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Fear of hyperglycemia

“At any time of the day, no matter the hour, if my glucose was above 250, I would automatically stop whatever activity I was doing and dedicate myself to exercising until it dropped below that number.”

The fear of hyperglycemia as such has not been studied as extensively as the fear of suffering from hypoglycemia. However, it is often, though not always, associated with the more prevalent fear among people with diabetes: the fear of developing complications as a result of diabetes (1).

AVOIDANCE BEHAVIORS AND THEIR PERPETUATING EFFECT

While fear is healthy, when it is excessive, it becomes maladaptive fear.

An adaptive behavior related to hyperglycemia is characterized by allowing the person to manage their fear effectively, promoting better control of diabetes without compromising their quality of life.

On the contrary, maladaptive behaviors, although they temporarily reduce anxiety and fear, perpetuate the problem, can lead to poor glycemic control, and significantly reduce the quality of life. Let's see

the following example. A person has experienced an episode of diabetic ketoacidosis that required hospitalization. They have associated elevated glucose with the possibility of having another similar event.

When this intrusive memory pops up for any reason, their anxiety spikes. At that moment, the only thing that calms them is monitoring their glucose and confirming it is in range.

In this way, this behavior will be consolidated. However, the unintended effect of this mechanism is that the fear of encountering elevated glucose will become more and more intense. The consequence is that they will have to check much more often to confirm that this is not the case (illustration 1).

CAUSES OF EXCESSIVE FEAR OF HYPERGLYCEMIA

Among the factors that may contribute

to the origin of this fear, the following stand out:

Indirect fear associated with concern about future complications

As is known, inadequate glycemic control over time increases the risk of long-term complications such as kidney damage, blindness, or cardiovascular diseases, which leads to the fear of developing any of them (2).

The development of the Fear of Diabetes Complications Questionnaire (2) can be useful for exploring a person's concerns about diabetes complications. It consists of only 15 items, so it can be routinely implemented in the consultation care protocol. As of the publication date of this article, a Spanish version is not available.

Traumatic past experiences

Having suffered an episode of diabetic ketoacidosis (DKA) due to severe hyperglycemia may have led the person to de- »

ALTHOUGH MALADAPTIVE BEHAVIORS MAY TEMPORARILY REDUCE ANXIETY AND FEAR, THEY PERPETUATE THE PROBLEM

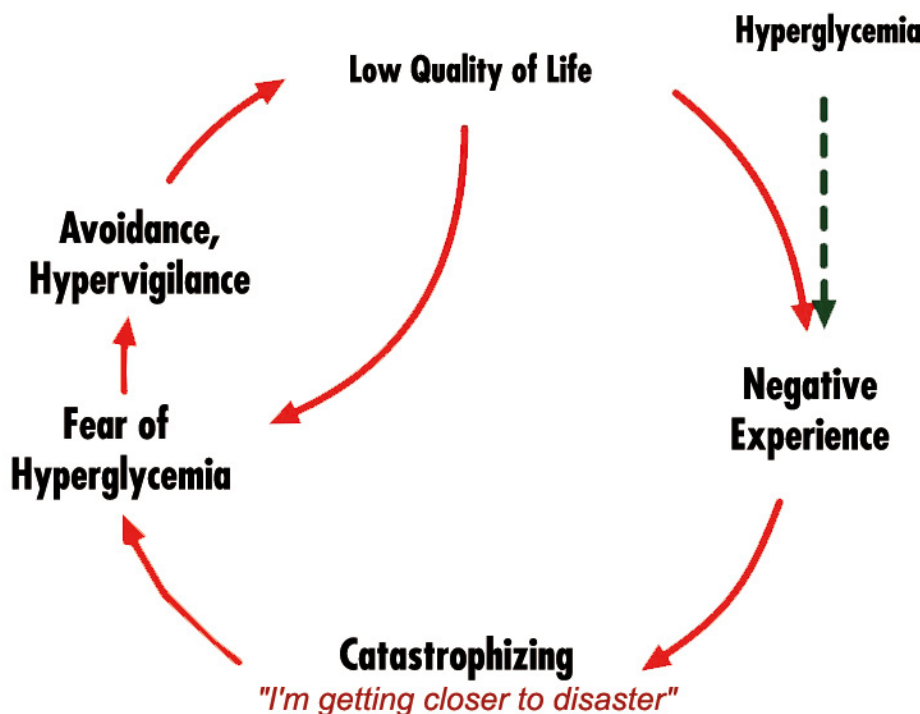


Ilustración 1

WHEN EDUCATING ABOUT DIABETES, SPECIAL ATTENTION SHOULD BE PAID TO MAKING SURE THAT THE PATIENT UNDERSTANDS WHAT HYPERGLYCEMIA IS, WHAT CAUSES IT, AND HOW TO MANAGE IT

» develop an exaggerated fear of experiencing another episode, especially if it was traumatic or involved hospitalization.

Having references from others who have developed complications

Knowing someone who has developed complications due to suboptimal diabetes control can increase the fear that the same may happen to them.

Alarming or biased information

Alarming information about the possible long-term complications provided by significant others (healthcare providers, parents, etc.), especially when the person is newly diagnosed, can lead them to develop a distorted image of what it means to experience hyperglycemia.

Personality

Those with diabetes who are predisposed to anxiety or tend to interpret situations catastrophically are more susceptible to developing a fear of hyperglycemia.

Lack of perceived control

Feeling that one cannot adequately manage their glucose levels and that they fluctuate independently of the person's actions increases frustration, anxiety, and fear.

HOW TO DETECT MALADAPTIVE FEAR OF HYPERGLYCEMIA

This fear can manifest in various ways in different individuals. Below are some possible indicators:

Avoiding social situations

Avoiding social situations where they feel they cannot maintain control, such as eating in restaurants where calculating carbohydrates is difficult, traveling, going out, etc.

Overcompensation in insulin administration

When one fears hyperglycemia, they may take actions to limit that possibility. Similarly to those who fear hypoglycemia and avoid taking insulin, those who fear hyperglycemia may be compelled to correct it. This may result in administering a larger dose of insulin than necessary or making small but frequent insulin adjustments.

Obsessive glucose monitoring

Excessive and frequent monitoring of glucose levels without medical justification. This leads to heightened alertness and reinforces fear.

Extreme dietary restriction

Avoiding or significantly reducing the intake of foods that could raise glucose levels. The probable consequence is poor and unbalanced nutrition.

Presence of anxiety symptoms

Experiencing physical symptoms of anxiety such as palpitations, sweating, etc., as well as catastrophic thoughts about glucose and its effects on the body. For example, "This 200 brings me closer to dialysis."

CONSEQUENCES

Psychological

The development of excessive fear leads to significant emotional overload. The person is likely to live in a constant state of tension due to the need to remain vigilant.

It is logical to think that if this state persists over time, the consequence will be profound emotional wear.

This can lead to significant psychological consequences such as chronic anxiety, stress, and even depression.

Diabetes management

Proper management of diabetes requires interventions (insulin administration, carbohydrate counting, etc.) to be carried out in a thoughtful and, often, conservative manner.

When dominated by anxiety (for example, if one believes that hyperglycemia contributes to future complications), corrective actions are more motivated by fear than logic. Contrary to what is desired, this action leads to worse control of the condition.

Quality of life

The fear of future complications or experiencing episodes of diabetic ketoacidosis can lead the person to try to control every aspect of their life and avoid many desired activities out of prevention, which impoverishes their quality of life. »

» SUGGESTIONS FOR INTERVENTION

The management of these fears requires a comprehensive approach that combines psychological and educational interventions.

Cognitive Behavioral Therapy

Cognitive-behavioral therapy (CBT) is especially effective in addressing irrational beliefs and catastrophizing related to hyperglycemia and possible future complications. Through cognitive restructuring, it helps the person acquire a more realistic and less fearful perspective about their condition (3).

Other psychological strategies

Coping skills training, gradual exposure to feared situations, and problem-solving training can reduce anxiety and help the person regain the perception of controlling their life effectively.

These interventions can include objectives such as meal planning, insulin dose adjustments, and handling unforeseen situations.

Therapeutic education

People with a fear of hyperglycemia often report that diabetes education sessions explained how these events contribute significantly to the development of complications like retinopathies, nephropathies, cardiovascular problems, etc.

The risk is that the patient builds a cognitive bias, an irrational idea: one hyperglycemia, one step closer to complications.

When educating on diabetes, it is essential to ensure that the patient understands what hyperglycemia is, what causes it, and how to manage it.

It is suggested that the professional should clearly distinguish

between a single hyperglycemic event and a prolonged state of hyperglycemia. They should also adjust the relationship between hyperglycemia and future complications and clarify the contribution of a single event to the final outcome.

This should be done through continuous, personalized diabetes education.

Regular follow-up and support

Integrating the exploration of possible maladaptive fear of hyperglycemia into each patient's follow-up protocol can be a valuable tool. The goal is early detection before the fear magnifies and leads to maladaptive avoidance behaviors that make correction increasingly difficult. **D**

CONCLUSIONS

Although fear of hyperglycemia is a real and significant concern for many people with diabetes, it can be managed and overcome with appropriate strategies. Prevention through inclusion in follow-up protocols, accurate therapeutic education, emotional support, and the development of coping skills are essential to prevent, detect, and correct this fear.

If any maladaptive fear (whether of hyperglycemia, hypoglycemia, complications, etc.) is proactively addressed, it is possible to significantly improve the quality of life for people with diabetes.

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