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Title: Evaluation of carotis intima media thickness in COPD patients

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Body: Background: Chronic obstructive pulmonary disease (COPD) and atherosclerosis may occur due to similar risk factors and have a significant cause of morbidity and mortality. In this study to assess the relationship between COPD and atherosclerosis; carotis intima media thickness (CIMT) of COPD patients and adult healthy individuals with normal BMI and metabolic parameters compared. Method: 2230 participants aged between 18 -92; 46 patients diagnosed with COPD according to clinical features and pulmonary function tests the study, 47 healthy controls who do not have exclusion criteria were evaluated. Doppler ultrasound was performed for the assessment of CIMT to all participants. Results: Mean CIMT in COPD group and control group were 0.79 ± 0.16 mm and 0.616 ± 0.1 mm, respectively ($p < 0.001$). In logistic regression analysis that made to determine the parameters affecting atherosclerotic; it was found that CIMT was related to age with direct proportion ($p = 0.004$) and to FEV1% with inversely proportion ($p = 0.029$). Conclusion: Persistent low-grade systemic inflammation in COPD and atherosclerotic disease may possibly have been reported a factor in both pathologies. Early atherosclerosis and cardiovascular risks in adults with COPD increases independent of other risk factors. CIMT which shows direct proportion with age and inverse proportion with FEV1% is a non-invasive, easily applicable and cheap method that can be used in determining the risk of atherosclerosis.