

## Case 12 Diabetes Mellitus Type 1

### Phase 1

A five-year-old is brought to her pediatrician for an annual routine checkup. Her grandparents, who are also her legal guardians, are with her. The child has not seen her pediatrician in a year. The child recently had a visit to an urgent care center and was treated for strep throat. The grandparents are concerned about the child's weight gain. They state that no matter how much she eats she cannot gain weight and is hungry all the time.

#### Assessment:

Weight: 15.9 kg

Height: 41 in.

Heart rate: 122 beats per minute

Blood pressure: 96/44 mmHg

The child is anxious, looks thin, and has dry lips and dry mucous membranes. Upon neck palpation the child has several enlarged cervical lymph nodes and has a "sweet" odor to her breath. The remainder of the examination is within normal limits.

NGN Item: Enhanced Hot Spot

### Question 1

**Highlight or place a check mark next to the assessment findings that require immediate follow up by the nurse.**

NGN Item: Cloze

### Question 2

**Choose the most likely options for the information missing from the statements below by selecting from the lists of options provided.**

While assessing the child, the nurse recognizes that \_\_\_\_\_ 1 \_\_\_\_\_ ,  
\_\_\_\_\_ 1 \_\_\_\_\_ , and \_\_\_\_\_ 1 \_\_\_\_\_ are signs of  
\_\_\_\_\_ 2 \_\_\_\_\_ , a possible diagnosis. The nurse anticipates the provider will order the  
following tests, \_\_\_\_\_ 3 \_\_\_\_\_ and \_\_\_\_\_ 3 \_\_\_\_\_ to help confirm or rule  
out the diagnosis.

Options for 1	Options for 2	Options for 3
Dry mucous membranes	Diabetes Mellitus	Urinalysis
Poor weight gain	Metabolic alkalosis	Blood Sugar
Sweet breath odor	Respiratory alkalosis	Complete Blood Count
anxiety	Hyperaldosteronism	Ultrasound
Enlarged cervical lymph nodes	Hypothyroidism	Thyroid Test

## Phase 2

The primary care office does not have a glucometer available, so the provider orders a urinalysis dip stick test. The urinalysis shows a glucose of over 500 mg/dL with blood, leukocytes, and ketones. The results are shared with the grandparents along with the potential diagnosis and complications. The child's grandparents are visibly upset and start asking the nurse questions about their grandchild.

NGN Item: Cloze

### Question 3

**Choose the most likely options for the information missing from the statements below by selecting from the lists of options provided.**

Based on the available test results the nurse suspects the child may be experiencing \_\_\_\_\_ 1 \_\_\_\_\_, because of the \_\_\_\_\_ 1 \_\_\_\_\_ and \_\_\_\_\_ 1 \_\_\_\_\_ in the urine. The nurse anticipates that the child will need \_\_\_\_\_ 2 \_\_\_\_\_ and \_\_\_\_\_ 2 \_\_\_\_\_ as soon as possible.

Options for 1	Options for 2
Diabetic ketoacidosis	PO Glucagon
Metabolic alkalosis	IV Regular Insulin
Respiratory alkalosis	Fruit Juice
Respiratory acidosis	IV Long Acting Insulin
Glucose	IV Fluid Replacement

Ketones	5% Dextrose
Leukocytes	Chocolate Milk
Blood	

NGN Item: Matrix

#### Question 4

Use an X to indicate whether the nurse's responses to the child's grandparents are Therapeutic or Nontherapeutic.

Nurse's Response	Therapeutic	Nontherapeutic
"There is no need to worry, this diagnosis is common in children."		X
"By administering IV insulin and IV fluids, we can help your grandchild feel better."	X	
"I understand all of this can be overwhelming, but we are here to support you through this new diagnosis."	X	
"Yes, you could have contributed to this problem by not limiting the amount of sugar your grandchild eats."		X
"It is important that you understand that this is not something you could have prevented."	X	

#### Phase 3

The child is admitted to the local children's hospital with diabetes mellitus type 1 for continued care, further evaluation, and education about her new diagnosis. After several days, the child is ready for discharge. While the nurse is providing discharge education to both the child and her grandparents, the child asks if she will be ever be a normal kid again.

NGN Item: Extended Multiple Response

#### Question 5

Which of the following responses by the nurse are appropriate? Select all that apply.

- A. "You will always have diabetes mellitus type 1, but this does not mean that you cannot be a normal child."
- B. "You may have a hard time making friends who understand your diagnosis."
- C. "You will need to monitor your blood sugar and carbohydrate intake, but you can still participate in your favorite activities."

- D. “It will be hard for you to continue taking dance and gymnastics now that you have been diagnosed with diabetes mellitus type 1.”

NGN Item: Matrix

**Question 6**

After providing discharge instructions to the grandparents, the nurse assess the grandparents understanding. **For each statement, use an X to indicate whether the nurse’s discharge instructions were Effective (helped the grandmother understand the discharge instructions), Ineffective (did not help the grandmother understand the discharge instructions), or Unrelated (not related to the discharge instructions).**

Statements	Effective	Ineffective	Unrelated
“We will need to help our granddaughter monitor her blood sugar levels on a daily basis.”			
“We will keep our medications in childproof containers and out of reach.”			
“We will help our granddaughter plan her daily meals and count carbohydrates.”			
“We will ensure she understands that the abdomen is the only location for an insulin injection site.”			
“As long as we monitor what our granddaughter eats, she should not need to use insulin.”			
“It is important that we understand the signs and symptoms of hypoglycemia and hyperglycemia.”			