The Fatal Mistakes Report

By Claire Corter

IMPORTANT:
If you haven’t signed up to my free HESI Study email list, go to:
http://www.yourbestgrade.com/hesi/

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How to Avoid Six Fatal HESI Mistakes

Claire Corter – YourBestGrade.com

On the free HESI practice exam at https://www.yourbestgrade.com/hesi/tests/1/tos, most students failed to choose the correct answer to the same six questions on the test.

I was surprised to find that these questions stumped so many students... Just look at the chart below and you’ll see I’m not kidding – these questions STUMPED!

<table>
<thead>
<tr>
<th>Question</th>
<th>Students Who Answered Correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>19%</td>
</tr>
<tr>
<td>3</td>
<td>24%</td>
</tr>
<tr>
<td>4</td>
<td>28%</td>
</tr>
<tr>
<td>5</td>
<td>28%</td>
</tr>
<tr>
<td>6</td>
<td>33%</td>
</tr>
</tbody>
</table>

What is it about these questions that challenged so many students?

To delve into this, I sat back in my chair and wrote this report on the 6 most difficult questions in the practice exam according to the test outcome statistics.

I thought this should really help you out in gaining that EXTRA layer of understanding and NEVER repeating those mistakes again.

The Six Fatal Questions

Let’s review these six questions that were missed so frequently and try to develop some baseline information that you can recall next time you face a similar question on your actual HESI Exit Exam.

1. A client is prescribed to receive one-quarter strength tube feeding at 40 ml per hour. If the nurse has 80 ml of full strength tube feeding solution, how many hours of feeding is available? (Only enter the numeric value.)
Correct answer: 8

80 ml / 40 ml per hour = 2 hours of feeding at full strength feeding. However, the question asks how long one-quarter strength feeding will last. Take the 2 hours and divide by 0.25 = 8 hours of one-quarter strength continuous feeding.

I think there are only two reasons this question didn’t receive more correct answers. The first reason is it’s well known that the HESI plants extra information in questions that can distract you from the real question and answer. In this case, you may have skipped over the “one-quarter strength” and you might have just focused on the 40 ml per hour and worked the math from there. Your answer might have been 80 ml / 40 ml per hour = 2 hours of feeding.

When you see one-quarter strength in the formula, you must work the original problem as above. Then take your answer 2 and divide by .25. This will give you the correct answer of 8 hours of one-quarter strength continuous feeding.

One technique that I use to prevent myself from skimming a calculation problem is to write down the figures and set up the equation on a piece of paper. Then I check my equation with the on-screen question to be sure I’ve have done it correctly. Don’t ever just solve a HESI calculation in your head no matter how easy it appears. Remember, only ten percent of students chose the right answer to this question.

The only other reason why anyone would miss this question is if you are uncertain about how to calculate these problems. In that case, I’d suggest a crash revisit to your medication calculation book. Work as many of the problems as you can to gain competence. On the HESI, missing a numeric calculation is a big strike against your test score.

2. A client is prescribed 1200 units of intravenous heparin per hour. The medication is provided as 25,000 units in 2.5 dl (deciliters) of normal saline. Calculate the rate in which the nurse should administer this medication in ml (milliliters) per hour. (Only enter the numeric value.)

Correct answer: 12

Only 19% of the students computed the correct answer. I think the problem here is a conversion error from deciliter (dl) to milliliter (ml). So let’s do a brief review of conversions. If you can commit these prefixes to memory and you can do calculations, you should never miss another math answer again.
**Common Prefixes to Know in Medical Measurements**

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kilo</strong></td>
<td>one thousand times</td>
<td>1kg = 1000 g</td>
</tr>
<tr>
<td><strong>Hecto</strong></td>
<td>one hundred times</td>
<td>100L = 1 hL</td>
</tr>
<tr>
<td><strong>Deka</strong></td>
<td>ten times</td>
<td>10L = 1 dal</td>
</tr>
<tr>
<td><strong>Deci</strong></td>
<td>one tenth</td>
<td>1L = 10 dL</td>
</tr>
<tr>
<td><strong>Centi</strong></td>
<td>one hundredth part of</td>
<td>1L = 1</td>
</tr>
<tr>
<td><strong>Milli</strong></td>
<td>one thousandth part of</td>
<td>1g = 1000 mg, 1L = 1000 mL</td>
</tr>
<tr>
<td><strong>Micro</strong></td>
<td>tiny</td>
<td>1000 mcg = 1 mg, 1 million mcg = 1 g</td>
</tr>
</tbody>
</table>

The client is receiving 1200 units of heparin every hour. One deciliter equals 100 milliliters. Convert the 2.5 dl to 250 ml

\[
\frac{25000 \text{ units}}{250 \text{ ml}} = 100 \text{ units/ml}
\]

\[
1200 \text{ units/hour divided by 100 units/ml}
\]

\[
1200 / 100 = 12 \text{ ml/hour}
\]

If you knew how to make the conversion and you still missed this question, hit the calculation practice book.

3. Which of the following laboratory results would be seen in a client with a confirmed bowel obstruction?

A. Metabolic acidosis upon arterial blood gas analysis
B. Hypokalemia
C. Decreased serum amylase levels
D. Hyperchloremia

**Correct Answer: B Hypokalemia**

This is one of those HESI questions that require that you know about the first condition and that information will lead you to the correct second condition.

A bowel obstruction is a partial or complete blockage of the bowel that prevents the passage of intestinal contents. Now take a close look at the symptoms of this type of blockage.
Symptoms
- Vomiting;
- Diarrhea;
- Constipation;
- Breath odor;
- Abdominal distention, fullness, pain and cramping.

With a bowel obstruction, the patient experiences vomiting which depletes the potassium in the body and can then lead to hypokalemia. Vomiting can also lead to hypochloremia and metabolic alkalosis because the vomiting will cause a loss of hydrochloric acid in the stomach.

Hypokalemia occurs when the level of potassium in the blood drops too low.

<table>
<thead>
<tr>
<th>Lab</th>
<th>Normal Value</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>3.5-5.0 g/dl</td>
<td><strong>Hypokalemia</strong> – potassium is below 3.5 g/dl</td>
</tr>
</tbody>
</table>

**Causes:**
* Vomiting
* Sweating
* Some antibiotics (carbenicillin, gentamicin, amphotericin B)
* Diuretics
* Diarrhea
* Kidney disease
* Eating disorders

**Symptoms:**
* Weakness, tiredness, muscle cramps
* Tingling or numbness
* Nausea or vomiting
* Abdominal cramping, bloating
* Constipation
* Heart Palpitations
* Passing large amounts of urine
* Feeling very thirsty most of the time
* Fainting due to low blood pressure
* Abnormal psychological behavior
This question demonstrates how important it is to know your standard range of lab values for all commonly tested levels and to know the most common results of testing low or high in that value.

If you know these, you will be able to eliminate the other possible answers in Question 3. For example, the vomiting will also lead to hypochloremia, not hyperchloremia (D). You will expect an ABG to show metabolic alkalosis not acidosis because of the vomiting and from a loss of hydrochloric acid in the stomach (A). Also, you will know that the serum amylase levels will probably be elevated, not decreased (C), especially if bowel strangulation is present.

There are many charts out there that are good study guides on lab ranges and studying one of these will serve you well on your test.

4. The nurse is instructing a client newly diagnosed with diabetes the signs and symptoms of hypoglycemia. Which of the following should the nurse include in these instructions? Select all that apply.

A. Tremors  
B. Irritability  
C. Bradycardia  
D. Nausea  
E. Hypertension

**Correct Answer:** A Tremors, B Irritability, D Nausea

These symptoms of hypoglycemia are caused by responses in the patient’s autonomic nervous system to a low blood glucose level.

<table>
<thead>
<tr>
<th>Lab</th>
<th>Normal Range</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>70-150 mg/dL</td>
<td>Hypoglycemia - blood sugar is below 55 mg/dL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Common in diabetics</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Symptoms:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Hunger, nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Anxiety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Pale cool skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Sweating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Tremors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Irritability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Rapid Pulse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Hypotension</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Fainting</td>
</tr>
</tbody>
</table>
If you know these symptoms, you are able to eliminate some of the other answers offered. Bradycardia (C) is incorrect because tachycardia is seen with hypoglycemia. Hypertension (E) isn’t seen in hypoglycemia but hypotension is.

5. The nurse is assessing a client in labor and finds the fetus has a right sacrum anterior (RSA) position. In order to place the fetal heart transducer properly, the monitor should be placed in which of the following areas?

Correct Answer: A

The right sacrum anterior (RSA) position indicates the baby buttocks faces anteriorly and towards the mother’s right side of the abdomen. If you’re familiar with fetal lie positions before delivery, you recognize that RSA is a breech position.

In breech presentations, fetal heart sounds are usually heard above the level of the umbilicus. This is because the fetus is situated with the head and upper body toward the upper quadrant and the legs and feet closer to the vagina. The heartbeat is best heard over the baby’s back. In this case, the back faces the front of the abdomen. Therefore, the nurse should place the fetal monitor within the right upper quadrant (A).

Only 28% of the students taking our practice HESI test chose the correct answer to this one. It’s no surprise. If you read any of the discussions posted on the nursing student pages online, you’ll see that one of the biggest Achilles’ heel of many nurses is the topic of maternity. Many of these nurses and student nurses leaving comments are women and many of them are also mothers. Don’t assume because you’re a parent, that you know this information. Maternity questions are always popular with the test writers. This is one area that requires your study focus.
Fetal lie is difficult to become test-ready on without using visual aids. You probably have at least one nursing text that graphically depicts the different fetal positions. Try to commit all of the positions to your memory. Be sure you can recognize all positions that may require a C-section delivery including a frank breech, a complete breech and a transverse lie. There’s a very good chance you’ll be tested in this area.

6. A client’s sodium level is 153 mEq/L. Which of the following symptoms should the nurse assess in this client?

A. Abdominal cramping  
B. Muscle cramps  
C. Restlessness  
D. Coma  

**Correct Answer:** C

(continued on next page)
<table>
<thead>
<tr>
<th>Lab</th>
<th>Normal Values</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>135-145 mEq/L</td>
<td><strong>Hypernatremia</strong> – sodium is &gt; 145 mEq/L</td>
</tr>
</tbody>
</table>

**Causes:**
* Diuretics
* Common in elderly
* Diabetes insipidus
* Hypothalamus or pituitary disease
* High salt intake

**Symptoms:**
* Muscle twitching
* Tired and confused
* Thirst
* Increased Temperature
* Sticky Mucous Membranes
* Restlessness
* Weakness
* Altered mental status
* Decreasing level of consciousness
* Seizures

Hypernatremia is a greater than normal concentration of sodium in the blood. This is one to be very familiar with and watch for in your elderly patients.

Sodium must be kept at a specific concentration in the blood for the body to function properly. The major signs of hypernatremia are caused by the CNS dysfunction that occurs because of the brain cell shrinkage. Restlessness, confusion, neuromuscular excitability, hyperreflexia, and seizures may be the result. This can lead to coma and death.

As you can guess, knowing these lab normal ranges and some of the consequences of high or low lab results will be a daily necessity when you begin nursing. They will also play an important role in your upcoming tests.

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Well, that was a brief review of six HESI practice questions that seemed difficult for most students. I hope you gained some insight and understanding from it.
The purpose of the HESI is really to help you identify the study areas you need to double up on. Therefore, before taking the HESI Exit Exam, track your difficult topics and start to master them.

If this report got you motivated to adequately prepare yourself for the HESI Exit Exam, and if you want to learn and practice answering HESI Exit questions in a true HESI format, you can…

I’ll show you exactly how to do that in my course HESI Study Insider and you can check it out at www.YourBestGrade.com/hesi/letter today.

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Happy studies!

Claire Corter