

Dyslipidemia and atherogenic indices in children with Transfusion dependent thalassemia

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Abstract

Objective- Assessment of lipid profile and atherogenic lipid indices in children with transfusion dependent thalassemia (TDT) and to compare them with matched healthy children. **Method-** The study group consisted of total 72 patients of TDT aged between 3-14 years while the control group had 83 age and sex matched healthy children. Estimation of fasting lipid profile and lipid indices - atherogenic index of plasma (AIP), Castelli risk index I and II, atherogenic coefficient were calculated and compared between the two groups. **Result** – Compared to the control group, the mean LDL, HDL, and cholesterol level were significantly lower among case group (P value < 0.001). The mean VLDL and triglycerides were significantly higher in case group (P value < 0.001). Lipid indices including atherogenic index of plasma (AIP), Castelli risk index I and II, atherogenic coefficients were significantly higher in TDT children. **Conclusion-** Dyslipidemia and increased risk of atherosclerosis were found in children of TDT as they had elevated atherogenic lipid indices. Our study underlines the importance of routine use of these indices in TDT children. Future studies should focus on lipid indices in this high group of children so that preventive strategies can be planned accordingly.

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