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Case Study(D.M)

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Mr. A.H., a 54-year-old man with type 2 diabetes mellitus for 8 years on insulin therapy, was brought to the emergency department after experiencing dizziness, sweating, tremors, and confusion while driving. He had taken his morning insulin dose (12 units of regular insulin) but skipped breakfast. On examination, he appeared pale, diaphoretic, and mildly disoriented, with a heart rate of 110 bpm. His blood glucose level was 45 mg/dL. He was immediately treated with 50% intravenous dextrose, followed by a 10% dextrose infusion until his blood glucose rose to 110 mg/dL and his mental status improved. After recovery, he was given a light meal and his insulin dose was reduced to 10 units before breakfast. He received education on the importance of not skipping meals after insulin administration and on regular glucose monitoring.

Symptoms of Hypoglycemia

Shaking or trembling.

Faster heart rate.

Extreme hunger.

Sweating.

Confusion/difficulty concentrating.

Dizziness.

Sub-Group 1	Question
	1. What is the main cause of hypoglycemia in this patient?
	2. What symptoms did the patient present with, and what do they indicate?
	3. Why is skipping a meal after taking insulin dangerous?

Sub-Group 2	Question
	4. What was the patient's random blood glucose level upon admission, and what is the normal range?
	5. What immediate treatment was given to the patient in the emergency department?
	6. Why was intravenous dextrose chosen as the first line of treatment?

Sub-Group 3	Question
	7. What are the possible complications of untreated hypoglycemia?
	8. What changes were made to the patient's insulin therapy after stabilization?
	9. What advice was given to the patient to prevent future hypoglycemic episodes?

Sub-Group 4	Question
	10. How can hypoglycemia be recognized early by diabetic patients?
	11. What are the physiological mechanisms that cause the symptoms of sweating and tremor in hypoglycemia?
	12. What is the role of self-monitoring of blood glucose (SMBG) in preventing hypoglycemia?

Sub-Group 5	Question
	13. How does the body normally respond to low blood glucose levels?
	14. What laboratory tests can help distinguish between insulin overdose and insulinoma?
	15. What are the long-term consequences of recurrent hypoglycemia?