

between CRP and total cholesterol levels and a weak negative correlation between CRP and HDL cholesterol levels were observed, however without statistical relevance.

Conclusions:

The results obtained establish a correlation between lipid profile and CRP levels in serum, contributing to the hypothesis that dyslipidaemias induce inflammatory reactions. Considering that high levels of total cholesterol, LDL cholesterol and triglycerides promote the development of atherosclerosis, the association of these parameters with higher CRP levels can be used as a risk marker for the development of cardiovascular complications.

Association between serum levels of C-reactive protein and lipid profile

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Introduction:

C-reactive protein (CRP) is an acute phase protein synthesized in the hepatocytes. Its concentration in the blood gets elevated in several inflammatory responses associated with infections, cardiovascular diseases and metabolic diseases. Abnormalities associated with lipid metabolism show alterations in low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, total cholesterol and triglycerides levels, which contribute to a systemic inflammatory state in which CRP might be involved, resulting in higher risk for severe complications like atherosclerosis.

Objectives:

To evaluate a possible correlation between CRP levels and lipid profile in the serum of an adult study population.

Methods:

In this study, 41 individuals (65.85% female and 34.15% male) between the age of 23 and 65 without any infection or active inflammatory condition were studied. CRP, LDL cholesterol, HDL cholesterol, total cholesterol and triglycerides levels were evaluated using spectrophotometry.

Results:

A moderate positive correlation was observed between CRP and LDL cholesterol levels ($p \leq 0.05$) and also between CRP and triglycerides levels ($p \leq 0.05$). A weak positive correlation