

Hemoglobin A1c can be used to diagnose diabetes; the role of exenatide (Byetta) in managing hyperglycemia

Although hemoglobin A1c (HgbA1c) is widely used to measure long-term glucose control in patients with established diabetes, the American Diabetes Association recently recommended its use for diagnosing diabetes as well.¹ The new ADA recommendations also proposed the use of exenatide as a possible second-line option for treating hyperglycemia.² This update provides some clinical practice points relating to these issues and should be read in conjunction with the iDiS evidence document on the management of Type 2 diabetes, available at www.RxFacts.org.

A1c for diagnosis

The new 2010 ADA guidelines now include hemoglobin A1c as 1 of 4 possible criteria for making the diagnosis of diabetes:¹

random hemoglobin A1c \geq 6.5%, or
fasting glucose \geq 126 mg/dl (7.0 mmol/l), with fasting = no caloric intake for at least 8 h,* or
2-hour glucose \geq 200 mg/dl (11.1 mmol/l) in an oral glucose tolerance test,* or
random glucose \geq 200 mg/dl (11.1 mmol/l) in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis

*Confirm presence of these criteria with repeat testing, unless there is unequivocal hyperglycemia.

Exenatide for hyperglycemia

As before, ADA guidelines continue to recommend lifestyle interventions, metformin, sulfonylureas, and the early use introduction of insulin as core, well-validated treatments for the management of hyperglycemia.² The new guidelines now recommend exenatide as a “Tier 2, less well-validated therapy” that can be considered in specific circumstances, such as:

- patients who have hazardous jobs where hypoglycemia is especially undesirable;
- patients in whom weight loss is particularly useful, and whose A1c level is close to target (< 8.0%)

The recommendations for drug treatment in the iDiS evidence document have not changed in response to this new information. Exenatide may have a role in very limited circumstances.

References: 1. American Diabetes Association. Standards of Medical Care in Diabetes - 2010. Diabetes Care January 2010;33 Suppl 1: S11-S61. 2. Nathan DM, Buse JB, Davidson MB, et al. Medical management of hyperglycemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy: a consensus statement of the American Diabetes Association and the European Association for the Study of Diabetes. Diabetes Care 2009;32(1):193-203.

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These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient’s clinical condition.

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