

Association between fat-free mass with degree of airflow obstruction in stable COPD patients in Siloam General Hospital, Karawaci, Tangerang



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Abstract

Background: COPD is third leading cause of death worldwide. In Indonesia, the prevalence of moderate to severe COPD cases is around 5.6% or 4.8 million cases. Exacerbations in COPD patients result in comorbid symptoms of systemic manifestations that lead to limited physical activity, decreased health status and increased mortality. Limited physical activity is the major complaint of COPD patients which greatly affect their quality of life. COPD patients with low Fat- Free Mass (FFM) showed a poor prognostic with higher mortality rates for chronic patient with BMI <23 kg / m² and VE_{P1} <50%.

Objective: To analyze the relationship between Fat-Free Mass (FFM) with degree of airflow obstruction in COPD patients at RSUS, Karawaci, Tangerang

Methodology: This study will use numerical analytic observations with cross-sectional study design. Data collection will be carried out by anthropometric and spirometry measurements, which will be performed on COPD patients in the pulmonary general polyclinic at Karawaci Hospital, Tangerang. This study will involve 40 stable COPD patients using consecutive sampling techniques. Statistical analysis will be carried out using One-Way ANOVA in the SPSS 23.00 program.

Results: There is a significant difference in FFM between the four degree of airflow obstruction based on GOLD classifications (p-value = 0,001) but there is no significant relationship between FFMI with the four degree of GOLD classifications. There is also no significant difference in %VE_{P1} and VE_{P1}/KVP ratio among stable COPD patients who had Low FFMI and Normal FFMI in RSUS, Karawaci, Tangerang (p-value > 0,05).

Conclusion: Low FFM resulted in worsening of the degree of airflow obstruction based on GOLD classification.

Biography

Putri Nabila has completed her bachelor and post-graduate master's degree majoring in Clinical Embryology and Andrology at the age of 23 years from Monash University, Indonesia. She continued to pursue a medical degree in Indonesia. She is currently in her fifth year of MBBS.

