

Dyslipidaemia in children with type 1 diabetes: A cassandran cause or a pollyannic perspective

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Diabetes is a multifaceted disease, with each individual exhibiting varying aspects of the syndrome at different times in their life. Diabetes has been classified, for ease of understanding, into various types, including type 1 and type 2 diabetes.¹ Many researchers, however, appreciate diabetes as a continuum, rather than as distinct numbered phenotypes. The use of descriptive such as double diabetes, type 1.5 diabetes, type 3 and type 5 diabetes bears testimony to this.²

Children and adolescents living with type 1 diabetes have unique necessities and needs.³ Diabetes care professionals should be aware of the nuances and niceties of their management. At the same time, they should not forget that persons living with type 1 diabetes are equally prone to the comorbidities and complications that occur in type 2 diabetes.⁴

Original research published by Raza et al from Karachi in this month's issue of Journal of Pakistan Medical Association highlight this fact⁵. Studying a cohort of children with type 1 diabetes, they report a high (55%) prevalence of dyslipidaemia. This finding is worrisome, to say the least. The authors find that dyslipidaemia is associated with poor glycaemic control, and may be caused by carbohydrate rich diet and lack of physical activity. They also find a link between severe dyslipidaemia and coeliac disease, and a significant prevalence of nephropathy, as measured by microalbuminuria.

This Cassandric viewpoint may be balanced by a Pollyannic perspective, however. Dyslipidaemia is an easily modifiable risk factor for cardiovascular disease. If screened for, and treated appropriately, it can improve long term health outcome. The lipid values serve as a motivational tool, to spur healthier food choices and physical activity patterns. They also act as a 'red flag', prompting screening for vascular complications such as

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nephropathy, and autoimmune comorbidities like coeliac disease.

The link between dyslipidaemia and coeliac disease is surprisingly significant.⁶ Deranged lipids may be part of the generalized inflammatory response, or may be a result of subclinical thyroid dysfunction. Either way, the coexistence of microvascular complications macrovascular risk factors, and autoimmune comorbidities, reminds us to view the child with type 1 diabetes from a holistic perspective.

A focus on dietary and lifestyle modification, along with lifestyle modification, along with regular screening for relevant risk factors and biomarkers, must be ensured. Along with the insulin advocacy that characterizes efforts at improving type 1 diabetes care,^{7,8} our work must be supplemented with social awareness and activation for vascular risk reduction.

Raza et al take an important step in this regard, as they seek to advance awareness and augment activities related to comprehensive care for type 1 diabetes. We commend the authors for their focus on an easily manageable clinical challenge which has immense public health relevance.

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