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Case report/ Kazuistyka

Therapeutic traps in management of diabulimia in acute setting: A case report

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ABSTRACT

Objective: This case report deals with challenges faced in medical and psychological treatments of a patient with diabulimia. **Method:** Medical investigations, clinical measures – MMPI (Minnesota Multiphasic Personality Inventory), EDE-Q (Eating Disorder Examination Questionnaire), HAM-A (Hamilton Anxiety Rating Scale), HAM-D (The Hamilton Rating Scale for Depression), Y-BOCS (Yale-Brown Obsessive Compulsive Scale) as well as psychological tests such as TASIT (The Awareness of Social Inference Test), RME (Reading the Mind in the Eyes Test), TAS-20 (Toronto Alexithymia Scale), Stroop Colour and Word Test, TMT A and TMT B (Trail Making Test) have been used to identify the problems that the patient confronts. **Conclusion:** Managing diabulimia can be very challenging, especially if some of their symptoms cannot be explained medically solely. In this case the main problem experienced by the patient was nausea and vomiting. The cause of her symptoms was identified after extensive medical and psychological investigations.

Background

Diabulimia refers to eating disorders which people with type 1 diabetes deliberately manipulate insulin doses to control weight along with bulimic behaviour. Diabulimia is not currently recognized as a formal diagnosis of an eating disorder. Therefore there are no so many reported study cases about patients suffering from diabulimia. Multiple hospitalizations for ketoacidosis as a result of chaotic insulin intake and higher risk of developing medical complications, such as neuropathy, retinopathy, and nephropathy are cues to search for underlying disordered eating behaviour [1–3].

Depriving oneself of insulin for purposes of weight control is being considered as a form of medication misuse, which is listed as a recurrent, improper, compensatory behaviour. In DSM V [4] diabulimia applies to the category of "unspecified feeding and eating disorder" (UFED) 307.50, and in ICD-10 [5] it fits into the category "eating disorder, unspecified" F 50.9.

It is common phenomenon in clinical settings that patients with type 1 diabetes and poor treatment compliance have been already diagnosed with an eating disorder such as bulimia nervosa or anorexia nervosa [6]. Both service users and clinicians are often unaware that diabulimia is so prevalent with about one-third of diabetics

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between the ages of 15 and 30 engaging in this [2, 7]. Patients with diabulimia are estimated to have a 13-year-shorter life expectancy [2].

This case report deals with challenges faced in medical and psychological treatment of the patient with diabulimia who suffers from long-term diabetes mellitus type one.

Data of the patient: A.S., 30-year-old female.

Medical and psychiatric background

A.S. eating disorder started prior to her diagnosis of diabetes at her age of 14.

After an episode of bullying at school A.S. started cutting out her meals to lose weight because she felt people would like her more. She developed type II diabetes two years later when she was sixteen. At this age she could not come to terms with her diagnosis as she was asymptomatic and went into denial about it. In the meantime, her diet consisted mainly of chocolate purely to proof that the diagnosis is wrong. At the age of 18 she was diagnosed with Maturity Onset Diabetes of the Young and had to start taking insulin. Despite numerous consultations and encouragement from health care professionals and her parents she was not compliant with the treatment of her diabetes. The poor glycaemic control led to complications such as diabetic retinopathy, autonomic neuropathy, intermittent gastroparesis and intermittent renal impairment with resultant hyperkalemia, and neuropathic bladder leading to recurrent urinary tract infections. She had several admissions to York District Hospital for keto-acidosis and 4 operations for her diabetic retinopathy.

Subsequently, she developed depressive episodes at the age of 24 and administered inappropriate amount of insulin as a method of self-harm. In addition to that, she had several suicide attempts by trying to jump down the stairs and getting out of a moving car. She spent one year as an in-patient at specialist eating disorders unit in the UK before she was referred to another specialist ED inpatient setting. The primary treatment objective was to control her diabetes. She decided from there that she wanted to pursue her recovery. On admission her weight was 50.3 kg and her BMI was 17.61.

Social history

According to A.S. she has strong relationships with all family members. The patient was also in a heterosexual relationship. She did well at school and obtained a degree in mathematics. No history of using illicit drugs or excess alcohol.

AS finds her family supportive. She did well at school and obtained a degree in mathematics. She then had an administration job but had to leave due to her deteriorating health.

Physical examination on admission

Comfortable at rest, and haemodynamically stable. No sign of concern found on physical examination.

Mental state examination

Good eye contact and rapport were established. Speech was low in volume and slow in speed. Mood appeared subjectively and objectively low. She presented with obsessional thoughts around food and being fat. There was no thought block and the conversation was easily followed. No psychotic phenomena were elicited. There were no issues in relation to memory, language, comprehension and intelligence. She presented with limited insight into her health condition however was willing to accept the recommended treatment.

A.S. had mentioned that she was having fleeting suicidal thoughts and felt depressed. She had self-harmed with superficial scratching as a way of coping with her negative emotions. She expressed no thoughts to harm others.

Admission

She has had several informal admissions with minimal results to different specialist Eating Disorder units for the past two years with the diagnosis of anorexia nervosa. In every admission to an eating disorder unit she was spending most of the time on medical wards.

On admission the patient's weight was 50.3 kg and her BMI reached 17.61.

Her presenting complaints for admission were mainly nausea and vomiting due to diabetic ketoacidosis as well as coffee ground vomiting as a result of prolonged retching. Furthermore, she was very prone to urinary tract infections and had to be catheterized in numerous occasions due to urine retention.

One of her common presentations was feeling sick. Predominantly, each time an assessment or group activity was about to take place that she did not want to participate in, she was complaining of feeling sick. Despite giving strong anti-emetics her nausea did not settle. Her nausea was first thought to be due to her poor diabetic control since there was no other factor causing this symptoms.

After discussion with a consultant gastroenterologist a naso-jejunal tube was fitted endoscopically in order to give her stomach a rest. However it was removed due to her uncontrolled intake of insulin, which did not match her tube feed. Her blood sugar readings were fluctuating from 2.1 mmol/L to 30 mmol/L whilst an average fasting glucose level is around 4.5 mmol/L with a lows of down to 2.5 and up to 5.4 mmol/L [8]. Despite several insulin regimes and trying different combination of long and short acting insulin (Humulin I, Novorapid, Glargine) there was still no adequate glycaemic control.

Therefore, specific measurements were taken to keep her blood sugars within normal range. In order to do so, the exact amount of carbohydrates contained in each meal was calculated and the equivalent insulin was administered in a short acting form on top of her long acting background control. By using this method the blood sugars were more controlled. Despite these attempts it was not long that she started to be nauseas again and had several episodes of