

THE INFLUENCE OF THE TYPE OF MUTATION AND NUTRITION ON LIFE EXPECTANCY OF PEOPLE WITH CYSTIC FIBROSIS

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The purpose of the study was to evaluate the influence of nutrition and the type of mutation on cystic fibrosis patients' life expectancy.

Data were longitudinally collected from patients of Department of Pulmonology, Allergology and Respiratory Oncology Poznań University of Medical Sciences. Sixty adults with CF aged 18-50 years were studied. The analysed variables consisted of the BMI ratio, Cole's body mass index cut offs, type of mutation and lifespan of CF patients. The Kruskal-Wallis test's, survival analysis and Chi-square test were used to examine the effect of genetic background and nutrition on life expectancy.

Mean BMI ratio strongly correlated with the type of mutation ($H=9,73$; $p<0,00$) and was significantly lower among patients with "severe" type of mutation. The type of mutation significantly affected patients' life expectancy ($\text{Chi}^2=6,42$; $p=0,04$). Mean life expectancy was higher among patients with „light” and „not defined” type of mutation. BMI ratio and Cole's body mass index cut offs also significantly affected life expectancy (respectively: $\text{Chi}^2= 12,45$; $p=0,002$; $\text{Chi}^2= 30,98$; $p<0,001$). CF patients, who suffer from malnutrition and emaciation live shorter than those with proper nutrition.

The obtained results confirmed a significant effect of nutrition and the type of mutation on CF patients' life expectancy.