

Cystic Fibrosis Research News

Title:

Cystic fibrosis related diabetes in Europe: Prevalence, risk factors and outcome

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What was your research question?

Which are the risk factors for getting diabetes when you have cystic fibrosis? When does diabetes start and how many people with cystic fibrosis (CF) are affected during their lifetime? Does having CF-related diabetes increase your risk of poor lung function, poor weight or chronic infection?

Why is this important?

People with CF live longer than ever. We know that many will get diabetes, and that the risk of diabetes increases with age. Earlier studies have shown that diabetes may cause poor lung function, and eventually earlier death. If we find risk factors for diabetes, we will know which individuals to focus on. We may be able to diagnose diabetes earlier and start treatment to avoid the harmful effects. Knowing the expected number of individuals with diabetes will also help foresee the need for resources at the CF clinics.

What did you do?

We used data from more than 34,000 people in the European Cystic Fibrosis Society Patient Registry (ECFSPR). This allowed us to study many individuals of differing ages, with different complications and with different CF genes. We chose to study gender; CF genotype, age and pancreas function as possible inborn risk factors. We studied the relation between diabetes and lung function, weight (Body Mass Index) and chronic lung infection.

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What did you find?

The risk of diabetes increases with age, but even in the oldest age group above 30 years, only 33% had diabetes. Women got diabetes at an earlier age than men and had a higher risk of diabetes overall. Those with diabetes had lower lung function, lower weight and higher risk of chronic lung infection. The number of people with diabetes was different from country to country in Europe.

What does this mean and reasons for caution?

The results show that many people with CF will get diabetes, but maybe less than earlier studies have shown. The difference in the number of people with diabetes between countries may in part be due to registration problems. Those individuals with diabetes are not doing as well as those without the conditions. Therefore, we need to focus on early diagnosis and better treatment of diabetes.

What's next?

In order to improve the outcome of people with CF-related diabetes, we should use these results to get the right resources in place to enable the early diagnosis and treatment of this condition.

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