

Case Study 1: Patient N.B.

Diabetic Ketoacidosis

Patient Profile

N.B., a 34-year-old Native American man, was admitted to the emergency department after he was found unconscious by his wife in their home.

Subjective Data (Provided by Wife)

Was diagnosed with type 1 diabetes mellitus 12 mo. ago
Was taking 50 U/day of insulin: 5 U of lispro insulin with breakfast, 5 U with lunch, and 10 U with dinner
Plus 30 U of glargine insulin at bedtime
States a history of gastroenteritis for 1 wk with vomiting and anorexia
Stopped taking insulin 2 days ago when he was unable to eat

Objective Data

Physical Examination

Breathing deep and rapid
Fruity acetone smell on breath
Skin flushed and dry

Diagnostic Studies

Blood glucose level 730 mg/dL (40.5 mmol/L)
Blood pH 7.26

Discussion Questions

1. Briefly explain the pathophysiology of the development of diabetic ketoacidosis (DKA) in this patient.
2. What clinical manifestations of DKA does this patient exhibit?
3. What factors precipitated this patient's DKA?
4. Priority Decision: What is the priority nursing intervention for N.B.?
5. What distinguishes this case history from one of hyperosmolar hyperglycemic syndrome (HHS) or Hypoglycemia?
6. Priority Decision: What is the priority teaching that should be done with this patient and his family?
7. What role should N.B.'s wife have in the management of his diabetes?
8. Priority Decision: Based on the assessment data presented, what are the priority nursing diagnoses?
Are there any collaborative problems?
9. Evidence-Based Practice: N.B.'s wife asks you if she should have given her husband insulin when he got sick? How would you respond?