Chest Tube Management Practice Test (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. 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

1. What data about the fluid in the water-seal chamber indicates the chest drainage system is functioning correctly?

- **A. Rises with inspiration and falls with expiration**
- **B. Rises with expiration and falls with inspiration**
- **C. Stays constant**
- **D. Fluctuates randomly**

2. Which chamber in a closed chest drainage system is used to regulate suction and may show bubbling?

- **A. Water seal chamber**
- **B. Drainage reservoir**
- **C. Suction control chamber**
- **D. Collection chamber**

3. What maintains the visceral pleura in contact with the parietal pleura?

- **A. Positive pressure between the membranes**
- **B. Negative pressure (vacuum) between the membranes**
- **C. Gravity**
- **D. Air pressure in alveoli**

4. The control chamber water level is responsible for which aspect of suction?

- **A. It sets the suction pressure by its height and volume in the control chamber**
- **B. It monitors heart rate**
- **C. It filters air into the system**
- **D. It stores drainage**

5. Is it recommended to depress the manual vent when suction is not connected or not operating?

- **A. Yes**
- **B. No**
- **C. Only if trained**
- **D. Only briefly**

6. Which statement about depressing the manual vent is correct?

- **A. It should be depressed only when suction is connected and operating**
- **B. It should be depressed any time to speed up drainage**
- **C. It should never be used**
- **D. It should be kept closed at all times**

7. Which statement best describes the diagnostic utility of the water seal?

- **A. It can determine heart rate noninvasively**
- **B. It can directly drain pleural fluid**
- **C. It can measure blood oxygen saturation**
- **D. It can reveal very small air leaks and changes in intrathoracic pressure**

8. How should you lower the water seal height when the chest drainage system is connected to suction?

- **A. Temporarily depress the manual vent located on top of the drain until the water column lowers to the desired level**
- **B. Increase the suction regulator to maximum**
- **C. Remove the chest tube**
- **D. Close the drainage bottle valve**

9. Before removing a chest tube, what is the acceptable 24-hour drainage volume?

- **A. <500cc over 24 hours**
- **B. <100cc over 24 hours**
- **C. <150cc over 24 hours**
- **D. <75cc over 24 hours**

10. Which finding indicates there is no air leak present?

- **A. No bubbling with minimal float ball oscillation at the bottom**
- **B. Continuous bubbling in the water seal**
- **C. Intermittent bubbling with float ball oscillation**
- **D. Bubbling from right to left**

Answers

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

Explanations

1. What data about the fluid in the water-seal chamber indicates the chest drainage system is functioning correctly?

A. Rises with inspiration and falls with expiration

B. Rises with expiration and falls with inspiration

C. Stays constant

D. Fluctuates randomly

The data being tested is tidaling in the water-seal chamber—the water level should move with the patient's breathing. When you inhale, intrapleural pressure becomes more negative, pulling air from the pleural space into the water seal and pushing the water level up. As you exhale, the pressure becomes less negative and air exits through the system, causing the water level to fall. So rising with inspiration and falling with expiration shows the chamber is allowing air to move as the lungs expand and contract, indicating the system is functioning properly. If the level stays constant or shows other patterns, that can point to a blockage or other issue, but the described rise with inspiration and fall with expiration is the hallmark of a working water-seal drainage system.

2. Which chamber in a closed chest drainage system is used to regulate suction and may show bubbling?

A. Water seal chamber

B. Drainage reservoir

C. Suction control chamber

D. Collection chamber

The suction control chamber is responsible for setting and regulating the negative pressure applied to the chest. It uses a column of water to create a controlled suction level: as the wall suction draws air through, bubbles rise in this water column, and those bubbles show that suction is being transmitted to the system at the prescribed level. If the bubbling in this chamber is absent or inconsistent, the suction may not be properly delivered, and connections or the water level should be checked. The water seal chamber, by contrast, acts as a one-way valve to prevent air from flowing back into the chest; it can bubble when there's an air leak or during respiration, but it does not regulate suction. The drainage or collection chamber simply collects pleural fluid and does not control suction.

3. What maintains the visceral pleura in contact with the parietal pleura?

A. Positive pressure between the membranes

B. Negative pressure (vacuum) between the membranes

C. Gravity

D. Air pressure in alveoli

The membranes stay in contact because the space between them is kept under negative pressure. This intrapleural vacuum arises from the opposing elastic recoils of the lungs and the chest wall, aided by the surface tension of the small amount of pleural fluid between them. That negative pressure pulls the visceral and parietal pleura together and keeps the lungs expanded within the chest. At rest this pressure is below atmospheric and becomes even more negative during inspiration, helping the lungs to expand. If air or fluid enters the pleural space and the negative pressure is lost, the lung collapses or fails to fully inflate. Positive pressure between the membranes would push them apart, gravity isn't what maintains the contact, and the air pressure in the alveoli isn't the mechanism for keeping the pleurae apposed.

4. The control chamber water level is responsible for which aspect of suction?

A. It sets the suction pressure by its height and volume in the control chamber

B. It monitors heart rate

C. It filters air into the system

D. It stores drainage

In suction-chest tube systems, the suction control chamber uses a water column to regulate the negative pressure delivered to the pleural space. The height of the water in that chamber determines how much suction is transmitted: a taller column means greater negative pressure (within the device's limits), and the volume of water helps dampen fluctuations to keep suction steady. This is why the control chamber water level is described as setting suction pressure by its height and volume. It isn't about monitoring heart rate, filtering air, or storing drainage—those functions belong to other parts of the system.

5. Is it recommended to depress the manual vent when suction is not connected or not operating?

A. Yes

B. No

C. Only if trained

D. Only briefly

In this setup, preserving a closed, controlled drainage system is essential. The manual vent is part of the suction control that allows air to escape when suction is active. If suction is not connected or not operating, depressing the vent creates a direct opening to the atmosphere. Without suction to pull air through, opening the vent can let room air enter the drainage line and potentially the pleural space, increasing the risk of a pneumothorax or compromising drainage. Therefore, the vent should not be depressed when suction is unavailable. If suction isn't connected or isn't working, check the system for disconnections, kinks, or faults and restore suction before making any vent adjustments.

6. Which statement about depressing the manual vent is correct?

A. It should be depressed only when suction is connected and operating

B. It should be depressed any time to speed up drainage

C. It should never be used

D. It should be kept closed at all times

The main idea is how the manual vent changes the flow path in a chest tube drainage system. Depressing the vent opens an air pathway to the atmosphere, which reduces resistance in the system and allows air and fluid from the chest to escape more readily. By providing this quick release path, drainage can be speeded up whenever you want or need faster removal, such as when suction isn't actively pulling fluid or when rapid drainage is indicated. The other thoughts—only using it with suction, never using it, or keeping it closed—don't align with how the vent is intended to function to enhance drainage.

7. Which statement best describes the diagnostic utility of the water seal?

A. It can determine heart rate noninvasively

B. It can directly drain pleural fluid

C. It can measure blood oxygen saturation

D. It can reveal very small air leaks and changes in intrathoracic pressure

The water seal chamber functions as a passive, one-way barrier that allows air to escape from the pleural space but prevents air from flowing back in. Because of this setup, you monitor the chamber visually to detect air movement. Bubbling in the water seal indicates air is leaving the chest, and even very small leaks will often produce some bubbling. The pattern and presence of bubbling also reflect intrathoracic pressure changes with breathing or with suction, so you can detect shifts in pressure or the persistence of a leak. The water seal does not actively drain pleural fluid (that happens in the collection chamber), nor does it measure heart rate or oxygen saturation (that monitoring is done separately). Therefore, describing the water seal as capable of revealing very small air leaks and changes in intrathoracic pressure best captures its diagnostic utility.

8. How should you lower the water seal height when the chest drainage system is connected to suction?

A. Temporarily depress the manual vent located on top of the drain until the water column lowers to the desired level

B. Increase the suction regulator to maximum

C. Remove the chest tube

D. Close the drainage bottle valve

Lowering the water seal height while the system is on suction is done by briefly depressing the manual vent on top of the drainage unit. Opening the vent briefly allows air to escape from the suction-control chamber, which reduces the suction effect on the water column and lets the water level in the seal drop to the desired height. After achieving the target level, stop venting and maintain the suction as calibrated. Raising suction to the maximum isn't a direct way to control the water seal height and can risk tissue injury. Removing the chest tube or closing the drainage bottle valve would stop drainage or disrupt the system rather than adjust the water seal height.

9. Before removing a chest tube, what is the acceptable 24-hour drainage volume?

A. <500cc over 24 hours

B. <100cc over 24 hours

C. <150cc over 24 hours

D. <75cc over 24 hours

Before removing a chest tube, the amount of drainage in the last 24 hours should be minimal and show a downward trend, and there should be no ongoing air leak with the lung adequately expanded. The threshold most commonly taught for safe removal is less than 150 mL of drainage in 24 hours. This level suggests that the pleural space is no longer accumulating significant fluid or blood and that the risk of reaccumulation after removal is low, assuming the lung is fully expanded and there is no persistent air leak. Why this is the best choice: less than 150 mL in 24 hours signals resolution of the initial problem (bleeding or drainage) and stability after drainage, making removal safer while avoiding unnecessary prolongation of chest tube placement. Why the other options don't fit as well: a higher figure like 500 mL in 24 hours implies substantial ongoing drainage and a higher risk of recurrence if the tube is removed. Very strict thresholds such as under 100 mL or under 75 mL may be used in some protocols, but the standard teaching scenario commonly cited for safe removal uses the <150 mL criterion, balancing safety with timely removal.

10. Which finding indicates there is no air leak present?

A. No bubbling with minimal float ball oscillation at the bottom

B. Continuous bubbling in the water seal

C. Intermittent bubbling with float ball oscillation

D. Bubbling from right to left

In a chest drainage system, air leaks show up as bubbling in the water-seal chamber. If there's no air leak, you'd expect no bubbling in that chamber, with only minimal movement of the float ball indicating stable conditions. Continuous bubbling means a persistent air leak; intermittent bubbling means a leak that isn't constant; any unusual directional bubbling isn't a standard sign and still points to air movement. So the finding that indicates no air leak is the absence of bubbling in the water-seal chamber with only minimal float-ball movement.

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://chesttubemgmt.examzify.com

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