



שם: פרופר- לוינסון תמר

שם העבודה: Disordered Eating Behaviors Among Adolescents with Type 1 Diabetes

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Abstract

Background- Disordered eating behavior (DEB) is more common in young individuals with type 1 diabetes (T1D) than among young individuals in the general population. These behaviors are associated with poor glycemic control as well as various medical complications. T1D treatment necessitates a special dietary regimen that focuses greatly on food and eating patterns which can affect eating behavior and diet quality. It also requires intensive insulin therapy, which is sometimes associated with weight gain. These factors, along with the burden of diabetes management, may contribute to the development of DEBs. The modified dual pathway model provides a theoretical explanation for the development of DEB in individuals with T1D, and proposes that they develop DEB through several mechanisms, including: an increased focus on food, weight changes resulting from initiation of insulin therapy, and fluctuations in blood glucose (BG) levels associated with an inappropriate insulin dose. In addition, the treatment regimen, involving either multiple daily injections (MDI) or continuous subcutaneous insulin infusion (CSII), may affect DEB. The transition to CSII can normalize eating on one hand, but on the other hand can lead to an over-occupation around nutrition and carbohydrate counting. However, there are only a limited number of studies that examined the intersection of the association between T1D management and DEB, including the role of weight gain at the initiation of exogenous insulin, BG fluctuation, and implementation of CSII as contributing factors to the development of DEB among youth with T1D.

Aim- The aim of the study is to validate the modified dual pathway model for T1D adolescents, as well as to examine risk factors that contribute to changes in DEB after the implementation of CSII therapy.



Methods- Cross-sectional- Children and adolescents aged 10–21 years with T1D will be evaluated for DEB, weight gain at the initiation of exogenous insulin, BG fluctuations, dietary regimen, hunger and satiety dysregulation, body dissatisfaction, dietary restraint, diabetes-specific negative affect, HbA1c and insulin regimen.

Prospective cohort study- Children and adolescents, aged 10–21 years with T1D will be assessed 2 months before CSII initiation, at CSII initiation, 2 months after CSII initiation, and again 6 months after CSII therapy. Participants will be evaluated for DEB, BG fluctuations, dietary regimen, hunger and satiety dysregulation, HbA1c, height, weight and dietary intake.

The importance of the subject- Examining the entire modified dual-pathway model is crucial for a better understanding of the development of DEB in those with T1D. Understanding and expanding the knowledge regarding risk factors for DEB among youth with T1D, and examining the effect of implementation of CSII on DEB and dietary intake is crucial, and can help formulate essential recommendations for young patients with T1D.