Sample Questions

Each module contains three sections of questions types "Core Questions", "Core Question Sets", and "Key Advance".

**Core Question Section Instructions:**

There are 30 multiple choice questions in this section. Choose the best or most correct answer for each question and click “Confirm” to see if you answered correctly. When you are done reviewing the feedback on your answer, click “Continue” to go to the next question. Some questions have accompanying stimulus materials, such as lab results or ECGs, labeled in the module as “Supplemental Materials. Click the “+” to open the box and view one or more stimuli. Click the “-“ to collapse the box.
A 39-year-old woman presents with one hour of right-sided anterior epistaxis, which started when she was completing a weight-lifting workout. Vital signs are BP, 120/70; P, 70; R, 20; T, 37.0° C (98.6° F); and oxygen saturation, 98%. A point of care hemoglobin is 12 g/dL. Her only medication is an oral contraceptive pill. An anterior nasal packing is placed in the right nares, but the patient continues to bleed around the packing. She is not swallowing blood. In addition to direct pressure, what is the most appropriate next step in management?

A) clonidine  
B) fresh frozen plasma  
C) intranasal tranexamic acid  
D) posterior nasal balloon

The correct answer is intranasal tranexamic acid. Topical tranexamic acid is probably better than other topical agents in stopping bleeding from anterior epistaxis. There is no evidence that this patient has a posterior bleed and requires posterior management. There is no evidence that this patient has hypertension-related epistaxis or a coagulopathy.
Sample Questions

Each module contains three sections of questions types "Core Questions", "Core Question Sets", and "Key Advance".

Core Question Sets Section Instructions:

There are 3 question sets (presentation scenarios) in this section. Each presentation scenario contains two or more related questions. Choose the best or most correct answer for each question and click “Confirm” to see if you answered correctly. When you are done reviewing the feedback on your answer, click “Continue” to go to the next question. Some questions have accompanying stimulus materials, such as lab results or ECGs, labeled in the module as “Supplemental Materials. Click the “+” to open the box and view one or more stimuli. Click the “−” to collapse the box.
A 56-year-old homeless man with a history of alcohol abuse presents with epigastric abdominal pain and vomiting. His vital signs on arrival are BP 160/110; P, 120; R, 18; and T, 37.0° C (98.6° F). On exam, the patient is alert, tremulous, and has tenderness to palpation in the epigastrium.

In addition to IV fluid resuscitation with lactated Ringers, ordering ECG, laboratory studies, and pain control, which of the following should be administered next?

A) IV antibiotic
B) IV benzodiazepine
C) IV labetalol
D) PO phenobarbital

The correct answer is IV benzodiazepine. Benzodiazepines are the preferred treatment for alcohol withdrawal syndrome. There is no indication for an antihypertensive, an antibiotic.
A 56-year-old homeless man with a history of alcohol abuse presents with epigastric abdominal pain and vomiting. His vital signs on arrival are BP 160/110; P, 120; R, 18; and T, 37.0° C (98.6° F). On exam, the patient is alert, tremulous, and has tenderness to palpation in the epigastrium.

Vital signs remain the same. The ECG and serum troponin are normal. His CBC and lipase results are shown. An additional dose of benzodiazepine is administered and the stool is found to be positive by hemoccult testing. What should be done next?

A) administer PO clonidine
B) administer Vitamin B12 (cyanocobalamin)
C) place nasogastric tube
D) type and cross, then transfuse one unit

The correct answer is type and cross, then transfuse one unit. The patient is anemic, probably from GI bleeding and should be transfused one unit of packed red blood cells to start. The vital signs are likely related to alcohol withdrawal syndrome and there is no indication for clonidine, vitamin B12, or nasogastric tube insertion.
# Supplemental Materials

## CBC

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
<th>Normal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC</td>
<td>5,500/mm³</td>
<td>3,200-9,800/mm³</td>
</tr>
<tr>
<td>RBC</td>
<td>5.1 x 10⁹/mm³</td>
<td>4.2-5.8 x 10⁹/mm³</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>6.5 g/dL</td>
<td>14-17 g/dL (Male)</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>20%</td>
<td>41-51% (Male)</td>
</tr>
<tr>
<td>Platelets</td>
<td>200,000/mm³</td>
<td>150,000-450,000/mm³</td>
</tr>
</tbody>
</table>

## LIPASE

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
<th>Normal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipase</td>
<td>300 units/L</td>
<td>less than 95 units/L</td>
</tr>
</tbody>
</table>
A 56-year-old homeless man with a history of alcohol abuse presents with epigastric abdominal pain and vomiting. His vital signs on arrival are BP 160/110; P, 120; R, 18; and T, 37.0° C (98.6° F). On exam, the patient is alert, tremulous, and has tenderness to palpation in the epigastrium.

On reassessment, his BP is 134/90, P is 94, and his tremor has diminished significantly. Which of the following should be done next?

A) abdominal CT with contrast
B) tagged RBC study
C) discharge with primary care follow-up
D) RUQ abdominal ultrasound

The correct answer is RUQ abdominal ultrasound. Most acute pancreatitis patients should have RUQ ultrasound imaging early in their course to determine if gallstones are present. Abdominal CT is unnecessary in the first 24-hours unless the patient is severely ill. There is no clear indication for ICU admission, although this patient should be admitted until his evaluation and acute management are complete.
Sample Questions

Each module contains three sections of questions types "Core Questions", "Core Question Sets", and "Key Advance".

**Key Advance Question Section Instructions:**

There are 10 multiple choice questions in this section. Each question is related to a Key Advance synopsis. Choose the best or most correct answer for each question and click "Confirm" to see if you answered correctly. When you are done reviewing the feedback on your answer, click “Continue” to go to the next question. The related Key Advance synopsis, along with any accompanying stimulus materials, is available in the “Supplemental Materials.”
A 60-year-old man with medication-controlled hypertension presents after a couple minutes of substernal burning chest pain. The onset of pain occurred 20 minutes after eating lunch at work. His vital signs, examination, ECG, and troponin are normal. Using his HEART score, what is the most appropriate management approach?

A) discharge home with follow-up
B) inpatient admission and cardiac testing
C) observation unit and cardiac testing
D) observation unit and cardiology consult

The correct answer is discharge home with follow-up. This patient is low risk with a HEART score of 2 (History 0, ECG 0, Age 1, Risk Factors 1, Trop 0) giving him approximately 0.9-1.7% risk for Major Adverse Cardiac Event over the next 6 weeks. The appropriate management is discharge home for outpatient follow-up and further evaluation.

See the Heart Score Synopsis.