

Abstract

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Title of diploma thesis: Densitometric determination of body composition in patients with chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is the fourth leading cause of death in 2004 according to the WHO Global Burden of Disease Project and its morbidity and mortality worldwide is still increasing. Besides the lung function impairment, there are often described changes in body composition in COPD patients e.g. the skeletal muscle protein loss.

The main aim of the study was determining the body composition by DEXA in patients diagnosed with COPD and comparing them with physiological values or studies dealing with this issue. On each patient was performed one examination, patients were coming after twelve-hour fasting. Average age was 66 ± 8 years.

The amount of fat-free mass was not reduced. There was not therefore a loss of muscle tissue due to COPD. When evaluating total fat, we find that men have more fat than normal levels. This is also indicated by BMI that has been in the majority in the range of overweight and obesity. We did not confirm the link between COPD and osteoporosis. No patient suffer from osteoporosis. Neither BMD testing or detection of T - score did not prove osteoporosis.

Poor prognosis in patients with COPD, depending on body composition weren't fortunately confirmed in our patients.