

28_ Prevalence of dyslipidemia in Indian children with poorly controlled type 1 diabetes mellitus
India

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COMPLICATIONS

Prevalence of dyslipidemia in Indian children with poorly controlled type 1 diabetes mellitus

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Abstract

Background

Children with type 1 diabetes having dyslipidemia are at increased risk of developing premature atherosclerosis and cardiovascular disease. The present study aims to determine the prevalence of dyslipidemia and its predictors in poorly controlled Indian children with type 1 diabetes.

Methods

The cross-sectional study included 235 children and youth (3-18 years) with type 1 diabetes having disease duration of at least 1 year. Demographic data and laboratory findings were obtained from patients' records.

Results

The prevalence of dyslipidemia in our study was 47.2% with abnormal low-density lipoprotein cholesterol being the most common lipid abnormality. Poor glycemic control and higher thyroid stimulating hormone values were important predictors of likelihood of dyslipidemia and hypertriglyceridemia. Despite a low percentage of overweight and obese children in our study, body fat percentage was a significant predictor of likelihood of high total cholesterol and abnormal high-density lipoprotein. Interestingly, 28 children under the age of 10 years were found to have dyslipidemia, which constitutes 11.9% of the total study group.

Conclusions

We found a high prevalence of dyslipidemia in children with type 1 diabetes including children under age of 10 years, which emphasize the need for early screening and regular monitoring of lipid profile in these children.