

Bronchitis and COPD

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Genetic factor and socioeconomic status of people with COPD.

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Chronic Obstructive Pulmonary Disease (COPD) is a widespread, chronic disease subject to prophylaxis and treatment. It is characterized by fixed restriction of airflow through the lower respiratory tracts, which usually progresses and is associated with excessive bronchial and lung inflammatory responses to the harmful effects of gases and dusts (in Poland it is usually tobacco smoke). Alpha-1-antitrypsin (A1AT) is a protein that is synthesized in the liver and then secreted into the bloodstream. It is responsible for inhibiting the action of many enzymes, including inhibits the degradation of elastin, the main component of elastic fibers in the lower respiratory tract. The occurrence of SERPINA1 mutation is one of the many risk factors for COPD. The aim of the study was to show the extent of the polymorphism of rs8004738 and the socioeconomic status of COPD patients. The study involved 65 people diagnosed with COPD, residing in the West Pomeranian Province. The study included a survey questionnaire containing medical and socioeconomic data, as well as a study sample of DNA from each respondent for laboratory testing. In the preliminary study, 63 samples were obtained by studying the SERPINA1 gene and its rs8004738 polymorphism. The results show that A/A genotypes were 21.54%, A/G genotypes were 41.54% and G/G genotype were 33.85%. The occurrence of SNP rs8004738 of the SERPINA1 gene in the West Pomeranian Province was similar to the results achieved in Poland. Where genotype: A/A were 38%, A/G 40%, and G/G 22%.