Bulimia in Diabetic Patients: A Review on Diabulimia

Latifeh Nezami¹, Froogh Abiri¹*, Esmail Kheirjoo²

Abstract

Objective: Eating disorder (bulimia) is common in young diabetic patients which may influence insulin levels. To reduce calories by manipulating insulin is known as Diabulimia. The purpose of this paper is to define Diabulimia and relative issues and highlight the need for early diagnosis and treatment of the disease. Studies showed that early diagnosis and intervention in the treatment of diabulimia can reduce the risk of premature death.

Keywords: Eating disorders, Bulimia, Diabetes, Diabulimia

Introduction

Diabetes mellitus is the most common chronic metabolic diseases in world. Diabetes causes many complications in different parts of the body. (1) Type 1 diabetes is often diagnosed in young people which the body is not able to produce insulin. Type 2 diabetes occurs at any age. This type of diabetes is prevalent and is characterized by insulin resistance. At the national and international levels, the incidence of diabetes is increasing (2). Studies showed that people with diabetes are at risk of death 3 times more likely than non-diabetics (3)

The World Health Organization estimates in 2050, there will be 300-200 million diabetic patients worldwide (4). In Iran, there are more than 3 million diabetic patients in over 20 years population (5), about 50% of diabetic patients are not aware of their diseases (6).

Disordered eating behaviors in diabetic patients

The chronic nature of diabetes has adverse psychiatric complications that make it difficult to control and treat. Therefore, along with training for their quality of life improvement, recognition of the psychiatric problems is an important part of comprehensive diabetes treatment. (7) Some groups of people are at greater risk for developing mental disorders such as diabetic patients. The incidence of psychiatric disorders in diabetic patients has been shown in several studies (8). Diabetes treatment depends on mental health and patients’ self-care. The poor self-care and self-
Monitoring blood glucose would increase complications of diabetes and decline of the quality of life. (9,10).
Mental disorder is a set of psychological conditions that cause discomfort to a person or incapacity in his or her behavior and thinking (11). The cause of mental disorders is not well known, but the main reasons are genetic and environmental factors (12). Eating disorders are one of the most significant mental / psychological disorders today. This type of disorder can cause physical and mental illness and affect the quality of life and may also increase mortality. The main cause of these disorders is still not well known and their treatment is difficult because many patients are disinclined to use current treatments (13).
Eating disorders can modify the pattern of food and nutrient intake which cause nutritional disturbances and threaten the health. Regarding what mentioned above, evaluation of abnormal eating habits and behaviors is important in evaluating the mental health of people (14). According to the fifth Diagnostic and Statistical Manual of Psychiatric Disorders (DSM-5), eating disorders have different types such as psychotic overeating (bulimia) as the most important and common. Psychotic overeating involves the unusual ingestion of a large amount of food and the feeling of lack of control during eating that occurs at least twice a week for six months (15). People with bulimia strongly blame themselves for overeating and the physical appearance. As a result, they try to compensate their overeating and refine themselves after overeating by vomiting, using laxatives, diuretics, other medications, fasting or vigorous exercise. The feelings of shame and distress lead to severe depression (12).
Self-esteem of patient suffers from bulimia affects the shape and body weight. Often this disease is hidden due to shame and clean-up after overeating. These patients use variety of diets but ultimately fail to eat because of dietary restrictions. In this case, it is said that the patient is in an alien state and struggles to get rid of the signs of the disease (16).
In general, 15 to 20% of the population is affected by eating disorders and 80% are female (15,17). Psychological causes of eating can include low self-esteem, feeling of incompetence, depression, anxiety and stress. In patients with bulimia nervosa, mood disorders and impulse control disorders are more prevalent. Also, medical evidences suggested that overeating can lead to serious health problems such as high blood pressure, diabetes, high cholesterol, heart attacks, cancers and arthritis (18).
Despite their mental suffering and high mortality, these patients do not accept their disturbances, support of families and friends, recognition from professional medicine and treatment interventions. It also disrupts the person's interpersonal relationships, destroys the current and future career and job position, and jeopardizes one's financial security. Social understandings of these patients are poor and sometimes distorted in interpersonal relationships (17).
The prevalence of bulimia in lifetime is 1.5% in women and 0.5% in men (11). The word diabulimia is a combination of two words, diabetes and bulimia. Symptoms of this disorder include rapid weight loss, sporadic eating patterns, obsession to shape and body weight, lethargy, flatulence, high and abnormal levels of blood glucose, ketone odor in breathing and urine (19,20). The combination of socio-cultural factors, psychological behaviors and psychological changes that occur during sexual maturation may be associated with increased eating behaviors (21).
In fact, cultural-social factors cover the beliefs and behaviors of people with eating disorder (22). People with diabetes as well as other eating disorders can appear with poor body impairment (an impression of a person's apparent defect or defect). This disorder is a type of obsessive-compulsive disorder and anxiety disorder (23). Past studies showed that girls with type 1 diabetes are more likely to
Diabulimia
develop eating disorder than non-diabetic girls (20).

The strategy of weight loss, especially when it is performed by the removal of insulin, leads
to diarrhea as a method of cleansing (24). The
process of insulin removal is reported in
adolescents with impaired eating with type 1 diabetes, and overeating and low-dose insulin
are one of the most common methods for
weight loss in adolescents (25).

In North America, about 19 women with type 1 diabetes have been studied; after 4 to 5
years, 71% of those who had normal diet had
eating disorder and the number of women who
had eliminated their own insulin rose from
14% to 34%. These behavioral disorders are
associated with vascular complications,
including retinal disease and impaired
metabolic control (26). On the other hand,
some diabetic patients reduce the insulin doses
due to their cognitive problems, phobic needle
anxiety, mood disorders, social barriers and
anxiety about blood glucose deficiency (20).

Some groups are at greater risk of developing
mental disorders such as diabetic patients. The
majority of psychiatric disorders in diabetic
patients have been shown in several studies
(8,27). The impact of diabetes on
psychological growth puts adolescents at risk
of eating disorders. The presence of an eating
disorder in adolescents with diabetes has a
direct impact on blood glucose control and
early onset of diabetes complications. There is
an ever-increasing diagnosis of the eating
disorders such as bulimia in diabetic patients
(28).

Discussion

Eating disorder is a major problem in
developed countries and is the cause of
physical and psychological disorders among
young women and adolescents in western
countries. Although diabetic has been started
since 1980, it has not been recognized as a
medical or psychiatric diagnosis yet. Type 1
diabetes and eating disorder often affects
adolescents and young people, especially
women. People with diabetics also suffer from
other abnormalities associated with eating
behaviors, since they take a diet or exercise in
order to control their weight and overcome
their dissatisfaction with the body. Diabulimia
is associated with macrovascular and
microvascular complications.

Regardless of diagnosis, the support of
affected people is also important, such as
building a diabetic campaign and teaching
various eating disorders that can increase the
knowledge of diabetic young people and
healthcare professionals working with type 1
diabetes patients.

Conclusions

Early diagnosis of Diabulimia is important for
prevention of eating disorders in order to
prevent it. Timely intervention and treatment
can be a major way to prevent chronic long-
term illness and mortality in young people
with type 1 diabetes.

Suggestions

It is suggested that future studies be carried
out by screening for eating disorders among
people with diabetes.

References

1. Rezaye N, Tahbazi F, Kimyagar M, Alavymajd H.
Effect of nutrition education on knowledge, attitude
and practice of patients with type 1 diabetes in
Aligodarz City. Journal of Shahrekord University

2. Yi-Frazier J, Hilliard M, Cochran K, Hood K.
The Impact of Positive Psychology on Diabetes

3. Jaffa T, McDermott B. Eating Disorders in
Children and Adolescents. Cambridge University
Press. 2006;177-8.

4. Hussain A, Clausen B, Ramachandran A,
William W. Prevention of type 2 diabetes. Diabetes

5. Larjani B, Abolhasani F, Mohajer Tehrani MR,
Tabatabaei Malazy O. Prevalence of diabetes
mellitus in Iran in 2000. Iranian Journal of Diabetes


