

Plasma Lipid and Lipoprotein Levels during the Menstrual Cycle

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Objective: Investigations on variation of lipids and lipoproteins are very important because they are risk factor for cardiovascular disease. The influence of menstrual cycle on plasma lipid and lipoprotein levels has not been extensively investigated.

Methods: The purpose of this study was to determine the levels of triglyceride, total cholesterol, HDL-C, LDL-C, ApoA1, Apo B and Lp(a) during the menses, follicular and luteal phases of the menstrual cycle in twenty women

Results: Our results showed that triglyceride, total cholesterol, LDL-C, Apo B and Lp(a) levels in luteal phases 31, 26, 32, 15, 34 % (respectively) were lower and HDL-C and ApoA1 35, 17 % (respectively) were higher than follicular phases respectively.

Conclusions: These findings support idea that the luteal compared with the follicular phase has a lipid and lipoprotein profile that associated with decreased coronary heart disease (CHD) risk. Also we conclude that differences in lipid profile between menstrual cycle phases need to be considered in the screening and medical monitoring of premenopausal women, especially those with borderline levels.

Keywords: Lipids, Menstrual cycle, Sex hormones