

WHAT YOU SHOULD KNOW ABOUT HYPERGLYCEMIA IN THE HOSPITAL

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What Is Hyperglycemia?

Hyperglycemia is the term for high blood glucose (blood sugar), which happens when the body has too little insulin or can't use insulin properly. Hyperglycemia is concerning in the hospital as it may lead to additional complications, including infection and dehydration.

If you have diabetes, let your nurse and doctor know when you enter the hospital. If possible, bring your medications and insulin (or a detailed list of all your medications and your insulin dose) to the hospital. Ask your doctor to make sure this information goes into your chart.

What May Cause Hyperglycemia in the Hospital?

Hyperglycemia in the hospital is often related to various causes, including:

- Not receiving enough insulin (especially if you have type 1 diabetes)
- Ineffective use of insulin by your body (as often occurs in type 2 diabetes)
- The body's stress response to an illness, such as a cold or flu
- Certain medications that may raise your blood sugar, such as steroids
- Having a heart attack or another serious medical condition that increases metabolic stress

What Are the Symptoms of Hyperglycemia?

Signs and symptoms include:

- High levels of glucose in the blood and urine
- Frequent urination
- Increased thirst
- Dizziness or dehydration

Can I Prevent Hyperglycemia in the Hospital?

One way to prevent hyperglycemia in the hospital is by checking your blood glucose often. If you are being admitted for a procedure, ask your doctor how often you should check and what your levels should be before or during your hospitalization. Also ask about which medications you should or should not take before a procedure.

In the hospital, your care providers will check your blood glucose and treat elevations early to avoid problems associated with hyperglycemia.

What Will Happen in the Hospital?

- Your doctor will order blood sugar testing and will monitor your levels carefully.
- Your physician will likely order insulin or other medications to treat persistently elevated blood sugars.
- Your doctor may perform or refer you for other tests.



How Is Hyperglycemia in the Hospital Treated?

Hyperglycemia in the hospital is most often treated with insulin. Basal (long- or intermediate-acting) insulin is given once or twice a day to keep blood sugar levels steady between meals or if you are not eating. The effect of these injections tends to be over 24 hours, and they should not be skipped if you do not eat, although doses may need to be adjusted if you are not eating.

Before meals, bolus (rapid-acting) insulin helps prevent blood sugar levels from going too high after eating. This scheduled insulin treatment can help prevent a dangerous health problem called diabetic ketoacidosis (DKA), where acids and substances called ketones build up in the blood due to lack of insulin.

Intravenous insulin is another option. It is used when the blood sugar is too high or unstable, when the blood sugar does not respond to subcutaneous injections, or if you have DKA. Intravenous insulin can also be used in very sick patients or those who are not able to eat.

How Should I Manage My Diabetes Before Surgery?

Before surgery, patients who take insulin should continue to do so. If you do not take insulin, your care providers will sometimes stop or adjust noninsulin medicines and may advise you to receive insulin while in the hospital.

Before and after surgery, all patients with type 1 diabetes and most with type 2 diabetes should receive insulin, especially basal insulin to prevent hyperglycemia and DKA.

Questions for My Doctor

- Does having hyperglycemia in the hospital mean I have diabetes?
- What type of diabetes do I have?
- What is the plan to manage hyperglycemia in the hospital?
- What should be my plan to manage hyperglycemia when I leave the hospital?
- What physical activities are good for me?
- Which medicines will I be taking for diabetes, and what do they do?
- What changes in my condition should make me call the office?
- Who will be managing my hyperglycemia after discharge?

For More Information



Endocrine Society

www.endocrine.org/patient-engagement/endocrine-library/hyperglycemia

American Diabetes Association

<https://diabetes.org/living-with-diabetes/treatment-care/hyperglycemia>