

## **What do we do with Lipid Levels measured as part of the National Paediatric Diabetes Audit ?**

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**Objective:** Macrovascular complications are rare in childhood, but screening for the risk factors (cholesterol, blood pressure and obesity) is important as modifications can prevent future adverse outcomes. The National Paediatric Diabetes Audit requires their measurement,(Ref. NPDA 2017) but only blood pressure and BMI contribute to key care processes. The current NICE (2016) guidance on childhood diabetes does not require lipid screening and has no specific advice on dyslipidaemia in type 1 diabetes.

**Method:** Interrogation of hospital diabetes database annual lipid results for those 12-19 years old children and young people (C&YP) under care of ENHIDE.

**Results:** Using published 'normal total cholesterol values' of up to 4 mmol/l, we found 52% of C&YP exceeded this value, and 15% had cholesterol levels above 5mmol/l. 9 C&YP (3%) had values of 6+mmol/l, raising the possibility of additional familial hypercholesterolaemia (FH), which can co-exist with lipid changes seen in diabetes

**Conclusions:** Analysis of the data determined a significant number of C&YP with diabetes have established lipid abnormalities, which are not being actively treated. There are currently no clear guidelines for managing paediatric dyslipidaemia. Pharmacological management in childhood is controversial, and recommended management is lifestyle modification by diet and exercise although data on the benefits in CY&P is lacking. The impact of statins on surrogate measures of macrovascular complications in CY&P with Type 1 diabetes is contentious. The potential of concomitant FH requiring consideration of statin therapy post puberty would be in line with national guidance and requires a detailed family history.

### **Abstract 247 Words**

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