



Cystic Fibrosis Research News

Title:

Clinician variability in the diagnosis and treatment of *Aspergillus fumigatus*-related conditions in cystic fibrosis: An international survey

Lay Title:

Different approaches to *Aspergillus*-related conditions in people with cystic fibrosis

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What was your research question?

We wanted to understand how physicians and other clinicians diagnose and treat *Aspergillus*-related lung diseases in people with cystic fibrosis (CF) across the world and see if there are any differences in these approaches.

Why is this important?

Aspergillus-related diseases in cystic fibrosis (CF) are complex challenging to diagnose and treat. *Aspergillus fumigatus* is a common fungus that affects many people with CF. Currently, there are no guidelines to diagnose and treat different *Aspergillus*-related lung diseases in CF with the exception of allergic bronchopulmonary aspergillosis (ABPA). Without a guide for *Aspergillus* infection, we thought that CF providers may have different practices.

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What did you do?

We asked clinicians who take care of children and adults with CF from around the world to complete a survey. The survey included questions about how doctors and other clinicians understand, diagnose, and treat *Aspergillus* colonization, infection, and allergy, such as ABPA.

What did you find?

We received 319 CF specialists from 35 countries across the world sent us survey responses. We realised that clinicians approach *Aspergillus*-related conditions in people with CF differently. There were differences between specific geographical regions, including the USA, Canada, Europe, and other countries. We found differences in the use and frequency of diagnostic tests, including fungus culture and blood tests to check for immune responses to *Aspergillus*. The diagnostic criteria, treatment decisions and approaches for ABPA and *Aspergillus* bronchitis were also different between the USA/Canada compared to Europe.

What does this mean and reasons for caution?

The differences in how CF clinicians approach *Aspergillus*-related diseases, such as ABPA and *Aspergillus* bronchitis, highlight the need to understand the best ways to diagnose and treat *Aspergillus* diseases in order to improve the lives of people with CF. The differences among CF clinicians may be due to several reasons, including the lack of high-quality studies to inform updated and new guidelines for these diseases. Although this was a large international survey, we can only interpret responses we received, which does not reflect the practice of every single CF clinician across the world.

What's next?

This study shows that we need for well-designed clinical studies, including a large multicentre observational clinical trial, to work out the best ways to find and treat *Aspergillus*-related lung disease in people with CF.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/34332906/>