

QUESTION

A 65-year-old woman with a 10-year history of hypertension and a 20-year history of type 2 diabetes mellitus presents to the primary care physician for a routine checkup. She reports feeling increasingly fatigued and has noticed a recent increase in thirst and urination. Her physical examination is unremarkable, and her blood pressure is 150/90 mmHg. Laboratory tests reveal a hemoglobin A1c of 8.5% and a fasting plasma glucose of 180 mg/dL. She is currently on metformin and lisinopril.

Which of the following is the most appropriate next step in management?

- A. Increase the metformin dose to 2550 mg daily.
- B. Add insulin therapy to her current regimen.
- C. Switch her from metformin to sulfonylurea.
- D. Refer her to an endocrinologist for further evaluation.

ANSWER

B. Add insulin therapy to her current regimen.

This patient has type 2 diabetes mellitus with a hemoglobin A1c of 8.5%, indicating poor glycemic control. According to the American Diabetes Association (ADA) guidelines, the target A1c for this patient is less than 8.0%. The current regimen of metformin and lisinopril is insufficient to achieve this target. Adding insulin therapy is the most appropriate next step in management, as it allows for more precise glucose regulation. Increasing the metformin dose or switching to a sulfonylurea may provide some improvement, but they are unlikely to achieve the target A1c. Referring to an endocrinologist is also a reasonable option, but adding insulin is the most direct and effective approach.

Reference: <https://www.diabetes.org/healthcare-professionals/clinical-guidance/2022-standards-of-care-for-diabetes-mellitus>

EXPLANATION

Incorrect Answers:

A. Increase the metformin dose to 2550 mg daily. While increasing the metformin dose may help improve glycemic control, it is unlikely to achieve the target A1c of less than 8.0%. Metformin is the first-line medication for type 2 diabetes, but it is often not sufficient to achieve optimal glycemic control, especially in patients with long-standing diabetes and poor control.

C. Switch her from metformin to sulfonylurea. Switching to a sulfonylurea may provide some improvement in glycemic control, but it is not the most appropriate next step. Sulfonylureas are second-line medications and are associated with a higher risk of hypoglycemia compared to metformin. Additionally, the patient is already on metformin, and switching to a sulfonylurea may not provide the necessary improvement in glycemic control.

D. Refer her to an endocrinologist for further evaluation. Referring to an endocrinologist is a reasonable option, but it is not the most appropriate next step. The patient's symptoms and laboratory findings are consistent with type 2 diabetes, and the current management plan is insufficient. Adding insulin therapy is the most direct and effective approach to achieve the target A1c.

Correct Answer:

B. Add insulin therapy to her current regimen. This patient has type 2 diabetes mellitus with a hemoglobin A1c of 8.5%, indicating poor glycemic control. According to the American Diabetes Association (ADA) guidelines, the target A1c for this patient is less than 8.0%. The current regimen of metformin and lisinopril is insufficient to achieve this target. Adding insulin therapy is the most appropriate next step in management, as it allows for more precise glucose regulation. Increasing the metformin dose or switching to a sulfonylurea may provide some improvement, but they are unlikely to achieve the target A1c. Referring to an endocrinologist is also a reasonable option, but adding insulin is the most direct and effective approach.