



PCDS Mental Health Hub

Eating disorder in type 1 diabetes

Case presentation

Novo Nordisk has provided sponsorship to the PCDS to cover the costs of the development and hosting of the PCDS Mental Health Hub. The PCDS Mental Health Hub is designed to provide digestible, easy to access information through peer-led videos, linked CPD and printable HCP/patient reference sources to promote optimal care. Novo Nordisk has had no influence over the creation, development or content of these mental health e-learning modules and full control remains the full responsibility of the PCDS.

Patient profile: Lydia

Age – 55 years old

Presentation – Six years ago

- Dramatic weight loss (16 kg in 6 months)
- Lethargy, polyuria, polydipsia, nocturia, blurred vision
- Urinalysis: glucose 3+, ketones 3+

Referred to hospital and admitted for intravenous fluids

- New diagnosis of type 1 diabetes (T1D)
- Lethargy was the main complaint while in hospital
- She was keen to get back to exercise
- Current weight was 40.1 kg (BMI 18.4 kg/m²)



Diabetes management



Insulin detemir and insulin aspart started



Multidisciplinary team started education about T1D. Lydia was not keen about staying in hospital. She agreed to visit the outpatients department daily for education



Diabetes management



Insulin detemir and insulin aspart started



Multidisciplinary team started education about T1D. Lydia was not keen about staying in hospital. She agreed to visit the outpatients department daily for education



A week later ...



On leaving the ward, Lydia's blood glucose level was 14.9 mmol/l, ketones were 4.1 mmol/l, Hba1c was 147 mmol/mol



During the first week at home, her blood glucose was 6–18 mmol/l



Insulin dose adjusted



A week after discharge her weight was 43.4 kg; the weight increase caused Lydia considerable distress



A week later ...



On leaving the ward, Lydia's blood glucose level was 14.9 mmol/l, ketones were 4.1 mmol/l, Hba1c was 147 mmol/mol



During the first week at home, her blood glucose was 6–18 mmol/l



Insulin dose adjusted



A week after discharge her weight was 43.4 kg; the weight increase caused Lydia considerable distress



A week later ...



Ongoing education with the diabetes specialist nurse and diabetes dietitian; Lydia has a good understanding of insulin and diabetes



The dietitian provided advice about carbohydrates; Lydia agreed to keep a food diary



Lydia agreed not to exercise until her blood glucose levels had settled; she was, however, very keen to restart



Blood glucose readings 14-22 mmol/l; fasting blood glucose >12 mmol/l



Ten days after discharge ...



Lydia maintained contact with team and attended appointments



She was concerned that she still had blurred vision



Lydia maintained excellent routine blood glucose testing and showed a good knowledge of carbohydrate sources and portions; she admitted having a poor appetite at lunch time



Lydia restarted exercise (running, exercise classes and weights) 10 days after diagnosis; she reported feeling much better when she kept active; the team suggested adjusting insulin and avoiding exercise if her blood glucose exceeded 15 mmol/L



The team adjusted her insulin regimen to provide more basal than bolus insulin



Ten days after discharge ...



Lydia maintained contact with team and attended appointments



She was concerned that she still had blurred vision



Lydia maintained excellent routine blood glucose testing and showed a good knowledge of carbohydrate sources and portions; she admitted having a poor appetite at lunch time



Lydia restarted exercise (running, exercise classes and weights) 10 days after diagnosis; she reported feeling much better when she kept active; the team suggested adjusting insulin and avoiding exercise if her blood glucose exceeded 15 mmol/L



The team adjusted her insulin regimen to provide more basal than bolus insulin

Are there any issues
that you should be
concerned about?



12 weeks after diagnosis ...

Self-management deteriorated

- Lydia missed appointments; she often phoned to apologise and said she felt well
- She called the team after a weekend to report that she had omitted insulin and admitted she was struggling with diabetes
- She had been doing a lot of research and was aware of the risk of diabetic ketoacidosis

Admitted to an eating disorder

- Lydia admitted she has had an eating disorder from 17 years of age
- She says that the disorder was under control for many years; however, the diagnosis of diabetes and focus on food caused some issues to re-surface
- She binge eats (especially during the night), purges, takes laxatives and runs 5-10 miles a day, takes exercise classes and uses weights to control weight



12 weeks after diagnosis ...

Self-management deteriorated

- Lydia missed appointments; she often phoned to apologise and said she felt well
- She called the team after a weekend to report that she had omitted insulin and admitted she was struggling with diabetes
- She had been doing a lot of research and was aware of the risk of diabetic ketoacidosis

Admitted to an eating disorder

- Lydia admitted she has had an eating disorder from 17 years of age
- She says that the disorder was under control for many years; however, the diagnosis of diabetes and focus on food caused some issues to re-surface
- She binge eats (especially during the night), purges, takes laxatives and runs 5-10 miles a day, takes exercise classes and uses weights to control weight



Discussions with Lydia reveal ...



Her weight is 45.3 kg (BMI 20.4 kg/m²), she is “very unhappy at being this heavy”



Lydia declined referral to eating disorder team and psychologist; she had attended a psychologist years privately, while leaving in another area



She is at risk of re-feeding syndrome; Lydia reports experiencing re-feeding syndrome previously



Discussion between eating disorder team, GP, and consultant psychiatrist

Results of professional discussion

- Safety concerns, including a high risk of diabetic ketoacidosis
- GP assessed mental capacity
- Lydia understands information about diabetes
- She chooses not to take recommended insulin doses
- Lydia feels she can get back on track and get back in control

Results of discussion with Lydia

- Lydia describes two options; the “sensible option” which includes taking insulin as prescribed for food and the “control option” which limits the insulin/ omits the insulin ie the eating disorder has the control
- Diabetes gives a ‘bit more power to the control option’: insulin options give another level of power
- Lydia is keen to attend diabetes education programmes - but the criteria for the programme excludes eating disorder
- She is using the FreeStyle Libre 2, which provided more power and felt that “high” blood glucose levels were positive



Current situation



Lydia's engagement with the diabetes team is variable



She continues to decline support from the eating disorder team and psychologist



She is using insulin in small doses and managing to stay out of hospital



She declines to be weighed regularly



Hba1c 140mmol/mol (lowest was 58mmol/mol), weight 36.9 kg, BMI 16.3 kg/m²

