Diabulimia

Diabulimia is an eating disorder which often occurs among people with Type 1 diabetes. Khalida Ismail, Professor of Psychiatry and Medicine, King’s College London, and Libby Dowling, Senior Clinical Advisor, Diabetes UK, describe the symptoms, risk factors and complications of diabulimia and the role of healthcare professionals in managing this complex condition.

The term ‘diabulimia’ is not yet recognised as a separate medical or eating disorder, but it is best described as having three key features: it is the practice of deliberate insulin omission in order to lose weight; and it only occurs in people with Type 1 diabetes.

The Diagnostic Statistical Manual of Mental Disorders Fifth Edition states that insulin omission in order to lose weight is a clinical feature of anorexia and bulimia, but does not call this diabulimia. However, diabulimia is recognised in the latest draft NICE guidance for eating disorders.

Individuals with Type 1 diabetes are approximately twice as likely to develop both sub-threshold or diagnostic eating disorders compared with the general population. It has been estimated that around 30–40 per cent of women with Type 1 are using insulin as a method of controlling their weight. Around 10 per cent of adolescent boys with Type 1 diabetes may omit or reduce insulin to lose weight.

Symptoms of diabulimia

The following are common symptoms and clinical features of diabulimia. It is important to exclude other medical and psychiatric explanations.

- recurrent diabetic ketoacidosis (DKA)
- persistent non-DKA hyperglycaemia
- fear of gaining weight or distorted body image
- weight loss/low body mass index (BMI)/fluctuation in weight
- early onset of diabetes complications, especially retinopathy
- fear of injecting insulin
- reluctance to be weighed
- not attending diabetes appointments
- avoidance of blood glucose monitoring
- depression, anxiety or diabetes distress
- pubertal delay, growth retardation, amenorrhea or irregular menses
- usually a normal appetite or bingeing behaviours
- an encyclopaedic knowledge of nutritional composition of foods
- loss of function, such as academic and work performance, difficult interpersonal relationships.

Risk factors & complications

There is insufficient research on understanding who is most at risk of diabulimia. However, it is thought that worries about weight gain on insulin may contribute, as a psychological side effect of recommended management of Type 1 diabetes, which requires a mental focus on food composition and amount. NICE guidance recommends the use of a basal bolus insulin regimen and, in certain circumstances, pump therapy, which requires accurate carbohydrate counting to establish correct insulin dosage for optimal glycaemic control.

This can make some individuals, perhaps those already worrying about their body image, experiencing other emotional stresses in their lives, or very distressed about the diagnosis of Type 1 diabetes, more vulnerable to an eating disorder. Specific aspects of diabetes management that have been identified as contributory factors that can lead to an eating disorder among people with Type 1 diabetes include:

- attention to food labels
- attention to weight
- loss of impulse control during hypoglycaemia
- constant awareness of numbers
- family dynamics, such as unhelpful expressed emotions
- shame over management
- experience of healthcare professionals as critical or threatening
- difficulty dieting due to insulin therapy
- initial sudden weight gain following commencement of insulin therapy
- feelings of depression, guilt, burden.

These factors do not exist by themselves, and diabulimia usually develops from a complex combination of biological, psychological and social interactions. Diabulimia brings forward the onset of diabetes complications, with a two to three-fold increased risk.

It is thought that severe diabulimia is associated with rapid fluctuations in capillary blood glucose and the microvasculature is very sensitive to this, as well as to persistent high blood glucose levels.

The role of the diabetes healthcare professional

Diabetes healthcare professionals are in a special position to recognise the potential signs and symptoms of diabulimia, and are at the front line for providing support. There is an urgent need for healthcare professionals to have better awareness of the predisposing factors to the condition. Consequently, it is crucial that sufficient time, resources and training are in place to identify and support people with diabulimia, and their families, effectively.

A clinical mindset shift is needed in that professionals must consider psychological factors in all episodes of DKA, if there is no obvious medical explanation such as infection or injury, and to always consider diabulimia as an explanation for recurrent DKA. In addition to developing an open, trusting approach with individuals with Type 1 diabetes, healthcare professionals should maintain a
non-judgemental approach to encourage disclosure about diabetes management. Most people with diabulimia are distressed by it and want help. It is also extremely important that they avoid comments or procedures that may trigger insulin omission, e.g. over monitoring of weight or excessive warnings or threats about impending diabetes complications, as these lead to a fearful anxiety response and subsequent avoidance of self-management.

**Treatment**

Early detection and management of disturbed eating behaviour is important to improve health outcomes for individuals with Type 1 diabetes and an eating disorder. Treatment for diabetes with a co-existing eating disorder is complex – as recommended treatment for one condition is contrary to that for the other. For example, recommended diabetes management requires meticulous attention to food composition and amount, whereas managing an eating disorder successfully requires a removal of focus on food. In diabetes, precision is key, while in eating disorders an attitude of relaxation around strict goals and behaviours prevails. Physical and psychological care are equally important – if brain function is compromised by poor diabetes control or a low BMI, psychological therapy will be less effective. Also, emotions about food and body shape must be taken into account if diabetes education is to be effective. The following principles for management of diabulimia are recommended:

- a multidisciplinary team approach, combining diabetes and mental health clinicians, with open and frequent communication
- setting realistic expectations and goals
- safety as the primary objective – tight glycaemic control is rarely appropriate initially
- maintenance of recommended screening for complications.

**Case study: King’s Health Partners**

An example of good practice in managing diabulimia is the service at King’s Health Partners (KHP), which is an academic health science centre with two teaching hospital acute trusts (King’s College Hospital, Guy’s and St Thomas’ Hospital), a mental health trust (South London and Maudsley Hospital) and a university (King’s College London). After an assessment, patients are offered a range of treatments – all integrated with high-quality diabetes care as part of a multidisciplinary team. These can be nurse-led diabetes-focused cognitive behaviour therapy or cognitive analytical therapy, longer-term psychodynamic psychotherapy, family work, psychotropic medications, graded insulin titration, dietary advice and, for extreme cases, inpatient care, second opinions and case management with other healthcare trusts outside of the KHP catchment area.

This model of integrating diabetes and psychological care in one clinical setting is in keeping with the wishes of people with Type 1 diabetes because they want to know that healthcare professionals understand their diabetes, as well as their minds, before they feel safe and confident enough to make a recovery. Previously, diabetes care was separated from the psychological care and this led to poor communication, different management plans and patients lost trust.

**REFERENCES**

7. Diabetics with Eating Disorders http://dwed.org.uk/
8. LD: personal communication
11. NICE (2015). Diabetes (Type 1 and Type 2) in children and young people: diagnosis and management. www.nice.org.uk/guidance/ng18?unlid=78425894201623665