# VASCULAR TECHNIQUES EXAM 3 PRACTICE (SAMPLE)

## STUDY GUIDE

## SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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https://vasculartechniques3.examzify.com

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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 is the role of venous mapping in planning arteriovenous access or bypass?**

A. Venous mapping has no role in planning AV access.

B. Venous mapping only assesses skin color.

C. Identify suitable veins for grafts or fistulas by assessing diameter, continuity, valves, and patency.

D. Venous mapping focuses on lymphatic drainage.

**2. Which term describes a stroke lasting longer than 24 hours with permanent damage?**

A. CVA (Cerebrovascular Attack)

B. TIA (Transient Ischemic Attack)

C. ICH (Intracerebral Hemorrhage)

D. SAH (Subarachnoid Hemorrhage)

**3. A mass located between the internal carotid artery (ICA) and external carotid artery (ECA) with a size of 1-6 cm is most likely which entity?**

A. Aneurysm of the common carotid

B. Carotid body tumor

C. Lymph node

D. Atherosclerotic plaque

**4. Emboli causing amaurosis fugax typically originate from which artery?**

A. External carotid

B. Vertebral

C. Subclavian

D. Internal carotid

**5. How is the ankle-brachial index calculated?**

A. Ankle systolic pressure divided by the highest brachial systolic pressure

B. Ankle systolic pressure divided by the lowest brachial systolic pressure

C. Ankle systolic pressure divided by the average brachial systolic pressure

D. Ankle diastolic pressure divided by the brachial systolic pressure

**6. Which arteries are typically used to obtain ankle systolic pressure for ABI?**

A. Dorsalis pedis or posterior tibial arteries

B. Femoral or popliteal arteries

C. Carotid or vertebral arteries

D. Radial or ulnar arteries

**7. Which of the following is a controllable risk factor?**

A. Alcohol or Drug Abuse

B. Hyperlipidemia

C. Age

D. Hypertension

**8. Which statement best describes common contraindications or limitations to EVAR and when alternatives might be used?**

A. Inadequate proximal or distal seal zones, hostile neck anatomy, extreme tortuosity, and poor access.

B. EVAR is always feasible regardless of anatomy.

C. Good neck anatomy guarantees EVAR success in all cases.

D. Extreme tortuosity is not a limitation to EVAR.

**9. What are the six Ps of acute limb ischemia relevant to vascular procedures?**

A. Pain, pallor, pulselessness, paresthesias, paralysis, and poikilothermia

B. Pain, pallor, pulsatile mass, paresthesias, paralysis, and photophobia

C. Pressure, pallor, pulselessness, paresthesias, paralysis, and polarity

D. Pain, pallor, pulselessness, paresthesias, paralysis, and polyuria

**10. The acronym ACST stands for which study?**

A. Aneurysm Carotid Stenosis Trial

B. Asymptomatic Carotid Atherosclerosis Study

C. Arterial Circulation Study Test

D. Autoimmune Carotid Stenosis Trial

# Answers

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

# Explanations

## 1. What is the role of venous mapping in planning arteriovenous access or bypass?

A. Venous mapping has no role in planning AV access.

B. Venous mapping only assesses skin color.

C. Identify suitable veins for grafts or fistulas by assessing diameter, continuity, valves, and patency.

D. Venous mapping focuses on lymphatic drainage.

*The main idea here is using venous mapping to choose the best veins for arteriovenous access by checking which veins can reliably handle the arterialized flow and mature properly. Duplex mapping looks at vein size, continuity, valve pattern, and overall patency to decide if a vein is suitable for a fistula or graft. Diameter matters because veins need to be large enough to carry the increased flow after the connection is made; too-small veins are unlikely to mature into a usable access. Continuity is checked to ensure there's a clean, uninterrupted path for blood to travel from the artery into the vein without segmental disease or gaps that would jeopardize access. Valves are important because many veins have valves that can impede the forward flow needed for a successful fistula; mapping helps anticipate whether valve management or a different vein site would be required. Patency confirms there are no occlusions or significant stenosis that would prevent the vein from functioning long-term. Together, these assessments help predict maturation potential and guide site selection—often favoring superficial, easily accessible veins near the wrist or elbow, with alternatives considered if the most favorable veins aren't suitable. This is why venous mapping plays a central role in planning AV access or bypass; it's not about skin color or lymph drainage, and it significantly influences success and durability of the access.*

## 2. Which term describes a stroke lasting longer than 24 hours with permanent damage?

A. CVA (Cerebrovascular Attack)

B. TIA (Transient Ischemic Attack)

C. ICH (Intracerebral Hemorrhage)

D. SAH (Subarachnoid Hemorrhage)

*This question tests how to tell apart a transient ischemic attack from a stroke by duration and permanent damage. A Transient Ischemic Attack is a brief disruption of blood flow that resolves within 24 hours and does not cause permanent brain injury. When symptoms persist longer than 24 hours and leave permanent deficits, the event is described as a cerebrovascular accident. Historically, CVA denotes a stroke with irreversible brain injury. The other terms refer to bleeding-related strokes (intracerebral or subarachnoid hemorrhage), which are different categories of stroke, but the defining criterion here is duration with lasting damage, which fits CVA.*

## 3. A mass located between the internal carotid artery (ICA) and external carotid artery (ECA) with a size of 1-6 cm is most likely which entity?

A. Aneurysm of the common carotid

B. Carotid body tumor

C. Lymph node

D. Atherosclerotic plaque

*A mass located between the internal and external carotid arteries at the bifurcation is most consistent with a carotid body tumor. This lesion arises from the glomus (paraganglionic) cells right at the carotid body at the bifurcation, so it sits precisely between the two arteries. A hallmark imaging feature is that it tends to push (splay) the ICA and ECA apart, a sign often described as the splaying or Lyre sign. Its size is commonly in the range of 1–6 cm, which fits the description given. These tumors are typically highly vascular, receiving feeders from branches of the external carotid artery, which helps explain why Doppler or angiography shows a prominent vascular blush. This localization and vascular pattern help distinguish carotid body tumors from other possibilities: an aneurysm would arise from the vessel wall itself, a lymph node would lie along nodal pathways rather than sandwiched between the two arteries, and an atherosclerotic plaque is intraluminal within an artery rather than a discrete mass between them.*

## 4. Emboli causing amaurosis fugax typically originate from which artery?

A. External carotid

B. Vertebral

C. Subclavian

D. Internal carotid

*Amaurosis fugax is caused by transient retinal ischemia from emboli that reach the retinal circulation via the ophthalmic artery, which is the first intracranial branch of the internal carotid artery. Because the retinal vessels are supplied through the ophthalmic artery stemming from the internal carotid, emboli originating from the internal carotid are the usual source. Emboli from the external carotid artery don't reliably enter the retinal circulation, and those from the vertebral or subclavian arteries typically affect other vascular territories (posterior circulation or upper limbs) rather than causing transient monocular blindness.*

## 5. How is the ankle-brachial index calculated?

A. Ankle systolic pressure divided by the highest brachial systolic pressure

B. Ankle systolic pressure divided by the lowest brachial systolic pressure

C. Ankle systolic pressure divided by the average brachial systolic pressure

D. Ankle diastolic pressure divided by the brachial systolic pressure

*The ankle-brachial index measures arterial perfusion by comparing systolic pressures in the leg to those in the arm. To be reliable, you take the higher of the two ankle systolic pressures (dorsalis pedis or posterior tibial) and divide it by the higher of the two brachial systolic pressures. This approach accounts for possible asymmetry or undervaluation from a single cuff reading and prevents misclassification of disease due to a low arm pressure. Diastolic pressures aren't used in this index, and using an average or the lowest arm pressure would distort the ratio. Therefore, ankle systolic pressure divided by the highest brachial systolic pressure is the correct calculation.*

## 6. Which arteries are typically used to obtain ankle systolic pressure for ABI?

A. Dorsalis pedis or posterior tibial arteries

B. Femoral or popliteal arteries

C. Carotid or vertebral arteries

D. Radial or ulnar arteries

*Ankle pressures for the ABI come from arteries that actually supply the foot, because the test compares that distal pressure to the arm's brachial pressure to assess leg perfusion. The typical sites are the dorsalis pedis artery on the top of the foot and the posterior tibial artery just behind the medial malleolus. These arteries are easy to access with a Doppler and give a reliable measure of the ankle systolic pressure. If one site isn't detectable due to disease, the other can be used. Arteries higher up, like the femoral or popliteal, would measure proximal pressures and aren't used for the standard ankle measurement. Carotid/vertebral and radial/ulnar arteries are in the neck or upper limb and not relevant for this ankle-focused test.*

## 7. Which of the following is a controllable risk factor?

A. Alcohol or Drug Abuse

B. Hyperlipidemia

C. Age

D. Hypertension

*The main idea is that modifiable risk factors are those you can actively change to reduce disease risk. Hypertension is a controllable risk factor because blood pressure can be lowered through medications (antihypertensives) and lifestyle changes such as weight loss, reduced salt intake, regular exercise, and limiting alcohol. Lowering blood pressure reduces stress on arterial walls and lowers the risk of vascular events like stroke and aneurysm, making it a particularly clear target for intervention. Age cannot be changed, so it's not a controllable factor. Hyperlipidemia is also modifiable, but hypertension is the quintessential example of a risk factor that clinicians actively manage on multiple fronts. Alcohol or drug abuse is a behavioral factor that can be modified, but in the vascular context hypertension is the most directly and routinely targeted controllable risk factor.*

## 8. Which statement best describes common contraindications or limitations to EVAR and when alternatives might be used?

A. Inadequate proximal or distal seal zones, hostile neck anatomy, extreme tortuosity, and poor access.

B. EVAR is always feasible regardless of anatomy.

C. Good neck anatomy guarantees EVAR success in all cases.

D. Extreme tortuosity is not a limitation to EVAR.

*Endovascular aneurysm repair works best when there is a solid landing zone for the graft and a relatively straightforward path for delivery. When the proximal or distal sealing zones are inadequate, when the neck anatomy is hostile (short, highly angulated, with thrombus or calcification), when there is extreme tortuosity, or when the access vessels are poor, the graft may not seal or track properly. In these situations, the procedure carries higher risks of endoleaks, graft mispositioning, or failure, so alternatives are considered—such as open surgical repair or more complex endovascular solutions like fenestrated/branched devices or conduit extensions. That's why statements that EVAR is always feasible regardless of anatomy or that good neck anatomy guarantees success don't fit, and extreme tortuosity is indeed a real limitation to EVAR.*

## 9. What are the six Ps of acute limb ischemia relevant to vascular procedures?

A. Pain, pallor, pulselessness, paresthesias, paralysis, and poikilothermia

B. Pain, pallor, pulsatile mass, paresthesias, paralysis, and photophobia

C. Pressure, pallor, pulselessness, paresthesias, paralysis, and polarity

D. Pain, pallor, pulselessness, paresthesias, paralysis, and polyuria

*The main concept here is recognizing the classic signs of acute limb ischemia. Sudden loss of arterial blood flow produces a distinctive pattern of neurovascular symptoms, and the six Ps capture the key clinical clues you must act on quickly: Pain from ischemia, pallor due to lack of perfusion, pulselessness from absent distal arterial flow, paresthesias signaling nerve involvement, paralysis when muscle and nerve ischemia progress, and poikilothermia, meaning a cooler limb because it can no longer regulate temperature without adequate blood flow. Each sign fits the pathophysiology: urgent arterial occlusion deprives tissues of oxygen, so pain and color change appear early, the absence of pulses shows the downstream flow disruption, and sensory and motor symptoms reflect evolving nerve and muscle ischemia. Poikilothermia highlights the limb's inability to maintain warmth without circulating blood. The other options introduce features that aren't characteristic of acute limb ischemia, such as a pulsatile mass (suggesting an aneurysm or other local vascular issue), photophobia (eye-related), pressure or polarity (not relevant), or polyuria (a systemic metabolic sign, not local limb ischemia). Thus, the best answer lists Pain, pallor, pulselessness, paresthesias, paralysis, and poikilothermia.*

## 10. The acronym ACST stands for which study?

A. Aneurysm Carotid Stenosis Trial

B. Asymptomatic Carotid Atherosclerosis Study

C. Arterial Circulation Study Test

D. Autoimmune Carotid Stenosis Trial

*ACST refers to a study focused on individuals with carotid disease who have no symptoms, specifically atherosclerosis of the carotid arteries. The phrase "Asymptomatic Carotid Atherosclerosis Study" fits that focus exactly, highlighting both the asymptomatic population and the underlying disease process. The other options describe conditions or concepts that don't align with the study's scope—aneurysm, a generic arterial test, or an autoimmune origin—so they don't match the common naming you'd expect for this trial.*

# 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://vasculartechniques3.examzify.com

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