

Cystic Fibrosis Research News

Title:

Standards of care guidance for sweat testing; phase two of the ECFS quality improvement programme

Lay Title:

Guidance for Sweat Testing in Europe

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What was your research question?

The Sweat Test is a fundamental diagnostic tool for every person being evaluated for cystic fibrosis. In contrast to earlier guidelines on sweat testing this paper provides a pragmatic approach to guide CF centres/labs in Europe to perform a reliable sweat test, as part of the European Sweat test project.

Why is this important?

People with cystic fibrosis (CF) have a high concentration of salt in their sweat compared to healthy subjects. The sweat test measures the salt concentration in sweat on the forearm and is therefore a key in making the diagnosis of CF in people of all ages. It is essential to perform

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a reliable and standardized sweat test across European countries despite differences in financial resources and health care systems. Providing the pragmatic approach in this manuscript may overcome some of these barriers, enabling also low- and middle-income countries in performing a reliable sweat test.

What did you do?

The European survey on Sweat Test, initiated in 2015 by the Diagnostic Network Working group of the European CF Society, identified evidence of good practice in many centres, but also considerable variance in approach and interpretation of results. This scenario highlighted the need to start several initiatives to improve the knowledge and the skills and harmonize the practices. This paper provides for the first time sweat test recommendations that take into account local situations, especially in resource-limited settings.

What did you find?

A group of European CF experts reviewed and discussed existing guidelines and results from the European Sweat Test survey in order to identify barriers in performing optimal Sweat Test. The manuscript offers solutions applicable in real life in order to overcome these barriers.

What does this mean and reasons for caution?

To achieve high quality Sweat Testing is a challenge, requiring resources and well-trained staff. This is particularly challenging in countries with limited resources and countries with low prevalence of CF. The manuscript aims to clearly describe the different mandatory steps to perform a reliable sweat test and tries to offer alternative steps in case the newest sweat test equipment is not available.

What's next?

The next phase of the European Sweat Test project will consist in training and e-learning initiatives aiming to harmonize background knowledge and to reach learners from geographically dispersed locations.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/35063396/>