

SYMPTOMS: Adult or pediatric patient with history of diabetes, altered level of consciousness, seizure, or stroke symptoms. Abdominal pain, “fruity breath” and rapid deep respirations (Kussmaul’s respiration) may be associated with diabetic ketoacidosis.

Aliases: Diabetes, diabetic ketoacidosis (DKA), hyperosmolar (high concentration of glucose in the blood) hyperglycemic state, hyperosmolar non-ketotic coma.

Assessment, Treatment and Interventions

ALL LEVELS

1. Perform general patient assessment.

EMR-O; EMT-R

2. Obtain and monitor vital signs including pulse, respirations and blood pressure.
3. Monitor blood glucose levels.
4. Perform secondary assessment pertinent to blood glucose findings.
5. Evaluate for possible accompanying sepsis or septic shock.
6. Reassess vital signs, mental status, and hypovolemia.
7. Reassess blood glucose levels; provide appropriate treatment if hypoglycemia has developed.

EMT-O

8. Obtain ECG.

AEMT-R

9. If glucose greater than 250mg/dL, with symptoms of dehydration, vomiting, abdominal pain, or altered level of consciousness, provide volume expansion with normal saline bolus.
 - a. Adult: Normal saline 1L bolus; reassess and rebolus 1L if indicated.
 - b. Pediatric: Normal saline 10mL per/kg bolus IV; reassess and repeat up to 40mL per/kg total.
10. If findings consistent with hyperkalemia are present, consider administration of normal saline at 10 to 20mL/kg IV/IO.

INT-R

11. Interpret ECG; assess for peaked T waves or other findings consistent with hyperkalemia.
12. If findings consistent with hyperkalemia present, consider administration of albuterol nebulizer.

PARA-R

13. If findings consistent with hyperkalemia are present, consider administration of calcium gluconate [Adult: 3 grams IV/IO push over 2 mins; Pediatric: 60mg/kg; max dose 3 grams IV/IO push over 2 mins].