is required in infants who have tested positive within the newborn screening program. People with CF have a high salt content in their sweat. A normal test result can be helpful in ruling out the diagnosis of cystic fibrosis.

Who performs the test?

The test is carried out by a fully trained health care professional from the CF Centre/Laboratory.

What happens during the test?

Special pads soaked in a chemical substance called pilocarpine (or gel discs with pilocarpine) are placed in a small area of the forearm or leg, after it is wiped with alchol and water. Pilocarpine stimulates the production of sweat. Pilocarpine pads (or gel discs) are fixed in place and a small flow of current from a battery-powered generator passes through the pads (or gel discs) to stimulate the sweat-producing process. After about 5 minutes the pads (or gel disks) are removed. In the area where pilocarpine has stimulated the production of sweat the skin is reddened. This is a transient phenomenon, due to pilocarpine stimulation, which disappears within a few hours. The skin is then washed thoroughly with water and dried. A piece of filter paper (or gauze or a plastic coil) is placed and secured on the stimulated area to absorb the sweat. After 20-30 minutes the filter paper (or gauze or plastic coil) will be removed and sent to the laboratory for sweat analysis. During this interval, you (or your child) are free to read, play, or eat, although salty foods such as potato chips should be avoided to minimize any risk of contamination.

Does the test hurt?

The test is not painful. Some people experience an itchy sensation in the arm or leg where sweat is collected. No injection needles are used. In 1 case out of 50,000 there was a small skin burn.

Results.

In most cases the results show very clearly either a high level of salt in the sweat (abnormal, pathological, also referred to as POSITIVE SWEAT TEST) or normal (also referred to as NEGATIVE SWEAT TEST). A positive result can therefore mean that you or your child may be suffering from cystic fibrosis, but the final diagnosis will have to take into account clinical symptoms and signs or other laboratory data. Sometimes results may result in a questionable range (referred to as BORDERLINE SWEAT TEST) that does not allow diagnosis or exclusion of the disease and the test must be repeated. Sometimes the test may also need to be repeated for technical reasons, such as a low amount of sweat collected. In the event of a POSITIVE or BORDERLINE sweat test, a second test is recommended.

How long does it take before I receive the test results?

Sweat test results will be available the same day of the test.

Contacts

Further questions.

If you have any other questions about the need for a sweat test for you or your child, please talk to the doctor/specialist who recommended to perform this test or you can contact a doctor from the Cystic Fibrosis Center at