

Abstract

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Isoforms of apolipoprotein C-I associated with individuals with coronary artery disease.

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OBJECTIVE AND METHODS: Apolipoprotein C-I (apoC-I) is a 6.6kDa serum protein associated with high density lipoproteins (HDL) and triglyceride-rich lipoproteins. In this study, apoC-I was examined in high density lipoprotein subfractions from individuals with and without coronary artery disease (CAD).

RESULTS: New isoforms of apoC-I, were detected in the cohort of individuals with CAD using mass spectrometry while the expected apoC-I isoforms were absent. In addition, the apoC-I mass spectra for the CAD cohort had satellite peaks indicative of the involvement of oxidative processes.

CONCLUSIONS: Further analysis of the mass spectra of the CAD and non-CAD cohorts suggest that the origin of these new isoforms may be due to genetic mutations that could compromise the function of apoC-I.

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