Certified Pediatric Hematology Oncology Nurse (CPHON) Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Don’t worry about getting everything right, your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations, and take breaks to retain information better.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning.

7. Use Other Tools

Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly — adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What are two main cardiac complications associated with chronic anemia?

A. Cardiomegaly and EKG changes

B. Arrhythmias and myocardial infarction

C. Heart murmur and heart failure

D. Cardiac hypertrophy and hypertension

2. What does the term Hb AS refer to?

A. Acute Sickle Cell Disease

B. Carrier state

C. Severe Sickle Cell Disease

D. Moderate SCD

3. What is the estimated incidence of Schwachman-Diamond Syndrome?

A. 1 in 10,000 births

B. 1 in 15,000 births

C. 1 in 20,000 births

D. 1 in 25,000 births

4. What is the typical classification of Hb Sbeta0 Thalassemia?

A. Usually mild

B. Usually severe

C. Carrier state

D. Moderate

5. What does autotransfusion refer to in the context of splenic sequestration?

A. Transfusion of whole blood from a donor

B. Release of trapped RBCs by the spleen

C. Removal of the spleen

D. Point-of-care blood testing

6. What type of nutritional deficiency can occur due to malabsorption in Schwachman-Diamond Syndrome?

A. Water-soluble vitamins

B. Vitamin D only

C. Fat-soluble vitamins

D. Mineral deficiencies

7. What is one of the genetic anomalies seen in Dyskeratosis Congenita?

A. Telomerase insufficiency

B. Excessive telomere elongation

C. Enhanced ribosomal activity

D. Decreased apoptosis

8. Why do patients with SCD experience pain crises?

A. Due to high blood viscosity causing vascular occlusions

B. Resulting from dehydration

C. As a side effect of medication

D. Due to low blood pressure

9. Chronic neutropenia in children with Schwachman-Diamond Syndrome increases the risk for which of the following conditions?

A. Aplastic anemia

B. Rheumatoid arthritis

C. Bone demineralization

D. Asthma

10. What specific diagnostic test measures fat malabsorption in individuals suspected of having Schwachman-Diamond Syndrome?

A. Complete blood count

B. 72-hour fecal fat test

C. Serum electrocytes testing

D. Blood glucose testing

Answers

1. A
2. B
3. C
4. B
5. B
6. C
7. A
8. A
9. C
10. B

Explanations

1. What are two main cardiac complications associated with chronic anemia?

A. Cardiomegaly and EKG changes

B. Arrhythmias and myocardial infarction

C. Heart murmur and heart failure

D. Cardiac hypertrophy and hypertension

Chronic anemia leads to several adaptive changes in the cardiovascular system due to the decreased oxygen-carrying capacity of the blood. The correct choice highlights two main cardiac complications that frequently occur in the context of chronic anemia: cardiomegaly and EKG changes. Cardiomegaly, or an enlarged heart, often results from the heart working harder to supply adequate oxygen to the body due to low hemoglobin levels. This increased workload can lead to ventricular dilation and hypertrophy as the heart adapts to the chronic lack of oxygen. EKG changes can also manifest due to these adaptations and the resultant strain on the heart. Abnormalities such as left ventricular hypertrophy may be observed on an electrocardiogram as the myocardium adapts to the increased demand for cardiac output. Other options present cardiac issues that may be relevant but are not the primary complications typically associated with chronic anemia. While arrhythmias and myocardial infarction can occur in various cardiovascular conditions, they are not as directly linked to the chronic changes seen in anemia as cardiomegaly and EKG changes. Similarly, heart murmurs may indicate numerous other cardiovascular anomalies or effects but are not as specific to chronic anemia. Cardiac hypertrophy and hypertension are relevant factors in some

2. What does the term Hb AS refer to?

A. Acute Sickle Cell Disease

B. Carrier state

C. Severe Sickle Cell Disease

D. Moderate SCD

The term Hb AS refers to the carrier state for sickle cell hemoglobin, indicating that the individual possesses one normal hemoglobin gene (A) and one sickle cell gene (S). This genotype is also known as sickle cell trait. People with Hb AS typically do not experience the symptoms associated with sickle cell disease, as they have enough normal hemoglobin to prevent sickling under normal circumstances. However, they can pass the sickle cell gene to their offspring, which makes the identification of Hb AS crucial in genetic counseling and family planning. In contrast, acute sickle cell disease, severe sickle cell disease, and moderate SCD refer to more complex conditions relating to the Hb SS genotype, where individuals have two copies of the sickle cell gene and experience varying degrees of health challenges associated with sickling episodes. Understanding the distinction between Hb AS and these disease states is important for nurses caring for patients and families affected by sickle cell disorders.

3. What is the estimated incidence of Schwachman-Diamond Syndrome?

A. 1 in 10,000 births

B. 1 in 15,000 births

C. 1 in 20,000 births

D. 1 in 25,000 births

The estimated incidence of Schwachman-Diamond Syndrome is approximately 1 in 20,000 births. This genetic disorder primarily affects the pancreas, bone marrow, and skeleton, leading to symptoms such as pancreatic insufficiency, recurrent infections due to bone marrow dysfunction, and skeletal abnormalities. The specific incidence is based on available epidemiological studies that analyze the prevalence of this rare condition. While the other options provide different incidence figures, they do not accurately reflect the established estimates from current medical literature, which consistently supports the 1 in 20,000 births figure. This understanding is crucial for healthcare professionals, as recognizing the incidence can aid in early detection and management of the syndrome in affected individuals.

4. What is the typical classification of Hb Sbeta0 Thalassemia?

A. Usually mild

B. Usually severe

C. Carrier state

D. Moderate

Hb Sbeta0 Thalassemia is classified as usually severe due to the significant reduction or absence of beta globin chains, which leads to a clinical presentation characterized by severe anemia and associated complications. The combination of sickle hemoglobin (Hb S) and the absence of beta globin results in aggressive sickling of red blood cells, leading to vaso-occlusive crises, splenic sequestration, and increased risk of infections. Patients with Hb Sbeta0 Thalassemia typically exhibit symptoms such as jaundice, fatigue, and growth impairment due to the severity of the anemia. Chronic hemolysis further exacerbates their condition, making regular transfusions and extensive medical management necessary to maintain hemoglobin levels and prevent complications. In contrast, other classifications such as usually mild or moderate do not accurately represent the debilitating nature of Hb Sbeta0 Thalassemia, and the carrier state does not involve the same symptomatic and clinical challenges faced by those with the condition. Therefore, the classification of Hb Sbeta0 Thalassemia as usually severe underscores the critical need for comprehensive care and intervention in these patients.

5. What does autotransfusion refer to in the context of splenic sequestration?

A. Transfusion of whole blood from a donor

B. Release of trapped RBCs by the spleen

C. Removal of the spleen

D. Point-of-care blood testing

Autotransfusion in the context of splenic sequestration specifically refers to the process where the spleen releases trapped red blood cells (RBCs) back into circulation. In cases of splenic sequestration, such as in conditions like sickle cell disease, the spleen can become enlarged and trap a significant number of RBCs. This sequestered blood can result in a decrease in the circulating volume, leading to a drop in hemoglobin levels and potentially causing symptoms of anemia. When the spleen releases these trapped RBCs, it essentially helps to restore some of the lost blood volume and improve overall oxygen transport in the body, thereby helping to mitigate the effects of the sequestration. Understanding this process highlights the critical role the spleen plays in managing red blood cell counts and in the body's response to anemia. The other options do not accurately capture the essence of autotransfusion in this context. For example, transfusion of whole blood from a donor refers to an external source of RBCs, while removal of the spleen would eliminate the possibility of sequestration altogether, and point-of-care blood testing pertains to diagnostic procedures rather than the physiological process involved in autotransfusion related to splenic function.

6. What type of nutritional deficiency can occur due to malabsorption in Schwachman-Diamond Syndrome?

A. Water-soluble vitamins

B. Vitamin D only

C. Fat-soluble vitamins

D. Mineral deficiencies

Schwachman-Diamond Syndrome is associated with pancreatic insufficiency, which leads to malabsorption of nutrients. This condition significantly affects the absorption of fat-soluble vitamins, which include vitamins A, D, E, and K. The pancreas produces enzymes that are crucial for the digestion of fats, and when these enzymes are insufficient, the body struggles to break down and absorb these essential vitamins. Therefore, individuals with Schwachman-Diamond Syndrome are particularly at risk for deficiencies in fat-soluble vitamins due to this malabsorption issue. In contrast, water-soluble vitamins are typically absorbed differently and may not be as severely affected by pancreatic functions, while mineral deficiencies are less specifically linked to the malabsorption caused by this syndrome. Thus, the focus on fat-soluble vitamins highlights the unique nutritional challenges faced by individuals with this condition.

7. What is one of the genetic anomalies seen in Dyskeratosis Congenita?

A. Telomerase insufficiency

B. Excessive telomere elongation

C. Enhanced ribosomal activity

D. Decreased apoptosis

Dyskeratosis Congenita is characterized by genetic anomalies primarily associated with telomere biology, where telomerase insufficiency plays a critical role. This condition is often caused by mutations in genes involved in telomere maintenance, leading to a significant reduction in telomerase activity. Telomerase is the enzyme responsible for adding nucleotide sequences to the ends of telomeres, thereby maintaining their length and stability. When telomerase is insufficient, it results in progressive telomere shortening, which can lead to premature cellular aging, bone marrow failure, and increased susceptibility to certain cancers. The other options reflect processes not typically seen in Dyskeratosis Congenita. For example, excessive telomere elongation would not occur because the fundamental issue is a lack of adequate telomerase activity. Enhanced ribosomal activity and decreased apoptosis are also not directly related to the hallmark features of Dyskeratosis Congenita, which centers around telomere dysfunction and its complications.

8. Why do patients with SCD experience pain crises?

A. Due to high blood viscosity causing vascular occlusions

B. Resulting from dehydration

C. As a side effect of medication

D. Due to low blood pressure

Patients with Sickle Cell Disease (SCD) experience pain crises primarily because high blood viscosity leads to vascular occlusions. In SCD, abnormal hemoglobin (HbS) causes red blood cells to assume a sickle shape, particularly under conditions of dehydration, low oxygen levels, or other stressors. These sickled cells are rigid and can obstruct blood flow in small vessels, resulting in vaso-occlusive crises. The pain associated with these crises arises from the ischemia (lack of blood flow) and resultant tissue damage that occurs when blood flow is blocked. This disruption of circulation can lead to severe pain, particularly in areas like the chest, abdomen, and joints. Understanding the mechanism of pain crises in SCD highlights the critical role that blood viscosity and vessel obstruction play in the disease's pathophysiology. Other options may relate to factors that can exacerbate the situation, but the fundamental cause of pain crises is directly linked to vascular occlusions resulting from the unique characteristics of sickled red blood cells.

9. Chronic neutropenia in children with Schwachman-Diamond Syndrome increases the risk for which of the following conditions?

A. Aplastic anemia

B. Rheumatoid arthritis

C. Bone demineralization

D. Asthma

Chronic neutropenia, particularly in conditions such as Schwachman-Diamond Syndrome, leads to multiple challenges due to impaired immune function. Children with this syndrome often have a compromised ability to fight infections because neutrophils, a type of white blood cell essential for combating infections, are diminished. This persistent low level of neutrophils can also affect other aspects of health, including the maintenance of bone integrity. Bone demineralization is often a consequence of prolonged periods of infection or inflammation, which is common in children with neutropenia. The focus on chronic inflammation and the need for the body to rely on alternative mechanisms to compensate for the lack of neutrophils can result in a decrease in bone density over time. Therefore, bone demineralization is a concern in these patients as they may lead to an increased risk of fractures and other skeletal issues. While aplastic anemia, rheumatoid arthritis, and asthma are significant health concerns, they are not directly attributable to the chronic neutropenic condition associated with Schwachman-Diamond Syndrome in the same way that bone demineralization is.

10. What specific diagnostic test measures fat malabsorption in individuals suspected of having Schwachman-Diamond Syndrome?

A. Complete blood count

B. 72-hour fecal fat test

C. Serum electrocytes testing

D. Blood glucose testing

The 72-hour fecal fat test is the specific diagnostic measure used to assess fat malabsorption, particularly in individuals suspected of having Schwachman-Diamond Syndrome. This syndrome is a genetic disorder characterized by pancreatic insufficiency, which means the pancreas does not produce enough enzymes to properly digest food. As a result, individuals with this condition often experience malabsorption of nutrients, specifically fats. During the 72-hour fecal fat test, a patient consumes a diet high in fat and collects all stools produced over a three-day period. The collected stool samples are then analyzed for fat content. An elevated level of fat in the stool indicates malabsorption, confirming the suspicion of pancreatic insufficiency which is associated with Schwachman-Diamond Syndrome. Other diagnostic tests mentioned, such as a complete blood count, serum electrocytes testing, and blood glucose testing, do not specifically evaluate fat absorption. While these tests can provide useful information about a patient's overall health or specific aspects of their metabolic function, they do not offer the targeted assessment necessary to diagnose fat malabsorption linked to pancreatic insufficiency in this context.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://cphon.examzify.com

We wish you the very best on your exam journey. You've got this!