Traumatic Brain Injury Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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. Which domains are assessed by the FOUR score, and when is it typically used instead of the Glasgow Coma Scale (GCS)?

- **A. Eye response, motor response, brainstem reflexes, and level of respiration**
- **B. Verbal response, eye opening, pupil size, and limb movement**
- **C. Cognitive function, gait, sensation, reflexes**
- **D. Overall consciousness, orientation, communication, arousal**

2. How do you differentiate post-concussive syndrome from persistent cognitive impairment due to brain injury?

- **A. Post-concussive syndrome is typically in mild TBI with persistent headaches, dizziness, and cognitive symptoms for weeks to months; persistent impairment after moderate/severe TBI may reflect structural injury and longer recovery.**
- **B. They are identical conditions.**
- **C. Post-concussive syndrome always shows imaging abnormalities.**
- **D. Persistent impairment only occurs after pediatric injuries.**

3. Discharge planning essential element?

- **A. Vocational/educational planning.**
- **B. No follow-up appointments.**
- **C. No caregiver education.**
- **D. No home safety modifications.**

4. Define post-traumatic amnesia and explain its prognostic significance.

- **A. PTA is a transient mood change after injury; longer PTA predicts better outcomes.**
- **B. PTA is a period of confusion without memory loss; shorter PTA predicts worse outcomes.**
- **C. PTA is a subjective experience of amnesia with no impact on prognosis.**
- **D. PTA is the period of continuous memory loss after injury; longer PTA is associated with worse cognitive and functional outcomes.**

5. How do age and preinjury health influence prognosis after TBI?

- **A. Older age and poorer preinjury health predict worse outcomes.**
- **B. Age and preinjury health have no effect on prognosis.**
- **C. Older age improves prognosis.**
- **D. They only affect seizure risk.**

6. What is the typical timeline and type of seizures after TBI?

- **A. Early seizures occur within the first 7 days; late seizures occur after 7 days; prophylaxis considered depending on risk.**
- **B. Seizures occur only within 24 hours.**
- **C. All seizures occur after 7 days.**
- **D. Seizures do not occur after TBI.**

7. Which term describes the injury mechanism when the head is in motion and experiences rapid deceleration?

- **A. Deceleration injury**
- **B. Concussion**
- **C. Diffuse axonal injury**
- **D. Contusion**

8. Which imaging modality is more sensitive for detecting subtle brain tissue changes after traumatic brain injury?

- **A. CT**
- **B. X-ray**
- **C. MRI**
- **D. Ultrasound**

9. What is the effect of systemic hypotension on TBI outcomes?

- **A. It worsens outcome by reducing cerebral perfusion and exacerbating secondary brain injury**
- **B. It improves outcomes by reducing edema**
- **C. It has no effect on outcomes**
- **D. It delays recovery only**

10. Which imaging finding is characteristic of diffuse brain injury as opposed to focal injury?

A. Focal contusion.

B. Diffuse brain injury is characterized by widespread swelling and axonal injury with no single focal lesion; poorer prognosis.

C. Isolated hemorrhage.

D. Injury limited to the spinal cord.

Answers

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

Explanations

1. Which domains are assessed by the FOUR score, and when is it typically used instead of the Glasgow Coma Scale (GCS)?

A. Eye response, motor response, brainstem reflexes, and level of respiration

B. Verbal response, eye opening, pupil size, and limb movement

C. Cognitive function, gait, sensation, reflexes

D. Overall consciousness, orientation, communication, arousal

The main idea here is that the FOUR score evaluates coma by looking at four specific domains that reflect both cortical and brainstem function. It includes eye response and motor response, just like the GCS, but adds two crucial components: brainstem reflexes and respiration. This combination lets clinicians assess brainstem integrity and breathing patterns even when the patient cannot be scored reliably on verbal response. That's why the correct answer points to eye response, motor response, brainstem reflexes, and respiration. In practice, the FOUR score is especially useful when the Glasgow Coma Scale isn't fully applicable—most often in intubated patients or those with severe facial trauma—because you can't reliably measure verbal response. The brainstem reflexes and respiration parts provide important information about the patient's level of consciousness and brainstem function in those situations. The other options mix in elements that aren't part of the FOUR score—verbal response, pupil size, gait, or general orientation and arousal—so they don't describe the FOUR score domains.

2. How do you differentiate post-concussive syndrome from persistent cognitive impairment due to brain injury?

A. Post-concussive syndrome is typically in mild TBI with persistent headaches, dizziness, and cognitive symptoms for weeks to months; persistent impairment after moderate/severe TBI may reflect structural injury and longer recovery.

B. They are identical conditions.

C. Post-concussive syndrome always shows imaging abnormalities.

D. Persistent impairment only occurs after pediatric injuries.

The main idea is that how long symptoms last and how severe the initial injury was help tell the difference between post-concussive syndrome and lasting cognitive problems from brain injury. Post-concussive syndrome typically follows a mild TBI (a concussion) and includes headaches, dizziness, and cognitive complaints that hover for weeks to months after the injury, often without clear structural brain damage on imaging. When cognitive impairment persists after a moderate to severe TBI, it's more likely due to ongoing structural injury to the brain and tends to have a longer, more protracted recovery—sometimes with imaging showing abnormalities. The other statements aren't accurate because PCS is not identical to persistent impairment, imaging can be normal in PCS, and persistent impairment is not restricted to children.

3. Discharge planning essential element?

A. Vocational/educational planning.

B. No follow-up appointments.

C. No caregiver education.

D. No home safety modifications.

Discharge planning must include a pathway for returning to work or school, because reintegration into vocational or educational settings is a key goal after a brain injury. This planning helps coordinate rehabilitation services, accommodations, and supports needed to resume daily roles safely and effectively, addressing the patient's long-term functional goals and community participation. At the same time, a thorough discharge plan also covers follow-up appointments to monitor recovery, caregiver education so loved ones can support care at home, and any necessary home safety modifications to prevent further injury. Omitting follow-up, caregiver education, or home safety steps would leave important aspects of recovery unmanaged, even though they are all part of a comprehensive plan.

4. Define post-traumatic amnesia and explain its prognostic significance.

A. PTA is a transient mood change after injury; longer PTA predicts better outcomes.

B. PTA is a period of confusion without memory loss; shorter PTA predicts worse outcomes.

C. PTA is a subjective experience of amnesia with no impact on prognosis.

D. PTA is the period of continuous memory loss after injury; longer PTA is associated with worse cognitive and functional outcomes.

Post-traumatic amnesia is the period after a brain injury during which the person cannot form new memories and remains disoriented. It starts at the time of injury and ends when the ability to continuously recall ongoing events and new information stabilizes, meaning the person can reliably remember recent experiences and follow day-to-day events. The longer this memory-formation window lasts, the worse the cognitive and functional prognosis tends to be. A longer PTA duration indicates more extensive brain disruption, and it typically predicts slower overall recovery, longer rehabilitation, and a greater likelihood of lasting deficits. That's why PTA duration is a key marker used to gauge injury severity and guide prognosis and care planning. Other descriptions that portray PTA as mood changes, confusion without memory loss, or having no impact on prognosis don't capture the defining feature—the disruption of forming new memories—and don't align with how PTA relates to outcomes.

5. How do age and preinjury health influence prognosis after TBI?

A. Older age and poorer preinjury health predict worse outcomes.

B. Age and preinjury health have no effect on prognosis.

C. Older age improves prognosis.

D. They only affect seizure risk.

Age and preinjury health influence prognosis after traumatic brain injury. With increasing age, the brain has less plasticity and reserve, and older individuals often have more medical comorbidities and frailty, which raise the risk of complications during recovery and hinder rehabilitation. Poorer preinjury health—such as cardiovascular disease, diabetes, prior brain events, cognitive impairment, or general frailty—reduces physiological reserve and the body's ability to recover, making it harder to regain function. Together, these factors are associated with higher mortality, greater long-term disability, and slower, less complete cognitive and functional recovery. That's why the best answer is that older age and poorer preinjury health predict worse outcomes. The idea that age or health has no effect is not supported by evidence, and the notion that age would improve prognosis contradicts observed recovery patterns. Prognosis after TBI is broader than seizure risk and includes overall functional, cognitive, and independence outcomes.

6. What is the typical timeline and type of seizures after TBI?

A. Early seizures occur within the first 7 days; late seizures occur after 7 days; prophylaxis considered depending on risk.

B. Seizures occur only within 24 hours.

C. All seizures occur after 7 days.

D. Seizures do not occur after TBI.

After a brain injury, seizures are described by when they occur. Early seizures happen within the first seven days after injury, while late seizures occur after seven days. This timing matters because early seizures often reflect acute, reversible factors like swelling, hematoma, or metabolic disturbances, and are the window where short-term antiseizure prophylaxis is considered for those at high risk. Late seizures, which can indicate lasting changes and epileptogenesis, may require longer-term management, but routine long-term prophylaxis isn't generally used due to limited benefit and potential side effects. The other statements don't fit the typical pattern: seizures can occur beyond 24 hours, not only within 24 hours; not all seizures happen after seven days; and seizures can and do occur after TBI.

7. Which term describes the injury mechanism when the head is in motion and experiences rapid deceleration?

A. Deceleration injury

B. Concussion

C. Diffuse axonal injury

D. Contusion

This describes how the brain is injured when the head is moving and suddenly stops. When the skull comes to a halt but the brain inside keeps moving due to inertia, it experiences rapid deceleration. That abrupt stop creates shearing forces as brain tissue slides and strains, especially at the interfaces between gray and white matter, leading to injury of the neural tracts. The term for this mechanism is deceleration injury. Concussion refers to a clinical picture of transient neurological dysfunction, which can accompany such events but is not naming the mechanism itself. Diffuse axonal injury describes the widespread damage that can result from these shear forces, and contusion refers to focal bruising from direct impact. The key idea here is recognizing deceleration as the mechanism driving injury when the head is in motion and rapidly decelerates.

8. Which imaging modality is more sensitive for detecting subtle brain tissue changes after traumatic brain injury?

A. CT

B. X-ray

C. MRI

D. Ultrasound

The main idea is that MRI offers superior tissue contrast and specialized sequences that reveal subtle brain injuries that CT often misses. In traumatic brain injury, many important changes—like diffuse axonal injury, small contusions, edema, and microhemorrhages—can be too subtle for CT to detect. MRI uses sequences such as diffusion-weighted imaging to pick up early cytotoxic edema, FLAIR and T2 to show edema and contusion, and susceptibility-weighted imaging to reveal tiny microhemorrhages. This combination makes MRI much more sensitive to these subtle tissue changes. CT is excellent for its speed and its ability to detect acute hemorrhage and skull fractures, but its sensitivity to non-hemorrhagic or microscopic injuries is limited. X-ray provides essentially no information about brain tissue, and ultrasound is not suitable for imaging the adult brain and is mainly used in different contexts. So for detecting subtle brain tissue changes after traumatic brain injury, MRI is the best choice.

9. What is the effect of systemic hypotension on TBI outcomes?

A. It worsens outcome by reducing cerebral perfusion and exacerbating secondary brain injury

B. It improves outcomes by reducing edema

C. It has no effect on outcomes

D. It delays recovery only

Systemic hypotension lowers mean arterial pressure, which reduces cerebral perfusion pressure (CPP) in the brain. After a traumatic brain injury, intracranial pressure is often elevated, so the brain already operates near the limits of adequate blood flow. Since CPP is roughly the difference between MAP and ICP, a drop in MAP decreases CPP and risks ischemia in vulnerable brain tissue. That additional lack of blood flow powers secondary brain injury—energy failure, inflammation, and cell death—which worsens overall outcomes. Keeping blood pressure up to maintain adequate CPP is therefore crucial to limit this secondary injury. Edema itself isn't improved by lowering blood pressure, and the problem isn't that hypotension simply delays recovery in isolation—the main danger is the reduced perfusion leading to more brain injury. So, the best answer reflects how low systemic pressure harms the injured brain by compromising blood flow and fueling secondary damage.

10. Which imaging finding is characteristic of diffuse brain injury as opposed to focal injury?

A. Focal contusion.

B. Diffuse brain injury is characterized by widespread swelling and axonal injury with no single focal lesion; poorer prognosis.

C. Isolated hemorrhage.

D. Injury limited to the spinal cord.

The key idea is that diffuse brain injury shows a nonlocalizable, widespread pattern on imaging due to diffuse axonal injury. Instead of a single damaged spot, you see brain swelling across large areas and evidence of axonal disruption affecting many white matter tracts. MRI may reveal scattered microhemorrhages in white matter, brainstem, or the corpus callosum, and CT can show diffuse edema rather than one discrete lesion. This diffuse, multifocal disruption contrasts with focal injuries, which present as a specific contusion or a localized hemorrhage. Because the injury spreads through many areas rather than being confined to one site, prognosis tends to be poorer. Other options describe localized lesions or injuries limited to the spinal cord, which do not reflect the diffuse brain injury pattern.

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://traumaticbraininjury.examzify.com

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