What Is Sliding Scale Insulin Therapy?

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Sliding Scale Insulin: The Pros and Cons

Sliding scale insulin therapy is one of the first methods used to treat type 1 diabetes. It is a strict therapy in terms of timing and relies on a rigid schedule when it comes to one's lifestyle. It has been phased out of most professional healthcare facilities as a treatment for T1D, but often times it can be the first method used since it is easy to understand.

What Is Sliding Scale Insulin Therapy?

Sliding scale insulin is all about injecting specific insulins at the same time every day. The basic requirements include at least one to two injections of long-acting insulin and three to four injections of fast-acting insulin to cover meals. Long-acting insulin is known as basal insulin and, in theory, should keep your blood sugar stable all day and night if you are not able to consume any food. A good way to remember that basal is like background insulin is to think of it as base insulin. Fast-acting insulin to cover meals is called bolus insulin.

In sliding scale insulin therapy, the patient takes the basal and bolus dose at the same time every day. This method does not accommodate changes in activity or schedule. This method takes into account what the blood sugar reading is before the meal. Depending on the reading, it will either administer more or less insulin for the bolus dose. In terms of flexibly, the patient must eat the same amount of carbohydrates at the same time every day for this method to work.

Personally, I started out with managing my diabetes this way. I was very strict with my schedule and because I was in high school at the time, it was not too difficult to maintain. I did not like the fact that I could not eat when I wanted and I found it to be too much food, too often. For a lot of people, this method is hard on their blood sugar and is one of the main criticisms of the sliding scale. For me though, my blood sugar was quite good while I was on it, but a big reason for that was that I was still going through my honeymoon phase (when the patients pancreas still produces a little bit of insulin) and I was also strict with my timing, which is one of the requirements for this method to work. I had a lot of support from my family to make this work and the hospital gave me many worksheets and training in order to master it. Unfortunately, this is not the case for a lot of type 1 diabetics, especially if they are diagnosed in adulthood. Many times, an adult is given basic information with limited tools for success when first diagnosed with type 1 diabetes.

Sliding Scale Dosing

Figuring out one's personal insulin dosing on the sliding scale method is tricky at the start and is determined by your doctor. They help you figure out how much basal insulin you need, what your carb to insulin ratio is (how many grams of carbohydrate to units of insulin to cover meals). In other words, they look at your bolus insulin doses and your insulin sensitivity factor (how many units of insulin will bring down your blood sugar). Figuring out dosing takes lots of trial and error and lots of measuring of blood glucose levels.

What Are the Pros of Sliding Scale Therapy?

Sliding scale is good for newly diagnosed patients. It allows the patient to begin to understand how insulin works in relation to their body and how much insulin they require to bring down their blood sugar. The method is also good for people who love schedules and already eat and exercise at the same time every day. This method works well for parents taking care of children diagnosed with T1D as it is a method that is straightforward and easy to understand. It requires the parents to be on top of it, but if they follow it to a T, there should not be any issues and it can bring comfort knowing they are doing the best they can. Sliding scale insulin therapy is also one of the cheapest ways to manage type 1 diabetes as it does not require an insulin pump or a CGM.

What Are the Cons of Sliding Scale Therapy?

As mentioned above, this method does not allow for flexibility. If a patient who has an irregular schedule is told to follow this for the rest of their life, it will end up being a total disaster. The reality is, most people living with T1D live very full, flexible lives, so adhering to this way of management can be extremely difficult and unsustainable. If this method is prescribed but not followed exactly, unpredictable blood sugar will ensue, which can be extremely hard to live with. Having rollercoaster blood sugars (high to low, high to low) every day can take a major toll on the body and leave a person feeling defeated and depressed. This is why the sliding scale method is being phased out in most professional health care facilities.

In Conclusion

As you can see, sliding scale insulin therapy can work well for people who enjoy a strict schedule and minimal variation in meals. For most people living with diabetes, it is not a viable or sustainable way to manage the disease. It can be a great learning tool for the newly diagnosed, but ultimately with the diabetes technology on the market today, there are easier ways of managing type 1 diabetes.