National Pediatric Nighttime Curriculum
Questions for Abnormal Glucose Module

1. A serum glucose of 400 mg/dL is considered to be
   a. moderate hyperglycemia
   b. normoglycemia
   c. severe hyperglycemia
   d. mild hyperglycemia

2. An appropriate initial glucose bolus for hypoglycemia in a 10 kg child would be
   a. 20 ml D5W
   b. 40 ml D10 0.5NS
   c. 2 ml D5W
   d. 20 ml D10W

3. Which of the following is not typically seen with mild/moderate hyperglycemia?
   a. thirst
   b. polyuria
   c. kussmaul breathing
   d. tachycardia

4. Which of the following is not considered a critical sample obtained during an acute episode of hypoglycemia?
   a. acylcarnitine
   b. urine organic acids
   c. growth hormone
   d. free fatty acids

5. A child in DKA is at risk for all of the following except:
   a. renal failure
   b. hypokalemia
   c. hyperphosphatemia
   d. cerebral edema
   e. none of the above

6. A hypoglycemic child who does not respond to glucagon likely has
   a. exogenously administered insulin
   b. a fatty acid oxidation defect
   c. an insulinoma
   d. Type 1 DM
   e. all of the above
Answers

1. Answer = A. Moderate hyperglycemia is a fasting glucose between 200mg/dL and 410 mg/dL.

2. Answer = D. An initial glucose bolus should be 2-4 mls/kg of D10W.

3. Answer = C. Kussmaul respirations are typically seen only in severe hyperglycemia.

4. Answer = B. The critical samples during hypoglycemia refer to blood tests, not urine, although urine organic acids are also important to send in a metabolic workup.

5. Answer = C. Depletion of intracellular phosphate occurs in DKA and phosphate is lost as a result of osmotic diuresis.

6. Answer = B. A fatty acid oxidation defect will NOT respond to a dose of glucagon.