METABOLIC PHENOTYPES OF COPD: PECULIARITIES OF PATIENT MANAGEMENT (review of literature, own research results)

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Abstract. CImportance of the determination and correction of metabolic changes in patients with chronic obstructive pulmonary disease (COPD) increases with each passing year. Nutritional disorders, sarcopenia, obesity or development of cachexia significantly affect the clinical manifestations of COPD, impair the quality of life of the patient and increase the risk of exacerbations, cardiovascular events and death. Thorough study of the relationship between COPD and the constitutional characteristics of the patient has allowed to describe four metabolic phenotypes, to develop a stratification scale for determining the risk of cardiovascular events and death. Etiological factors and pathogenesis of skeletal muscle dysfunction (SMD), as the most significant comorbid state in COPD, have been established. For diagnosis of SMD are proposed such methods as bio-impedancemetry with determining the amount of muscle tissue, hand grip dynamometer test and a 6-minute walk test to evaluate its functional capacity. According to our own studies, the incidence of SMD in patients with COPD was 34 %. It was associated with more severe symptoms, frequent exacerbations, the worst parameters of quality of life due to limiting motor activity. Correction of metabolic disturbances in COPD patients requires an integrated approach, which includes not only basic treatment, but also smoking cessation, protein-, amino acid- and vitamin D-enriched nutrition,

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increased physical activity, the use of anabolic steroids, personalized interval training. Based on European guidelines for the rehabilitation of patients with COPD and SMD, we have developed and offered a personalized set of physical exercises. The regular execution of this complex contributed to improving the quality of life and physical activity of a patient with severe COPD.
Key words: chronic obstructive pulmonary disease, sarcopenia, skeletal muscle dysfunction, rehabilitation.

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