



Cystic Fibrosis Research News

Title:

Prevalence and factors associated with overweight and obesity in adults with cystic fibrosis: a single-center analysis

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What was your research question?

We wanted to assess the prevalence of overweight/obesity in adult patients with cystic fibrosis (CF) and determine its association with cardiovascular risk factors and pulmonary health. It is not clear if overweight/obesity is associated with adverse outcomes in patients with CF, as seen in the general population.

Why is this important?

Efforts to promote adequate nutrition in CF have significantly reduced the prevalence of malnutrition. However, at the same time an increase in the prevalence of overweight/obese has been recognized in patients with CF. Overweight/obesity is a major global health concern that is associated with higher risk of elevated blood cholesterol levels, high blood pressure, heart disease and death in the general population.

What did you do?

We performed a cross-sectional analysis of 484 adults with CF, seen at the University of Minnesota CF center between January 2015-January 2017. We classified patients according to body weight using body mass index (BMI) and

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examined the prevalence of overweight/obesity in patients with CF. We further examined the relationship of BMI with cardiovascular risk factors as well as pulmonary health.

What did you find?

Our study showed that overweight and obesity is common in adults with CF, occurring in about 1 out of 3 of all adult CF patients at the University of Minnesota. Only 5% of patients in our CF population were underweight. CF patients who were overweight or obese were more likely to be older, and to have a mild CFTR mutation and modestly elevated triglyceride levels. The rate of hypertension was higher in overweight (25%) and obese (31%) than normal (17%) or underweight (16%). Pulmonary function was better in the overweight/obese than in normal/underweight subjects.

What does this mean and reasons for caution?

The low rate of underweight reflects successful comprehensive care for CF patients over the last few decades. This success has been accompanied by a significant rise in overweight and obesity, which resembles the global trend of obesity in the general population. Although triglyceride levels were modestly elevated and there was a higher rate of high blood pressure, no overweight/obese patients in this cohort had known cardiovascular disease. Whether or not overweight/obesity poses a harmful risk in CF remains to be determined. Moreover, it is unclear at this time whether the weight management recommendations for the general population can be generalized to overweight/obese patients with CF.

What's next?

Further longitudinal studies will need to focus on addressing the consequences associated with overweight/obesity in adults and children with CF, and to determine appropriate nutritional approaches and treatment recommendations.



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