A Case of Diabulimia in a 23-Year-Old Woman with Extensive Comorbidities

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Abstract

Diabulimia is the behavior of withholding insulin injections in the presence of type 1 diabetes (T1D) for the purpose of weight loss.

Diabulimia risk factors include female gender, body dissatisfaction, low self-esteem, depression, and family history of eating disorders. Many individuals with diabulimia persist in their behavior despite full awareness of the potential detrimental medical consequences. Diabulimia remains underrecognized in the patient population. Screening for diabulimia is recommended for young patients with T1D who are non-compliant with their diabetes care regimen. Multidisciplinary diabulimia management includes a diabetes management team, dietician team, and mental health team. The aim of this poster is to raise awareness of the condition and provide an overview of screening and treatment.

Introduction

Diabulimia is a significant problem among female patients with diabetes

- In a study by Polansky et al. (1994) of females with T1D ranging in age from 13-60 years, 31% reported having intentionally omitted insulin over the course of their disease
- 9% of respondents indicated this behavior occurred frequently
- Among those omitting insulin, half stated that weight control was the primary reason for their behavior

- While exogenous insulin is a mainstay of treatment for patients with T1D, weight gain is a known side effect

- Consequent suboptimal glycemic control was associated with increased rates of complications including neuropathy, retinopathy, and hospitalization

- Many individuals with diabulimia often persist with the behavior despite full awareness of the potential detrimental consequences

Literature Review

Fifteen-minute consultation: Diabulimia and disordered eating in childhood diabetes. Candler et al. (2018) summarize diabulimia risk factors including:

- female gender
- high body mass index prior to T1D diagnosis
- being diagnosed with T1D between 7-18 years of age
- dissatisfaction with bodily appearance
- low self-esteem
- history of depression
- family history of eating disorders

Treatment considerations:

- Screening for diabulimia with the modified Eating Disorder Inventory (mEDI), Diabetes Eating Problem Survey (DEPS), or the modified SCOFF (mSCOFF) questionnaire
- re-establishing a regular meal pattern, establishing intuitive approaches to meal planning, and relaxing carbohydrate counting
- conducting cognitive behavioral therapy and assess and address the impacts of T1D and eating disorders on daily living

Disordered eating behaviors in youth with type 1 diabetes. Kelly et al. (2005) recommend:

- encouraging “good” glycemic control over “optimal”
- having patients spend less time on their diabetes management during the recovery process
- avoiding positive reinforcement for any weight loss achieved during recovery
- considering family therapy, as poor family dynamics can exacerbate the patient’s condition

Case Report

The 23-year-old Caucasian female with T1D, anorexia nervosa, post-traumatic stress disorder, and major depressive disorder was hospitalized for diabetic ketoacidosis (DKA) without coma. Her history was significant for multiple hospitalizations for recurrent DKA. The patient admitted that she had been skipping insulin with the intention of losing weight, a behavior she had learned in childhood from other girls with diabetes. She reported eating about one meal daily. The longest she had ever gone was four days without food and one week without insulin. The patient had experienced four days of DKA symptoms including subjective fevers, chills, nausea and vomiting which led to the present hospitalization. After stabilization, the patient was discharged to a partial in-patient eating disorder program. Over the next several months, she had subsequent episodes of DKA and was eventually enrolled in an intensive outpatient home care program and eating disorder support group.

Therapeutic Approaches and Prognosis

- Screening is recommended especially among female adolescent patients with T1D with increased HbA1C levels, history of recurrent ketoacidosis, or significant weight loss

- Treatment should be initiated by a multidisciplinary group consisting of a diabetes management team, dietician team, and mental health team

- Prognosis includes lengthy physical and psychological recovery, complications from T1D, and possibility of relapse

Conclusions

- Diabulimia patients report overwhelmingly negative experiences with the healthcare system, and continued progress is needed to rectify this issue

- Due to the inter-specialty overlap inherent in diabulimia, healthcare professionals in all disciplines must become comfortable screening for, diagnosing, and treating diabulimia as well as other eating disorders

References

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