

1. Classic clinical manifestations of diabetes include polyuria, polydipsia, and polyphagia.
2. The three main clinical features of diabetic ketoacidosis are hyperglycemia, dehydration with electrolyte loss, and presence of ketones in urine and blood.

3. What are the different types of insulins? Please give examples for each category.

Rapid acting: insulin lispro, insulin aspart, insulin glulisine, inhaled human insulin

Short acting: regular insulin

Immediate acting: NPH insulin

Long acting: insulin glargine, insulin detemir

Ultra-long acting insulin: U-300 insulin glargine, insulin degludec

4. What type of insulin can be given via intravenously?

Regular insulin

5. A nurse is caring for a client who has syndrome of inappropriate antidiuretic hormone (SIADH).

Which of the following findings should the nurse expect? (Select all that apply)

- a. Decreased blood sodium
- b. Urine specific gravity 1.001

- c. Blood osmolarity 230 mOsm/L
 - d. Polyuria
 - e. Increased thirst
6. What is the difference between DKA and HHS?
- a. DKA: type 1 diabetes, any condition that increasing carbohydrate metabolism, infection can cause, increased hormone production stimulating liver to produce glucose; GI effects, fruity breath, Kussmaul respirations, metabolic acidosis
 - b. HHS: type 2 diabetes/undiagnosed, enough insulin to prevent ketosis but not enough to prevent hyperglycemia, caused by infection, stress, medical conditions, medications; seizures, myoclonic jerking, reversible paralysis
7. A nurse is reviewing laboratory results for a client who has Addison's disease. Which of the following laboratory results should the nurse expect for this client? (Select all that apply)
- a. Sodium 130 mEq/L
 - b. Potassium 6.1 mEq/L
 - c. Calcium 11.6 mg/dL
 - d. Blood urea nitrogen (BUN) 28 mg/dL
 - e. Fasting blood glucose 148 mg/dL
8. What are treatments utilized in hypoglycemia (for both conscious and unconscious patients)?

- a. Conscious: glucose tablets, 6-10 hard candies, 4tsp sugar, 4 sugar cubes, 1tbsp honey/syrup, 4oz fruit juice/pop, 8oz low-fat milk, 6 saltines, 3 graham crackers
 - b. Unconscious: SQ/IM glucagon, IV 50% dextrose, lateral positioning
9. Describe in your own words what Pheochromocytoma is.
- a. Pheochromocytoma: condition caused by an adrenal medulla tumor resulting in severe episodic HTN, headache, hyperhidrosis, hypermetabolism, and hyperglycemia
10. For the following disorders, please describe the hormone affected and indicate if it is increased or decreased. Then describe what those hormones are responsible for.
- a. Cushing's Disease/Syndrome: increased ACTH → release of glucocorticoids (cortisol)
 - b. Addison Disease/Addisonian Crisis: decreased aldosterone and cortisol → metabolism, salt/water homeostasis
 - c. SIADH: excessive ADH → water regulation excretion through kidneys
 - d. Diabetes Insipidus: deficiency of ADH → water regulation excretion through kidneys
 - e. Thyroid Storm/Crisis: decreased TSH, increased T3/T4 → tsh stimulates thyroid to produce t3/t4, t3/t4 affects other hormones such as calcitonin, temperature regulation, metabolism, heart rate
 - f. Myxedema Coma: elevated TSH, decreased T3/T4 → TSH stimulates thyroid, T3/T4 affect other hormones such as calcitonin, body temperature regulation, metabolism, and heart rate