To investigate whether type 2 diabetes susceptibility genes and body weight influence the development of islet autoantibodies and the rate of progression to type 1 diabetes. Genotyping for single nucleotide polymorphisms (SNP) of the type 2 diabetes susceptibility genes CDKAL1, CDKN2A/2B, FTO, HHEX-IDE, HMGA2, IGF2BP2, KCNJ11, KCNQ1, MTNR1B, PPARG, SLC30A8 and TCF7L2 was obtained in 1350 children from parents with type 1 diabetes participating in the BABYDIAB study. Children were prospectively followed from birth for islet autoantibodies and type 1 diabetes. Data on weight and height were obtained at 9 months, 2, 5, 8, 11, and 14 years of age. None of type 2 diabetes risk alleles at the CDKAL1, CDKN2A/2B, FTO, HHEX-IDE, HMGA2, IGF2BP2, KCNJ11, KCNQ1, MTNR1B, PPARG and SLC30A8 loci were associated with the development of islet autoantibodies or diabetes. The type 2 diabetes susceptible genotype of TCF7L2 was associated with a lower risk of islet autoantibodies (7% vs. 12% by age of 10 years, \( P = 0.015 \), \( P \text{(corrected)} = 0.18 \)). Overweight children at seroconversion did not progress to diabetes faster than non-overweight children (HR: 1.08; 95% CI: 0.48-2.45, \( P > 0.05 \)). These findings do not support an association of type 2 diabetes risk factors with islet autoimmunity or acceleration of diabetes in children with a family history of type 1 diabetes.
diabetes.

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