RESPIRATORY MICROBIOLOGY OF ADULT PATIENTS WITH CYSTIC FIBROSIS IN POZNAN CENTRE

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Cystic fibrosis (CF) is the most common lethal genetic disorder in Caucasians, caused by CFTR mutations. In the airways, dysfunctional or absent CF transmebrane regulator, cause the alterations of surface liquid, predisposing to pathogens' colonisation. Infection in the airways still remains the morbidity and mortality's primary cause in CF patients.

The aim of the study was an identification of airways-colonizing bacteria and their impact on CF patients' disease course.

A retrospective review of respiratory cultures taken from 100 CF patients (age range 18-53, mean 28,2) treated in Pulmonology Department Poznan University Hospital from 2016 to 2018 was performed. The group was divided into classes for FEV1 and BMI.

The following pathogens have been identified: P. aeruginosa (PA) – 57%, S. aureus MSSA- 52%, S. aureus MRSA- 3%, Achromobacter spp- 14%, S. maltophilia- 5%, fungi- 54%. PA infections were more common in women (p=0,043), furthermore women are more often infected >1 PA-graft (p=0,037). There was also a tendency to lower FEV1 (p=0,069) in PA-infected group.

The trial showed dependence between female sex and PA colonisation. Moreover, there was a trend to lower FEV1 in PA-colonized group. There was no similar correlation between previous data and other pathogens.

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