LUNG FUNCTION IN DIVERS AND CANDIDATES FOR PROFESSIONAL DIVERS

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Background: Correct lung function parameters directly affect the ability to perform useful work underwater. For this reason, spirometric tests of lung functions remain an important element in the process of selecting candidates for professional diving. Medical studies conducted in the population of divers identified the phenomenon called *large lungs,* which is often associated with spirometric indices characteristic for lung ventilation impairment of the obstructive type. This study presents the results of the research into selected parameters of lung function in the population of divers and candidates for professional divers. **Material and methods:** A group of 52 men, divers and candidates for professional divers, were subjected to mandatory medical examination carried out as part of the selection process. Basic spirometric tests were performed: FEV1 [dm3], FVC [dm3], FEF25-75 [dm3 - s-1], and the parameter FEV1/FVC [%] was determined. The tests were standardized according to the European Coal and Steel Community (ECSC) reference values. Spirometric indices were compared with predicted reference values estimated by the ECSC. **Results:** The studies demonstrated certain differences in forced vital capacity (FVC) and forced expiratory flow (FEF) in the range 25-75% FVC (FEF25-75) in the group of divers in comparison to a selected sample population. **Conclusions:** The study has confirmed that the phenomenon described as *large lungs* can also be found in the population of Polish professional divers as well. The effects of functional hyperinflation persisting for an extended period of time, which has been observed among the studied individuals, may potentially lead to lung ventilation impairment of the obstructive type.