# An Analytical Study on the Effect of Chronic Liver Disease Severity and Etiology on Lipid Profiles

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**Abstract :** Background and Aims: The liver is integral to lipid metabolism, and a compromise in its function leads to perturbations in these pathways. In this study, we hope to determine the correlation between CLD severity and its effect on lipid parameters. We also look at the etiology-specific effects on lipid levels. Materials and Methods: This is a retrospective cross-sectional analysis of 250 patients with cirrhosis compared to 250 healthy age and sex-matched controls. Severity assessment of CLD using MELD and Child-Pugh scores was performed and etiological details collected. A questionnaire was used to obtain patient demographic details and lastly, a fasting lipid profile (Total, LDL, HDL cholesterol, Triglycerides and VLDL) was obtained. Results: All components of the lipid profile declined linearly with increasing severity of CLD as determined by MELD and Child-Pugh scores. Lipid levels were clearly lower in CLD patients as compared to healthy controls. Interestingly, preliminary analysis indicated that CLD of different etiologies had differential effects on Lipid profiles. This aspect is under further analysis. Conclusion: All components of the lipid profile were definitely lower in CLD patients as compared to controls and demonstrated an inverse correlation with increasing severity. The utilization of this parameter as a prognosticating aid requires further study. Additionally, preliminary analysis indicates that various CLD etiologies appear to have specific effects on the lipid profile – a finding under further analysis.

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