

Serum lipids in treated diabetic children and their families.

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Fasting lipid concentrations have been measured in fifty treated juvenile diabetics, their siblings and parents to determine which types of hyperlipoproteinaemia co-exist with juvenile diabetes and whether the abnormalities relate to diabetic control, or represent familial disorders. Lipid concentrations amongst the parents did not differ from adult control. Triglyceride concentrations were significantly higher in those diabetic children with fasting blood glucose concentrations greater than 10 mmol/l than those with concentrations less than 10 mmol/l. The latter group had similar triglyceride levels to non-diabetic siblings. Cholesterol concentrations were not related to fasting blood glucose and were similar in diabetic and sibling controls. Hyperlipoproteinaemia (types IIa, IIb and IV) was present in ten of the diabetic patients. Six of the nine diabetic patients with raised cholesterol had at least one parent with cholesterol in the highest quintile for the control population, whereas only six of the forty-one with lower levels had parents in this category. A similar trend for cholesterol was apparent amongst the non-diabetic siblings. However, no association was apparent between the triglyceride levels of diabetics (or their siblings) and parents. Thus although hyperlipidaemia associated with juvenile diabetes appears to be largely due to inadequate control, raised cholesterol concentrations frequently occur.