

Cystic Fibrosis Research News

Title:

Overweight and obesity in adults with cystic fibrosis: an Italian multicenter cohort study.

Lay Title:

How frequent is the condition of overweight among patients with cystic fibrosis in Italy?

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What was your research question?

The research question was to understand how frequent the overweight condition among individuals with CF in Italy is and to know if overweight individuals have better clinical characteristics, including pulmonary function and rate of pulmonary exacerbations.

Why is this important?

Over the last decades effective treatments have been successful to improve nutritional status in people with cystic fibrosis. As a result, with improvement of life expectancy and the advent of new CFTR modulators, overweight and obesity are progressively becoming a source of concern for adult population with CF in developed countries.

What did you do?

We did an observational study including adults with CF at three reference CF centers in Italy (IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan; Ospedale Pediatrico Bambino Gesù, Rome; Policlinico Umberto I, Rome). The overall population was divided into three groups

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according to the body mass index (BMI) classes as defined by the World Health Organization: overweight and obesity group including patients with BMI ≥ 25.0 kg/m², normal weight group including patients with BMI 18.6-24.9 kg/m², and underweight group including patients with BMI ≤ 18.5 kg/m². We measured prevalence of overweight in our population and compared clinical characteristics of individuals with overweight with other groups.

What did you find?

This study demonstrated that 1) the prevalence of overweight among adults with CF in Italy is up to 22%; 2) the overweight condition is more easy to be found in male individuals, with older age at diagnosis and pancreatic sufficiency; 3) the group of patients with overweight showed increased presence of cardiovascular and metabolic risk factors including systemic hypertension and hypercholesterolemia.

What does this mean and reasons for caution?

This was the first epidemiological study on overweight among a large number of individuals with CF in Southern Europe. We had previous data about increasing overweight frequency among adult patients from US, Canada and Northern Europe. With this experience, we confirmed that also in Italy overweight is significant.

The main limitation of our study is that we couldn't provide information about long-term outcomes, that is if individuals with overweight have a better lung function and clinical conditions over the years in comparison with people with normal weight. Second, we couldn't explore if overweight is associated with severe cardiovascular complications over the years.

What's next?

The next steps should be to prospectively monitor: 1) the increase of overweight status after the introduction of CFTR modulators in Italy; 2) the occurrence of any sort of overweight-related cardiovascular and metabolic complications in order to reformulate current standard indications on nutrition and diet for individuals with CF.

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