

ENC(C) Review Questions

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1. A three-month-old is brought to triage by their parents with complaints of nausea, vomiting and diarrhea. They just had their three-month immunizations two days ago. The mom states, "my baby just isn't acting normal, she won't wake up to feed and didn't take her bottle this morning." The last time the baby fed was eight hours ago. The child has a weak cry at triage and sleeps through the vitals assessment. Vitals are as follows:

- T - 38° C
- HR - 180
- BP - 72/42
- RR - 40
- SaO₂ - 96% on room air

Which of the following actions is the most appropriate next step?

- A. Given acetaminophen orally to treat the fever as that will help bring down the heart rate
 - B. Advise the parents that this is a typical reaction to immunizations
 - C. Initiate a cool bath to reduce the fever
 - D. Check a glucose at triage
2. A 10-year-old with known Acute Lymphoblastic Leukemia (ALL) presents to ER with his mom. His last chemotherapy was two days ago and he awoke with a fever this morning. On initial exam, you note that his cheeks are flushed, and he is lethargic with dark circles under his eyes. He has an IVAD in situ. His vital signs are as follows:

- T - 41.9° C
- HR - 156
- BP - 78/47
- RR - 24
- SaO₂ - 94% on room air

Which of the following actions is the most appropriate?

- A. Wait for the Maxilene (numbing cream) to take effect prior to accessing his IVAD. Rationale - to optimize the pediatric experience in ER
 - B. Administer a fluid bolus. Rationale - to manage hypotension
 - C. Wait for blood and urine cultures to be drawn prior to administering antibiotics. Rationale - to avoid jeopardizing culture results
 - D. Apply high flow oxygen. Rationale - to optimize oxygen availability for this septic patient
3. An 18-month-old boy presents to triage with his mother. She states her son has been having episodes of intermittent abdominal pain. The patient at triage is alert and interacting with mom, breathing is deep and easy with no increased work of breathing and color is pink and cap refill is brisk. Mom states that this abdominal pain has come and gone two times lasting about 20 minutes and the child pulls his legs up and starts crying. She also noted a bit of mucous and blood in his stool. What condition might this child be experiencing?
- A. Pyloric stenosis
 - B. Appendicitis
 - C. Intussusception
 - D. Constipation with anal fissure
4. A 26-year-old female presents to triage with generalized swelling, mild right upper quadrant abdominal pain, headache and nausea. The patient states that she is 28 weeks and 3 days pregnant. What condition might this patient be experiencing?
- A. Pre-eclampsia
 - B. Pancreatitis
 - C. Liver cirrhosis
 - D. Cholestasis of pregnancy

5. A 53-year-old man presents to the emergency department with complaints of weight gain, nausea and vomiting. His creatinine level is measured at 353 micromoles/L (normal values are 70–120 $\mu\text{mol/L}$). Which of the following is the most likely cause of these assessment findings?
- A. Hepatic toxicity
 - B. Pulmonary hypertension
 - C. Acute renal failure
 - D. Prostatic hypertrophy

Answer Key with Rationale

1. Correct answer D

The three-month-old is presenting with concerning signs such as lethargy, weak cry, poor feeding, and an inability to wake up for feeding, along with fever ($T\ 38^{\circ}\text{C}$), tachycardia (HR 180), and hypotension (BP 82/42). These signs may indicate a serious underlying condition like hypoglycemia. Infants are particularly vulnerable to hypoglycemia, especially if they haven't fed for several hours, as this baby hasn't fed in 8 hours. Hypoglycemia can cause lethargy, poor feeding, tachycardia, and altered mental status. Therefore, the most appropriate next step is to immediately check the infant's glucose level to rule out hypoglycemia, as it can be life-threatening if untreated (Logee, 2020). While fever can contribute to discomfort, it is not the immediate concern here (Ward, 2024). The baby's lethargy and weak cry suggest a more urgent issue, such as hypoglycemia, that needs to be addressed first. Although immunizations can cause mild fever or irritability, the baby's lethargy, poor feeding, and vital sign abnormalities (tachycardia, hypotension) are concerning and suggest a more serious condition that requires immediate investigation, not reassurance. A cool bath may help lower the fever, but the baby's symptoms indicate a possible systemic issue, such as hypoglycemia or infection, that requires immediate attention, not just symptomatic treatment for fever (Smitherman et al., 2025).

2. Correct answer B

Looking at the assessment findings for this patient we see that they are hemodynamically compromised. The most appropriate initial action for this patient is to initiate a peripheral IV if possible or IO if an IV cannot be accessed and administer. In this case, the patient likely has sepsis, indicated by signs such as hypotension, potential infection, and overall clinical presentation. One of the primary management steps for sepsis in pediatric patients (and adults) is fluid resuscitation to improve blood pressure and perfusion (Harley et al., 2022). Hypotension in a septic patient often signifies a state of circulatory shock, and immediate fluid bolus administration (typically with normal saline or lactated Ringer's) is critical to stabilize the patient's condition. While numbing cream may be helpful in making the procedure more comfortable, it is not the priority when a child is potentially in shock or septic (Lorenc, 2024). Immediate management of hypotension is more urgent. In septic patients, early antibiotic administration is crucial and should not be delayed even if cultures haven't been obtained yet. Waiting for cultures to be drawn can significantly harm the patient, as early antibiotics are vital in managing sepsis (Weiss & Fitzgerald, 2024). While oxygen may be important if the patient is in respiratory distress or has low oxygen saturation,

the priority in managing septic shock with hypotension is fluid resuscitation. Oxygen administration might be necessary, but addressing hypotension with fluids takes precedence to stabilize the circulatory system.

3. Correct answer C

Rationale – These symptoms are common with intussusception which is a common condition that occurs with children who are between three months and three years old (Cleveland Clinic, 2024a). It presents with colicky abdominal pain that is severe when the bowel telescopes inside of itself and then pain free when it resolves. These episodes usually last 15–20 minutes and then it goes away. Other symptoms include red jelly like stools, diarrhea, a swollen belly with a section that is harder, and sometimes nausea and vomiting (Cleveland Clinic, 2024b).

Pyloric stenosis is usually a condition associated with young infants (3–5 weeks after birth) and it is a condition associated with a muscular valve that sits between the stomach and the small intestine that prevents food from moving into the small intestine (Mayo, 2022). Appendicitis is also one that this could be, but pain is often persistent rather than intermittent. They will usually have a low-grade fever, right lower quadrant abdominal pain, nausea and vomiting and loss of appetite (Cleveland Clinic, 2024a). The last one is a possibility if the child has been constipated and has been straining. An assessment should be made to see if there is bleeding around the anus but generally this would be frank red blood and not a darker blood mixed with mucous as the bleeding is at the anus not higher (Mayo Clinic, 2024a).

4. Correct answer A

Rationale – The most common cause of these symptoms is pre-eclampsia. This condition commonly occurs after the 20th week of pregnancy (August & Sibai, 2025). Common symptoms associated with this condition include high BP, swelling, headaches, blurred vision, and protein in their urine (August & Sibai, 2025). Trending of blood pressures during pregnancy is important as it helps identify those women at higher risk for developing pre-eclampsia. Blood pressures 140/90 and above are classified as “mild” and severe are generally 160/110 (LeWine, 2023). Recognition of this condition can prevent maternal morbidity/mortality.

A pregnant patient might also have pancreatitis if they have had a previous history of same but generally only occurs in 3 out of 10,000 pregnancies (O'Heney et al., 2021). Acute liver cirrhosis is also relatively uncommon with the incidence occurring in about 3% of women (Garcia-Romero, 2019). Cholestasis of pregnancy is associated with right upper quadrant pain, itchiness, jaundice, nausea, pale colored oily stool as well as loss of appetite (Mayo, 2022). Although the patient does have some of these symptoms of each condition, she does have all the symptoms that are associated with pre-eclampsia.

5. Correct answer C

Rationale – The patient presents with weight gain, nausea, vomiting, and elevated creatinine levels (353 $\mu\text{mol/L}$, well above the normal range of 70–120 $\mu\text{mol/L}$), indicating impaired kidney

function. Hepatic toxicity typically affects liver function and does not cause such a significant rise in creatinine (Larson, 2023). Pulmonary hypertension primarily leads to symptoms like shortness of breath and fatigue, and lab studies will feature elevation in brain natriuretic peptide rather than creatinine (Rubin, 2024). Prostatic hypertrophy may cause urinary

retention but doesn't directly lead to a sharp increase in creatinine levels (McVary, 2025). The most likely diagnosis is acute renal failure (acute kidney injury), where the kidneys suddenly lose their ability to filter waste, leading to elevated creatinine and symptoms such as weight gain, nausea, and vomiting due to fluid retention and toxin buildup (Palevsky, 2025).

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