

## Guidance on Medical Management During Insulin Reintroduction

Initially, the aim should be toward modest blood glucose control with a gradual move toward tighter control. In most cases, the care team will assume responsibility for the diabetes care and gradually have patients resume responsibility as they demonstrate the ability and willingness to do so. For example, a patient who is admitted with an A1C of 13% (reflecting an estimated average glucose of > 345 mg/dl during the past 3 months), the aim would be to consistently and gradually improve serum glucose levels to run < 300 mg/dl for the first few days, then < 250 mg/dl for the next few days, then < 200 mg/dl, and so on until blood glucose is normalized. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Negotiate how much insulin she is willing to take initially, and set this as the goal. Increasing insulin too quickly worsens insulin edema and exacerbates complications, such as painful neuropathy. If this occurs, the patient may again reduce her insulin to make these uncomfortable symptoms subside, so increase the insulin slowly. A blood glucose target range in the 200's is a good place to start. As trust begins to build, slowly move forward with expectations for improved diabetes care.

Insulin distribution should be close to 50/50, background and fast acting. *Critchley S, Meier M, and Taylor D. Eating Disorders and Type 1 Diabetes: Practical Approaches to Treatment. Practical Diabetology. 2014 Mar/Apr:18-24.*

After a week or two of regular matching of insulin with food, patients find themselves struggling more with the eating disorder. Fear of weight gain, fear of food and/or fear of insulin use emerges or increases. *Critchley S, Meier M, and Taylor D. Eating Disorders and Type 1 Diabetes: Practical Approaches to Treatment. Practical Diabetology. 2014 Mar/Apr:18-24.*

It is important to constantly monitor medical stability of the patient. A relationship with an endocrinologist or other physician is vital for comprehensive treatment of the patient. *Critchley S, Meier M, and Taylor D. Eating Disorders and Type 1 Diabetes: Practical Approaches to Treatment. Practical Diabetology. 2014 Mar/Apr:18-24.*

If patients have been using an insulin pump, it should be discontinued, and the gradual process toward improved control should start with subcutaneous insulin administration. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Insulin regimens include establishing a basal insulin (long-acting insulin analog or intermediate-acting insulin) and a bolus insulin (fast-acting insulin analog) plan that

often includes a prescribed number of units per gram of carbohydrate consumed at a meal or snack. In addition, a hyperglycemia correction plan using a fast-acting insulin analog for blood glucose levels above the individualized target range should be determined. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Frequent testing of blood glucose should be conducted at the beginning of treatment. Testing frequency can be gradually decreased as blood glucose control becomes more stable and predictable. For example, patients may be instructed to begin with testing before meals and snacks, at bedtime, and twice during the night. Testing frequency can then be adjusted as needed. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Patients with ED-DMT1 may note faster improvements in their A1C with improved glycemic control than patients with diabetes but without an eating disorder. This is an unexplained observation to date, but it implies that more frequent A1C testing should be considered in this population. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Typically, insulin is administered before food intake; however, patients may refuse to eat or may limit their intake at meals. If a rapid-acting insulin analog has already been administered, this would put them at risk for hypoglycemia. Meal supplements with an equal number of carbohydrates may be used. In addition, preparations to treat hypoglycemia should include immediate availability of glucose tablets or simple-carbohydrate foods or drinks and a glucagon kit. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

Also, consider the timing of introduction of physical activity and the impact it may also have on insulin dosages, ratios and glycemic control. *Bermudez O, et al. Inpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):153-158.*

The treatment team must be willing to set small, incremental goals toward which patients feel they are able to work. It is important to note that intensive glycemic management of diabetes is not an appropriate early treatment goal for people with ED-DMT1. In fact, aiming for near normal glycemia too quickly can increase a patient's risk of developing retinopathy or worsening a preexisting condition and exacerbate neuropathy pain. The treatment team should establish a goal of gradually improving average blood glucose ranges over a period of months. *Goebel-Fabbri A, et. Al. Outpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):147-152.*

Insulin plans must be individualized for any patient with diabetes, including those with ED-DMT1. The most appropriate insulin plan should be determined on an individual

basis, and clinicians should consider factors such as lifestyle, type of eating disorder behavior (i.e., insulin restriction vs. bingeing/purging vs. calorie restriction), and overall progress in treatment. *Goebel-Fabbri A, et. Al. Outpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):147-152.*

A transition to a split-mixed insulin plan or the use of a premixed insulin such as a 70/30 formulation may improve regimen adherence until these patients are ready for a more complex insulin plan. (versus multiple daily injections or the use of a pump) *Goebel-Fabbri A, et. Al. Outpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):147-152.*

A sense of failure can result when clinicians, family members, or patients have unrealistic and perfectionistic expectations about blood glucose patterns. Establishing gradually improving and realistic blood glucose goals may also help to maintain patient motivation, decrease patient burnout, and decrease the risk of relapse or treatment drop-out. *Goebel-Fabbri A, et. Al. Outpatient Management of Eating Disorders in Type 1 Diabetes. Diabetes Spectrum. 2009;22(3):147-152.*

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