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Depressive Symptoms, Emotion Dysregulation, and Bulimic Symptoms in Youth With Type 1 Diabetes: Varying Interactions at Diagnosis and During Transition to Insulin Pump Therapy.

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Abstract

This study evaluated the associations between depressive symptoms, emotion dysregulation and bulimic symptoms in youth with type 1 diabetes (T1D) in the context of the diagnosis and treatment of T1D. Study participants were 103 youth in 2 distinct groups: newly diagnosed (New) or transitioning to pump therapy (continuous subcutaneous insulin infusion [CSII]; "Pump"), who completed questionnaires regarding symptoms of depression, emotion dysregulation, and bulimia. Glycemic control (A1c), height, weight, and questionnaires were evaluated within 10 days of diagnosis (n = 58) or at education/clinic visit before starting insulin utilizing CSII (n = 45). In the newly diagnosed group, only depression accounted for significant variance in bulimia scores ($\beta = .47$, $P < .01$). For the group with disease treatment experience (Pump), but not for the newly diagnosed group (New), greater depressive symptoms and

emotion dysregulation were associated with greater bulimic symptoms. Depressive symptoms and emotion dysregulation, an indicator of poor coping/behavioral control, could help explain adoption of disordered eating behaviors in youth with T1D who are transitioning to pump therapy.

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Impact of type 1 diabetes mellitus and celiac disease on nutrition and quality of life.

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Abstract

OBJECTIVE: Type 1 diabetes mellitus (T1DM) and celiac disease (CD) are autoimmune diseases and have similar genetic patterns. T1DM treatment is based on diet, physical activity and insulin therapy, whereas CD depends on dietary changes with restriction of wheat, rye and

barley. The aim of the study was to evaluate the quality of life (QoL) of individuals with the association of T1DM and CD, to characterize their nutritional status and to compare it with those with only one disease and healthier controls.

SUBJECTS/METHODS: Sixty patients controlled by sex, age and body mass index (BMI) were stratified by previous diagnosis in: T1DM and CD (DMCD group); T1DM (DM group); CD (CD group); or healthy participants (HC). The SF-36 questionnaire was applied to assess psychological well being and results were compared with glycemic control and presence of complications related to diabetes, adhesion to gluten-free diet (GFD). Nutritional status and body mass composition were determined by BMI, waist circumference, bioimpedance, general laboratory tests and whole-body densitometry.

RESULTS: The time of diagnosis of T1DM was similar between DMCD and DM groups; however, the duration of CD was significantly higher in the CD group compared with DMCD. The SF-36 analysis revealed statistically significant differences between DM and HC groups in two domains: general health (P=0.042) and energy/vitality (P=0.012). QoL was also correlated with compliance to a GFD, and scores were similar in both groups: DMCD and CD. Forty percent of individuals in the CD group had visceral fat area above 100 cm2, as opposed to 20% in the other groups.

CONCLUSIONS: Individuals of DMCD group had similar scores to DM, CD and HC on QoL, as well as on their nutritional status and bone metabolism. Thereby, we should conclude that the association of T1DM and CD did not deteriorate their health status.

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Biopsychosocial Aspects of Weight Management in Type 1 Diabetes: a Review and Next Steps.

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Abstract

PURPOSE OF REVIEW: This review aims to summarize the type 1 diabetes (T1D) and weight literature with an emphasis on barriers associated with weight management, the unique T1D-specific factors that impact weight loss success, maladaptive and adaptive strategies for weight loss, and interventions to promote weight loss.

RECENT FINDINGS: Weight gain is associated with intensive insulin therapy. Overweight and obese weight status in individuals with T1D is higher than the general population and prevalence is rising. A variety of demographic (e.g., female sex), clinical (e.g., greater insulin needs), environmental (e.g., skipping meals), and psychosocial (e.g., depression, stress) factors are associated with overweight/obese weight status in T1D. Fear of hypoglycemia is a significant barrier to engagement in physical activity. Studies evaluating adaptive weight loss strategies in people with T1D are limited. There is a growing literature highlighting the prevalence and seriousness of overweight and obesity among both youth and adults with T1D. There is an urgent need to develop evidence-based weight management guidelines and interventions that address the unique concerns of individuals with T1D and that concurrently address glycemic control.

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