

### Scenario

You work in the diabetes (DM) center at a large teaching hospital where you meet K.W. She is a 27-year-old Hispanic woman who was released from the hospital 2 days ago after being diagnosed with type 1 DM.

Nine days ago, K.W. went to see the provider after a 1-month history of frequent urination, thirst, severe fatigue, blurred vision, and some burning and tingling in her feet. She attributed those symptoms to working long hours at the computer. Her random glucose level was 410 mg/dL. The next day her laboratory values were as follows: fasting glucose 335 mg/dL, A1C 8.8%, cholesterol 310 mg/dL, HDL 25 mg/dL, LDL 160 mg/dL. Her body mass index was 29.6 with a BP 160/96 mm Hg. She was admitted to the hospital for control of her glucose levels and the initiation of insulin therapy with carbohydrate (CHO) counting. After discharge, K.W. has been referred to you for diabetes education. You are to cover 4 areas: pharmacotherapy, glucose monitoring, basic nutrition therapy, and exercise.

- 1. What is the overall teaching goal with a patient newly diagnosed with type 1 DM?**
- 2. What assessments do you need to make before starting your session?**
- 3. K.W. was started on sliding scale lispro (Humalog) four times daily and glargine (Lantus) insulin at bedtime. What are the significant differences between the 2 therapies?**
- 4. Outline important content to include about insulin therapy.**

5. What specific points would you include about managing insulin therapy? *Highlight 5 options.*

- a. Store unopened insulin in the freezer.
- b. The insulin can be used if it is yellow but not expired.
- c. The fastest subcutaneous absorption is from the abdomen
- d. Administer the lispro (Humalog) within 15 minutes of eating.
- e. Ideally, the glargine (Lantus) should be administered at bedtime.
- f. A prefilled syringe can be stored for 24 hours at room temperature.
- g. Always administer the injections in the same, easy-to-reach location.
- h. The current vial of lispro (Humalog) can be kept at room temperature for 1 month.
- i. Two injections will be needed to administer lispro (Humalog) and glargine (Lantus).

**CASE STUDY PROGRESS**

K.W. calls the clinic several days later reporting that she has “the flu.” She has been nauseated and vomited once during the night. She has had 2 loose stools. She states that she does have a few chills and may have a low-grade fever but does not have a thermometer. She did not check her glucose level this morning or take her insulin because she has not eaten.

6. Based on these findings, you recognize that K.W. may be experiencing \_\_\_\_\_1\_\_\_\_\_. The priority intervention is to \_\_\_\_\_2\_\_\_\_\_.

Options for 1	Options for 2
hyperglycemia	administer the normal morning insulin dose
hypoglycemia	ingest a rapid acting carbohydrate
	measure her glucose level

## N102 ENDOCRINE CLASS PREP: TYPE 1 DM

7. Use an **X** to indicate whether the instructions below are **Indicated** (appropriate or necessary) or **Contraindicated** (could be harmful) for K.W. about managing illness and DM.

<b>Instruction</b>	<b>Indicated</b>	<b>Contraindicated</b>
a. Check glucose level every 2-3 hours throughout the day.		
b. Maintain strict NPO status		
c. Use over-the-counter medications for symptom control.		
d. Obtain a yearly influenza vaccine.		
e. Take insulin as ordered; call back if there you have concerns so the HCP can adjust insulin doses		
f. Someone should be with her in case of an emergency.		