

Blood glucose levels

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Blood Glucose Levels due: Glycated hemoglobin (HbA1c) In this scenario, my 49-year-old patient is interested in knowing how her HbA1c helps indicate how well controlled her blood sugars have been over time. Being a medical practitioner, I am expected to educate this patient about how often this test needs to be performed and how the level goes up and down.

Glycated hemoglobin (HbA1c or HbA1c) is indicated as the percentage of a person's hemoglobin that is glycated. It is done to prove how well the blood sugar has been controlled over time. The test provides an average of a person's blood sugar control over the past 8 to 12 weeks, and is also used alongside other tests such as home blood sugar monitoring to determine if modifications in diabetes therapy will be required (Nathan, Turgeon & Regan, 2007). The duration is dictated by the lifespan of red blood cells, which is averaged 120 days.

When diabetes is not controlled, blood sugar levels rise and the sugar combines with the hemoglobin in erythrocytes, becoming glycated. Studies have confirmed the reliability of the HbA1c as a measure of long-term glycemia and in determining the pathogenesis of chronic diabetic complications (Rohlfing et al., 2002). An HbA1c greater than 6.5% is considered indicative of diabetes (World Health Organization, 2011).

Therefore, people living with diabetes are advised to maintain a level as near normal as possible to prevent long-term complications of diabetes.

In conclusion, it is important to measure the HbA1c periodically to know if the blood sugar is in control. Testing every three months is recommended but experts also recommend up to six months for people who can control their blood sugar. Abnormalities may however occur in disease cases where

haemoglobin is affected, such as anaemia. Kidney and liver disorders may also be sources of error in the test.

References

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