Earlier puberty in boys with type 1 diabetes mellitus compared to a simultaneously recruited group of control adolescents

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Background: Recent studies have suggested that there is an earlier age of onset of puberty in healthy boys. However, no study has determined the age of pubertal development in boys with type 1 diabetes (T1D) and compared the results with a simultaneously recruited group of healthy children. Objective: The aim of this study was to evaluate the age of pubertal events in boys with TD1 and determine whether the duration of diabetes, metabolic control or insulin dose are associated with the age of puberty in boys with T1D. Methods: Boys aged 7 to 19 years with T1D (n = 148, age 12.9 ± 3.0 years) and healthy boys recruited from schools (n = 388 controls, age 12.8 ± 2.2 years) were studied. A pediatric endocrinologist evaluated pubertal development. Results: Boys at genital Tanner stage 2 and the final stages of puberty (genital Tanner 4 and 5) were younger than the control group (P = 0.005, P = 0.003, and P = 0.015, respectively