

CORRELATION BETWEEN DYSLIPOPROTEINEMIA PARAMETERS AND THE MARKER OF SYSTEMIC INFLAMMATION C-REACTIVE PROTEIN IN COPD PATIENTS

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Abstract

Aim was to study the correlation between dyslipoproteinemia and systemic inflammation marker C-reactive protein in COPD patients.

Materials and methods. Retrospective data analysis of 66 cases of COPD patients aged 40-60 years was conducted. C-reactive protein (CRP) was assessed as a marker of systemic inflammation. We also measured the dyslipoproteinemia markers, such as total cholesterol (TC) and low-density lipoprotein cholesterol (LDLC). Using paired linear regression method there was studied an effect of CRP level on some dyslipoproteinemia indices in COPD patients.

Results. The average level of CRP was 11.60 ± 5.54 mg/l, demonstrating the presence of a systemic inflammation in study patients. We revealed a linear correlation between CRP and TC ($r = 0,7 \pm 4,7$). There was even stronger correlation between CRP and LDLC ($r = 0,8 \pm 3,5$).

Conclusion. In patients from this retrospective study, a correlation between the levels of CRP and TC/LDLC as the indicators of high risk of atherosclerosis was found. Therefore, it is possible to assume in COPD patients, it is feasible to screen the level of TC and LDLC for prevention/early diagnosing of atherosclerosis, which in turn is the leading cause of death worldwide.

Key words: chronic inflammation, atherosclerosis, COPD, C-reactive protein, dyslipoproteinemia.

Ukr. Pulmonol. J. 2024;32(1):46–48.

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