RESPONSE TO COMMENT ON STECK ET AL.

Early Hyperglycemia Detected by Continuous Glucose Monitoring in Children at Risk for Type 1 Diabetes. Diabetes Care 2014;37:2031–2033

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We thank Brancato and Provenzano (1) for their comments on our article (2). They pointed out their previously published study (3) of continuous glucose monitoring (CGM) in 31 islet autoantibody–negative children with incidental hyperglycemia, followed for 6–48 months for development of diabetes. Incidental hyperglycemia was defined as fasting or random, blood glucose ≥126 or ≥200 mg/dL, respectively, without symptoms of diabetes and not confirmed by retesting. Seventeen of these subjects developed diabetes, 2 diagnosed with type 1A diabetes (as they developed autoantibodies), 5 diagnosed with type 1B diabetes (autoantibody negative with fasting C-peptide at diagnosis <0.6 ng/mL), and 10 diagnosed with either maturity-onset diabetes of the young or type 2 diabetes. As the authors mentioned, the rate of progression to diabetes (17/31) was much higher than in a large multicenter Italian prospective study (4) that had followed 748 children for a median of 42 months (range 1 month to 7 years) where only 2.1% of the subjects became insulin dependent. Similar low risk of progression to diabetes among children with incidental hyperglycemia was reported in a 1989 article by Schatz et al. (5) from the U.S. population. All children with incidental hyperglycemia who progressed to diabetes in the multicenter Italian (4) and the U.S. population (5) were positive for islet autoantibodies, providing evidence for the accepted consensus that in children incidental hyperglycemia does not increase the risk of diabetes in the absence of islet autoantibodies. While children followed by Brancato et al. (3) do not seem to be representative of incidental hyperglycemia cases seen in the general population, we agree that their study and our study, performed in islet autoantibody–positive subjects, provided consistent preliminary evidence for predictive value of CGM metrics in prediabetic children, regardless of their islet autoantibody status. A larger prospective study in islet autoantibody–positive subjects is warranted.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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