

Decreased HDL, LDL and TG - A New Tool for Acute Peri/Myocarditis Diagnosis

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Background

Acute peri/myocarditis remains a challenging disease to diagnose with the possible confusion with myocardial infarction. Therefore this study aims to investigate lipoprotein alteration as a potential tool for identifying acute peri/myocarditis.

Methods

Sixty one consecutive patients 59 (96.7%) males age 31.4±10.5 years, with first episode of acute peri/myocarditis were enrolled in the study. Acute peri-myocarditis diagnosis was confirmed by the following: clinical history, electrocardiographic evidence of ST elevation or PR depression, elevated inflammation markers and echocardiographic findings. Patient's detailed medical history, EKG, echocardiography and blood tests including lipid profile were obtained within 24 hours after admission. Follow up examination repeating the same parameters were obtained upon recovery.

Results

Markedly decreased level of HDL was observed, 81.4% of the patients had HDL < 35 mg/dL, 30.5% had extremely low level of HDL < 25 mg/dl. After recovery, HDL level increased in all patients. Significant changes in the levels of LDL and TG were also observed.

	<i>Baseline</i>	<i>Follow-up</i>	<i>P value</i>
HDL	28.5±11.6	46.2±12.0	<0.001
LDL	81.1±24.4	95.9±27.5	<0.001
TG	116.9±67.1	140.5±75.2	=0.011

Conclusions

Low HDL, LDL and TG levels were found during acute peri/myocarditis. Marked reduction of HDL levels during acute peri/myocarditis is a new marker for the disease and may assist in differentiating acute peri/myocarditis from acute coronary syndrome.