

REGISTERED PHLEBOLOGY SONOGRAPHER (RPHS) CERTIFICATION PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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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. 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.

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. 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

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- 1. In patients with Nutcracker syndrome, what symptom is often present?**
 - A. Palpitations
 - B. Joint pain
 - C. Flank pain
 - D. Chest pain
- 2. Which additive is often used to enhance the effectiveness of anesthetic agents?**
 - A. Antibiotics
 - B. NaHCO_3
 - C. Vasopressors
 - D. Antihistamines
- 3. What is the normal air to sclerosant ratio for creating foam sclerotherapy?**
 - A. 1:2
 - B. 1:4
 - C. 1:5
 - D. 3:1
- 4. What effect do factors that increase interstitial fluid pressure have on lymph flow?**
 - A. Decrease lymph flow
 - B. No effect on lymph flow
 - C. Increase lymph flow
 - D. Only affect veins
- 5. What is the optimal concentration of epinephrine used to decrease the risk of toxicity?**
 - A. 1:100,000
 - B. 1:200,000
 - C. 1:300,000
 - D. 1:400,000

- 6. What is the risk of recurrent DVT in patients with PTS?**
- A. 1.6%
 - B. 7.5%
 - C. 15%
 - D. 10%
- 7. What effect does tumescent anesthesia have when applied properly?**
- A. Increases blood flow
 - B. Provides a thermal buffer
 - C. Reduces the need for sedation
 - D. Increases recovery time
- 8. Where does the great saphenous vein (GSV) originate?**
- A. Foot
 - B. Leg
 - C. Thigh
 - D. Hip
- 9. What is the primary effect of topical anesthesia when using Emila cream?**
- A. Reduction of pain sensation during procedures
 - B. Improved blood circulation
 - C. Increased heart rate
 - D. Enhancement of sedation effects
- 10. What percentage of varicose vein cases is attributed to the great saphenous vein (GSV)?**
- A. 60%
 - B. 53%
 - C. 32%
 - D. 9%

Answers

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

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Explanations

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1. In patients with Nutcracker syndrome, what symptom is often present?

- A. Palpitations
- B. Joint pain
- C. Flank pain**
- D. Chest pain

In patients with Nutcracker syndrome, flank pain is often a prominent symptom due to the compression of the left renal vein as it passes between the aorta and the superior mesenteric artery. This compression can lead to various symptoms, primarily related to the kidneys and the lower abdomen. The left renal vein becomes engorged due to increased venous pressure, which can cause pain in the flank region. Additionally, patients may experience other symptoms due to the potential for renal vein entrapment, but flank pain is a common and significant indicator of this condition. Other symptoms like palpitations, joint pain, or chest pain are not typically associated with Nutcracker syndrome, as they relate to different physiological processes and conditions that do not involve the specific vascular abnormalities present in this syndrome. Flank pain remains a key clinical marker linking this condition to its characteristic vascular compression effects.

2. Which additive is often used to enhance the effectiveness of anesthetic agents?

- A. Antibiotics
- B. NaHCO₃**
- C. Vasopressors
- D. Antihistamines

The use of sodium bicarbonate (NaHCO₃) as an additive in anesthetics is primarily to enhance the effectiveness of local anesthetic agents. When NaHCO₃ is added, it helps to increase the pH of the solution, making it less acidic. This higher pH allows for better diffusion of the anesthetic into the nerve tissues, leading to a more rapid onset of action and potentially improving the quality of anesthesia. In the context of anesthetic administration, when local anesthetics are used in acidic solutions, a significant amount remains in the ionized form, which does not effectively penetrate nerve membranes. By adjusting the pH with sodium bicarbonate, a greater proportion of the anesthetic exists in the non-ionized form, promoting better efficacy. Other additives, such as antibiotics, vasopressors, and antihistamines, serve different purposes. Antibiotics may be used to prevent infection, vasopressors can affect vascular tone and blood pressure, and antihistamines are typically used to manage allergic reactions or to provide sedation. These additives do not have the same direct impact on enhancing the effectiveness of anesthetic agents as sodium bicarbonate does.

3. What is the normal air to sclerosant ratio for creating foam sclerotherapy?

- A. 1:2
- B. 1:4**
- C. 1:5
- D. 3:1

The normal air to sclerosant ratio for creating foam sclerotherapy is typically 1:4. This ratio is important because it maximizes the effectiveness of the foam while minimizing the volume of sclerosant used. A 1:4 ratio creates a stable foam with sufficient volume to adequately fill the vein, allowing for better contact with the vascular endothelium, which enhances the sclerosant's action. Using this specific ratio helps in producing a foam that not only has the necessary density to facilitate proper vein closure but also ensures that it retains its effective properties during administration. A more concentrated foam can potentially lead to complications or increased side effects, while a weaker foam might not adequately address the target veins. This balance underscores the importance of adhering to established ratios in clinical practice for safe and effective treatment outcomes.

4. What effect do factors that increase interstitial fluid pressure have on lymph flow?

- A. Decrease lymph flow
- B. No effect on lymph flow
- C. Increase lymph flow**
- D. Only affect veins

Factors that increase interstitial fluid pressure primarily lead to an increase in lymph flow. The lymphatic system is designed to help manage excess interstitial fluid by reabsorbing it and returning it to the circulatory system. When interstitial fluid pressure rises, it enhances the driving force that propels fluid into lymphatic capillaries. This is due to the structure of the lymphatic system, where lymphatic capillaries have one-way valves that prevent backflow. As interstitial fluid accumulates and exerts higher pressure, it forces the fluid into these capillaries, effectively increasing the volume of lymph transported through the lymphatic vessels. The increased flow is necessary to maintain tissue homeostasis and prevent conditions such as edema, which can arise from fluid overload. This relationship underscores the lymphatic system's critical role in fluid regulation, particularly during situations when the interstitial environment changes, such as inflammation or increased vascular permeability.

5. What is the optimal concentration of epinephrine used to decrease the risk of toxicity?

- A. 1:100,000
- B. 1:200,000**
- C. 1:300,000
- D. 1:400,000

The optimal concentration of epinephrine used to decrease the risk of toxicity is typically considered to be 1:200,000. This concentration strikes a balance between providing adequate vasoconstrictive effects, which help prolong the action of local anesthetics, and minimizing the potential for systemic toxicity associated with epinephrine. When concentrations are too high, the likelihood of systemic absorption increases, which can lead to adverse cardiovascular effects, including increased heart rate and blood pressure, as well as potential arrhythmias. 1:200,000 is widely accepted in many clinical settings as a safe and effective dilution that allows for improved control of bleeding while reducing the risk of potential side effects. This concentration offers a compromise between efficacy and safety, making it a preferred choice among healthcare practitioners when utilizing epinephrine as an adjunct in local anesthesia.

6. What is the risk of recurrent DVT in patients with PTS?

- A. 1.6%
- B. 7.5%**
- C. 15%
- D. 10%

The risk of recurrent Deep Vein Thrombosis (DVT) in patients with Post-Thrombotic Syndrome (PTS) is significant due to the underlying changes in the venous system that occur after a DVT episode. PTS itself can lead to chronic issues such as venous hypertension, which can predispose patients to further thrombotic events. Studies indicate that the recurrence rate of DVT among patients with PTS is approximately 7.5%. This statistic underlines the importance of careful monitoring and management of patients diagnosed with PTS to reduce the risk of recurrence. Factors such as ongoing venous obstruction and valve dysfunction contribute to this elevated risk, reinforcing the necessity for preventive strategies in this patient population.

7. What effect does tumescent anesthesia have when applied properly?

- A. Increases blood flow
- B. Provides a thermal buffer**
- C. Reduces the need for sedation
- D. Increases recovery time

Tumescent anesthesia is a technique commonly used in various medical and cosmetic procedures, particularly for liposuction and varicose vein treatments. When applied properly, it provides a thermal buffer, which helps regulate and stabilize the temperature of the tissues in the area being treated. This is important during procedures where heat is generated, such as with laser treatments or radiofrequency devices, as it protects the surrounding tissues from potential thermal injury. By maintaining a stable temperature, tumescent anesthesia not only enhances patient comfort but also reduces the risks associated with thermal damage to the skin and other structures. This ability to act as a thermal buffer contributes significantly to the overall safety and efficacy of the procedure, making it a preferred anesthesia technique in these contexts.

8. Where does the great saphenous vein (GSV) originate?

- A. Foot**
- B. Leg
- C. Thigh
- D. Hip

The great saphenous vein (GSV) originates in the foot. More specifically, it starts as a continuation of the dorsal vein of the great toe and travels up the medial aspect of the leg and thigh, eventually draining into the femoral vein in the groin area. Its primary function is to collect deoxygenated blood from the lower limb and support venous return to the heart. Understanding its origin is crucial for various clinical practices, including the recognition of conditions affecting venous drainage and potential interventions.

9. What is the primary effect of topical anesthesia when using Emila cream?

- A. Reduction of pain sensation during procedures**
- B. Improved blood circulation
- C. Increased heart rate
- D. Enhancement of sedation effects

The primary effect of topical anesthesia, such as Emila cream, is the reduction of pain sensation during procedures. Topical anesthetics work by blocking nerve signals in the area where they are applied, thereby preventing the sensation of pain from reaching the brain. This localized effect is essential during various dermatological procedures or minor surgeries, allowing patients to experience less discomfort. The topical application of such anesthetics helps to create a more tolerable experience for patients, which is particularly important in procedures that might otherwise induce anxiety or significant discomfort. As a result, practitioners can perform necessary medical interventions with better patient cooperation and less anxiety.

10. What percentage of varicose vein cases is attributed to the great saphenous vein (GSV)?

- A. 60%**
- B. 53%
- C. 32%
- D. 9%

The correct answer indicates that 60% of varicose vein cases are attributed to the great saphenous vein (GSV). This statistic is significant as it highlights the prevalence of GSV involvement in chronic venous insufficiency and varicose vein pathology. The great saphenous vein runs the length of the leg and connects to the deep venous system. Its anatomy and proximity to areas prone to valve incompetence make it a frequent source of varicose veins. In clinical practice, understanding that a substantial percentage of varicose vein cases are linked to the GSV emphasizes the importance of targeting this vein during assessments and treatment planning. This knowledge assists practitioners in making informed decisions about intervention strategies, such as saphenous vein stripping or endovenous laser therapy, with the primary focus on maximizing patient outcomes by addressing the most common source of venous insufficiency.

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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://regphlebologysonographer.examzify.com>

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

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