



High Prevalence of Lipid Disorders in Type 1 Diabetes—Time for Treatment?

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Type 1 diabetes is one of the most common chronic disorders in children and adolescents [1]. The disorder predisposes to atherosclerotic cardiovascular disease later in life [2]. Dyslipidemia is a forerunner of cardiovascular complications, making timely identification and management of lipid disorders important [3]. There is a paucity of information about the prevalence and determinants of lipid disorders in Indian children and adolescents with type 1 diabetes.

In this issue of the Journal, Selvaraj et al. report the prevalence and determinants of dyslipidemia in South Indian children and adolescents [4]. The authors identified a high prevalence of lipid disorders (67.3%), with LDL levels above 100 mg/dL being the most common abnormality. Poor glucose control, as reflected by high HbA1C, emerged as the most important predictor of lipid abnormality in the study. The authors reiterate the importance of good glycaemic control in preventing lipid disorders in type 1 diabetes. These observations are commensurate with other studies showing a high prevalence of lipid disorders in Indian children and adolescents with type 1 diabetes [5, 6]. Glycemic control is an important determinant of lipid levels in type 1 diabetes, as highlighted by a large study based on the SWEET cohort [7]. While the study highlights the need for lipid assessment in type 1 diabetes, the need for therapeutic interventions in individuals with elevated LDL cholesterol remains unclear. ISPAD guidelines for managing dyslipidemia in type 1 diabetes suggest initiating pharmacological treatment in individuals with a cholesterol level above 130 mg/dL after 11 y [8]. This is reflected by the fact that lipid-lowering therapy was not initiated in any subject despite the presence of lipid disorders in over two-thirds of subjects. Therefore, the

identification of lipid disorders in this setting appears to be of preventive rather than therapeutic value. A similar prevalence of lipid disorders in children below 10 y (67.9%) as their older counterparts is a critical observation of the study; a lack of information on follow-up and surrogate markers of cardiovascular disease limits its clinical implications.

The study is a poignant reminder of the need for assessing the lipid profile in type 1 diabetes; long-term studies with correlation to the pathological endpoint are, however, required to understand the course and implications of mildly elevated LDL cholesterol levels (100–129 mg/dL) and the need for therapeutic intervention in the setting.

Declarations

Conflict of Interest None.

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