

Question 1. Harriet, age 62, has type 1 diabetes that is well controlled by insulin. Recently, she has been having marital difficulties that have left her emotionally upset. As a result of this stress, it is possible that she will:

1.
Have an insulin reaction more readily than usual.
2.
Have an increased blood sugar level.
3.
Need less daily insulin.
4.
Need more carbohydrates.

Rationales

Option 1:

Harriet will not have an insulin reaction (such as hypoglycemia) more readily than usual.

Option 2:

Stress causes the adrenal glands to secrete more cortisol, which leads to gluconeogenesis and insulin antagonism, raising the blood sugar. It is possible, then, that Harriet will have an increased blood sugar level. She will not need less daily insulin or more carbohydrates and will not have an insulin reaction (such as hypoglycemia) more readily than usual. Harriet may, in fact, need to increase her insulin use.

Option 3:

She will not need less daily insulin; she may need to increase her insulin use.

Option 4:

She will not need more carbohydrates; it is possible she will have an increased blood sugar level.

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- **Course Topic:** Endocrine and Metabolic Problems
- **Area of Practice(s):** Adult-Gerontology Primary Care; Family Practice
- **APN Knowledge Area(s):** Disease Management, Differential Diagnosis Clinical Decision-Making
- **Testing Domain:** Evaluate
- **Cognitive Level:** Analysis [Analyzing]

Question 2. Mason, age 52, has diabetes mellitus (DM) and is overweight. You now find that he is hypertensive. How should you treat his hypertension?

1.
You should treat it the same as in a client without diabetes.
2.
Because insulin affects most antihypertensive drugs, you should try diet and exercise first before ordering any antihypertensives.

3.

You should treat it very aggressively, preferably with angiotensin-converting enzyme (ACE) inhibitors.

4.

You should initiate therapy when the blood pressure is 5 to 10 mm Hg more than the conventional therapeutic guidelines.

Rationales

Option 1:

Because hypertension is implicated in accelerating the microangiopathy of diabetes (especially retinopathy and nephropathy), according to the Eighth Joint National Committee (JNC 8) therapy should be initiated when the patient has a blood pressure at or above 140/90 mm Hg. Other organizations recommend the lower goal of 130/80 in clients with DM.

Option 2:

Owing to the beneficial effects of reducing albuminuria and glomerular pressure, angiotensin-converting enzyme (ACE) inhibitors are the drugs of choice in clients with DM with hypertension.

Option 3:

ACE inhibitors should be initiated in patients with diabetes and an elevated blood pressure and are recommended in normotensive patients with albuminuria.

Option 4:

Depending on the guidelines, therapy should be initiated when blood pressure reaches levels equal to or 10 mm Hg less than conventional therapeutic guidelines.

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- **Course Topic:** Endocrine and Metabolic Problems
- **Area of Practice(s):** Adult-Gerontology Primary Care; Family Practice
- **APN Knowledge Area(s):** Pharmacologic Therapy and Polypharmacy, Disease Management
- **Testing Domain:** Plan
- **Cognitive Level:** Analysis [Analyzing]

Question 3. Dan, age 45, is obese and has type 2 diabetes. He has been having trouble getting his glycohemoglobin under control. He has heard that exenatide (Byetta) causes weight loss and wants to try it. What do you tell him?

1.

“Let’s adjust your oral antidiabetic agents instead.”

2.

“That’s a myth. People usually change their eating habits when taking this, and that’s what causes the weight loss.”

3.

“With type 2 diabetes, you never want to be on injectable insulin.”

4.

“Let’s try it. Your glycohemoglobin will be lowered and you may lose weight.”

Rationales

Option 1:

Adjusting the client’s oral antidiabetic agents may not be as effective, but these drugs are less expensive.

Option 2:

Exenatide (Byetta) can cause weight loss in some individuals.

Option 3:

Glucagon-like peptide-1 (GLP-1) injectables like exenatide are not injectable insulins.

Option 4:

Unlike many oral antidiabetic agents, injectable exenatide (Byetta) can cause weight loss in some individuals. The active ingredient is a protein that encourages digestion and the production of insulin. Glucagon-like peptide-1 (GLP-1) injectables like exenatide and liraglutide (Victoza) may be used as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

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- **Course Topic:** Endocrine and Metabolic Problems
- **Area of Practice(s):** Adult-Gerontology Primary Care; Family Practice
- **APN Knowledge Area(s):** Disease Management, Pharmacologic Therapy and Polypharmacy, Health Promotion and Patient Education
- **Testing Domain:** Plan
- **Cognitive Level:** Analysis [Analyzing]

Question 4. When you inspect the integumentary system of clients with endocrine disorders, a finding of coarse hair may be an indicator of:

1. Addison disease.
2. Diabetes mellitus.
3. Cushing syndrome.
- 4.

Hypothyroidism.

Rationales

Option 1:

Indicators of Addison disease include hyperpigmentation.

Option 2:

Indicators of diabetes mellitus include hypopigmentation.

Option 3:

Indicators of Cushing syndrome include hirsutism, hyperpigmentation, purple striae over the abdomen, and bruising.

Option 4:

During inspection of the integumentary system of clients with endocrine disorders, a finding of coarse hair may be an indicator of hypothyroidism. Fine hair is seen in clients with hyperthyroidism; hirsutism with Cushing syndrome; hyperpigmentation with both Addison disease and Cushing syndrome; hypopigmentation with diabetes mellitus, hyperthyroidism, and hypothyroidism; and purple striae over the abdomen and bruising with Cushing syndrome.

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- **Course Topic:** Endocrine and Metabolic Problems
- **Area of Practice(s):** Adult-Gerontology Primary Care; Family Practice
- **APN Knowledge Area(s):** Health Assessment, Pathophysiology
- **Testing Domain:** Assess
- **Cognitive Level:** Comprehension