Eating Disorders and Type 1 Diabetes: Strategies to Navigate This Perfect Storm

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Disclosures

Speakers Bureau Novo Nordisk

Speakers Bureau AbbVie Inc.

Objectives

- Identify disordered eating behaviors reported by patients with type 1 diabetes mellitus
- Explain how eating disorders and disordered eating behaviors may be linked with type 1 diabetes mellitus
- List 3 components of the approach to treatment of patients with both eating disorders and type 1 diabetes mellitus
45-year-old woman who was diagnosed with type 1 diabetes mellitus at age 2 years. “I have always been aware of what I am eating”. In school, I “stuck out like a sore thumb”. Admission hemoglobin A1C 6.5%.

She had a history of overweight (height is 5 foot 7 inches (1.7 m) and weight 170 lbs. (77.3 kg) and BMI 26.6) in college and initially sought input from her endocrinologist.

She reported depressive symptoms for most of her life, but treatment for depression began in college. She also endorsed severe OCD symptoms.

Patient understands the skills to challenge these thoughts and is successful when coached.
In her own words...

“I hate my body”

“I’ve lost all the things that I used to like about my body, now I’m just flabby and fat.”

“All I want to do is just go exercise and I can’t”

Anorexia Nervosa and Type 1 Diabetes

Restricting Type with Excessive Exercise

Intense Fear of Weight Gain
21-year-old woman who was diagnosed with type 1 diabetes at age 17 months. Admission hemoglobin A1C was 7.8%.

- Recurrent DKA and recurrent episodes of severe hypoglycemia, including seizures. Hypoglycemia unawareness.
- 5 year history of insulin refusal and decreasing pump basal rates, while concurrently binge eating 5-6 hours each night and vomiting also each night. No use of diet pills, laxative or diuretics.
- Eventual use of an insulin pump allowed her to decrease her insulin doses markedly and provoke episodes of DKA more predictably than with injections.

Patient 2

- Depressive symptoms for three weeks prior to admission to the Center for Change, including active suicidal ideation with a preoccupation with death and dying.

- Posttraumatic Stress Disorder

- Systemic Lupus Erythematosus

- Gluten Sensitivity
“the needles . . . the shots . . . always gave me anxiety . . . I was not real compliant with the pin prick blood sugar checks.”

“I began to notice that if I missed my insulin . . . I would lose weight . . . I liked that . . . pretty soon I was missing doses all the time . . . my hemoglobin A1C was about 11.”

After her post-op sepsis and cardiac arrest, “I lost a ton of weight being in DKA . . . it was really great.” She states, “In the back of my mind, I knew the DKA was awful, but I lost so much weight.”

“Pretty soon, I learned to manipulate my insulin pump.”

“I was in DKA every week . . . I would go to the local hospital emergency room on Fridays . . . in DKA . . . go to the pediatric ICU. . . stabilize over the next forty-eight-hours, and return to school on Mondays. That Friday, the cycle would repeat.”

After admission to an inpatient eating disorders facility, “Emotionally, I started having a total meltdown . . . I had conflicts with my parents . . . in the next two weeks, I increased my meal plan and insulin compliance . . . but the last week, I went back to my eating disorder. I had a nervous break down . . . I pulled out my hair . . . I stopped eating anything . . . I refused my insulin . . .”
**Assessments by the Center for Change Team**

- Patient states she realizes she's missing out on life and wants to return to school and move on with her life.
- In family therapy, patient shared several "secrets" with her mother, including a time she was raped and several times she's used drugs. Patient reported she is always drug seeking and trying to "numb out."
- Very challenging family therapy sessions
- Discharged after 3 week admission. Relapsed after 6 months and readmitted one year later.

**Bulimia Nervosa**

- Sense of Loss of Control Over Eating
- Recurrent Purging to Prevent Weight Gain
  - Self-induced vomiting
  - Misuse of Insulin (Omission/Restriction)
  - Fasting
- Comorbid disorders... Major Depressive Disorder & Generalized Anxiety Disorder
- Posttraumatic Stress Disorder
37.9% of females (15.9% of males) age 12-21 with type 1 diabetes (T1DM) exhibit disordered eating behaviors (DEBs)

Eating disorders (EDs) and DEBs may be more prevalent in individuals with T1DM compared to their peers without diabetes

EDs and DEBs do not usually resolve without treatment

32.4% of females with T1DM have some form of disordered eating or weight control behavior

36% reported intentional omission of insulin
Morbidities and Mortality of T1DM

magnified and complicated by the

Morbidities and Mortality of EDs and DEBs

...emergence of the perfect storm...

Why EDs and DEBs May Be Linked with T1DM

- Persistent Focus on Food (also makes detection of EDs and DEBs in this population more difficult). The loss of spontaneity with meals and snacks.

- Catabolic weight loss at clinical presentation of T1DM...then anabolic weight gain, including imprecise and imperfect insulin replacement likely to promote excessive weight gain

- Unrealistic metabolic goals (even unrealistic incremental improvements) are sometimes expected by both patients and providers (perfectionism)
Why EDs and DEBs May Be Linked with T1DM

- Effect of T1DM on self-concept, body image and family and peer interactions

Treatment Approach

- Multidisciplinary team with a “New Beginning” or “Fresh Start” philosophy

- Healing and Rebuilding (Recovery is a Process). Creating a nonjudgmental treatment relationship and celebrating small successes are essential

- In my mother’s words, “Watch Your Mouth!”
Treatment Approach

* Diabetes Care Levels to ensure safe diabetes care during treatment (stepwise increases to higher levels based on patient’s progress with self-care)

* Discontinue insulin pump, but continue CGM

* Recovery-directed eating (Intuitive Eating)...a challenge with T1DM

Conclusion

“My Personal Injection”
In her own words...

“I want to take a moment to thank you... for helping me make a significant change in my life. I should have sent you this a long time ago, but I’m stubborn and hard-headed.

I have made a lot of changes since leaving.

Not only do I owe you a “thank you”, but I owe you and the staff an apology. I was in a downward spiral of self-hatred and self-pity. I was unwilling to admit that my life was out of my control. I was angry and unwilling to allow people to help me. I was emotionless, too weak to smile, too full of hate to love anyone especially myself and too numb to care.

Thank you does not begin to express how grateful I am to you and the program. I would not be where I am at today had I not been given a chance.”

References


References (cont.)