NCLEX INTRACRANIAL PRESSURE (ICP) PRACTICE EXAM (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

1. Head-of-bed elevation at 30 degrees: which statement is correct?

A. Elevating to 30 degrees reduces sagittal sinus pressure and promotes drainage.

B. Elevating to 30 degrees has no effect on ICP.

C. Elevating to 30 degrees reduces CPP due to lower systemic BP.

D. Elevating to 30 degrees increases cerebral perfusion pressure.

2. Epidural hematoma presents most characteristically with which scenario?

A. Unconsciousness at the scene with a brief lucid interval followed by a decrease in LOC.

B. Failure to regain consciousness after head injury.

C. Rapid deterioration within 24-48 hours after injury.

D. Nonspecific progression over weeks or months.

3. Which imaging study is primarily used to identify the location of a brain lesion?

A. PET scan

B. Angiography

C. CT scan

D. EEG

4. In a patient with increased ICP, which function should be assessed first when evaluating body functions?

A. Corneal reflex testing

B. Pupillary reaction to light

C. Extremity strength testing

D. Circulatory and respiratory status

5. How should nutrition be provided to a patient with increased ICP to meet metabolic demands?

A. Enteral feedings low in sodium

B. Simple glucose available in D5W IV solutions

C. Fluid restriction that promotes a moderate dehydration

D. Balanced, essential nutrition in a form the patient can tolerate

6. A patient who does not open eyes to any stimulus, moans and mutters when stimulated, and withdraws from painful stimuli would have a Glasgow Coma Scale score of:

A. 11

B. 6

C. 7

D. 9

7. Which drug is used to treat vasogenic edema by stabilizing cell membranes and improving cerebral blood flow?

A. Dexamethasone

B. Mannitol

C. Oxygen administration

D. Pentobarbital

8. A patient with a suspected closed head injury has bloody nasal drainage. Which observation indicates a cerebrospinal fluid leak?

A. Halo sign on the nasal drip pad

B. Decreased blood pressure and urinary output

C. A positive reading for glucose on a test-tape strip

D. Clear nasal drainage along with the bloody discharge

9. What is the normal intracranial pressure range in adults?

A. 0-5 mm Hg

B. 5-15 mm Hg

C. 15-25 mm Hg

D. 25-35 mm Hg

10. An inward indentation of the skull is called which type of fracture?

A. Depressed skull fracture

B. Linear skull fracture

C. Comminuted skull fracture

D. Compound skull fracture

Answers

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

Explanations

1. Head-of-bed elevation at 30 degrees: which statement is correct?

A. Elevating to 30 degrees reduces sagittal sinus pressure and promotes drainage.

B. Elevating to 30 degrees has no effect on ICP.

C. Elevating to 30 degrees reduces CPP due to lower systemic BP.

D. Elevating to 30 degrees increases cerebral perfusion pressure.

Raising the head of the bed to about 30 degrees helps venous drainage from the brain. Gravity assists the blood leaving the intracranial space through the sagittal sinuses, so venous pressure within the skull falls and cerebral venous blood volume decreases. This reduction in venous blood volume lowers the overall intracranial pressure. Think of cerebral perfusion pressure as the pressure that drives blood flow into the brain: CPP = mean arterial pressure minus ICP. When ICP drops (as it does with head elevation) and mean arterial pressure remains stable, CPP can stay the same or increase. The statement that head elevation reduces CPP due to lower systemic BP isn't typically accurate in this context, because the beneficial effect is driven by lower ICP rather than a dangerous drop in systemic pressure. So, elevating the head to 30 degrees reduces sagittal sinus pressure and promotes drainage, which lowers ICP and can maintain or improve CPP.

2. Epidural hematoma presents most characteristically with which scenario?

A. Unconsciousness at the scene with a brief lucid interval followed by a decrease in LOC.

B. Failure to regain consciousness after head injury.

C. Rapid deterioration within 24-48 hours after injury.

D. Nonspecific progression over weeks or months.

Epidural hematoma is driven by rapid arterial bleeding, usually from a temporal bone fracture, which causes a quickly expanding hematoma and rising intracranial pressure. The hallmark pattern you're looking for is an initial loss of consciousness at the scene, followed by a brief period of lucidity, and then a rapid decline in consciousness as the hematoma enlarges. This lucid interval happens because the bleed starts small enough that the brain momentarily recovers, but the accumulating blood quickly worsens brain pressure and function. That pattern is the best clue of an epidural event, differentiating it from other intracranial injuries. For example, a chronic subdural hematoma may show weeks or months of progressive symptoms, and a simple failure to regain consciousness after injury doesn't capture the characteristic transient recovery. Rapid deterioration can occur, but the classic teaching point remains the lucid interval after the initial unconsciousness. Rapid recognition and emergent imaging and surgical management are essential.

3. Which imaging study is primarily used to identify the location of a brain lesion?

A. PET scan

B. Angiography

C. CT scan

D. EEG

Locating a brain lesion relies on a test that provides quick, clear anatomical detail across the brain. A CT scan fits this need in many settings because it can be done rapidly, is widely available, and shows the brain's structure well enough to identify the lesion's exact location and its effects on surrounding tissue such as edema and mass effect. It's especially good for detecting acute bleeding and bone-related injuries, which helps pinpoint where the problem is. While MRI offers superior detail for small or subtle lesions, it takes longer and isn't as practical in emergencies. Other methods focus on function or blood vessels rather than precise anatomy: PET assesses metabolism, angiography images vessels, and EEG records electrical activity. So, for identifying where a lesion is, CT scan is the best first choice.

4. In a patient with increased ICP, which function should be assessed first when evaluating body functions?

A. Corneal reflex testing

B. Pupillary reaction to light

C. Extremity strength testing

D. Circulatory and respiratory status

Increased intracranial pressure makes brain tissue extremely vulnerable to changes in oxygenation and perfusion, so the first priority is ensuring airway and breathing to maintain adequate oxygen delivery and ventilation, which supports cerebral perfusion. Hypoxia worsens brain injury, and elevated CO2 causes cerebral vasodilation that can raise ICP further. By stabilizing circulation and respiration, you preserve cerebral perfusion pressure (CPP = MAP − ICP), creating a reliable basis for further neurological assessment. Once the patient is adequately oxygenated and hemodynamically stable, you can more accurately interpret neurologic signs such as reflexes and motor strength.

5. How should nutrition be provided to a patient with increased ICP to meet metabolic demands?

A. Enteral feedings low in sodium

B. Simple glucose available in D5W IV solutions

C. Fluid restriction that promotes a moderate dehydration

D. Balanced, essential nutrition in a form the patient can tolerate

Meeting the brain's increased metabolic demands after a condition that raises ICP requires providing balanced, essential nutrition in a form the patient can tolerate. The brain uses more energy during injury, and adequate calories, protein, and micronutrients help prevent catabolism, support wound healing, and maintain immune and neurological function. Delivering nutrition via a route the patient tolerates—usually enteral feeding when possible—helps preserve gut integrity, reduces infection risk, and allows gradual adjustment of rate and composition to meet caloric and protein targets while monitoring for tolerance and electrolyte balance. Avoiding dehydration and unbalanced or inappropriate IV fluids is important. Fluid restriction that causes dehydration can compromise cerebral perfusion, worsening ischemia. IV solutions that are merely simple glucose (like D5W) can lead to hyperglycemia and fluid overload, which may worsen cerebral edema and ICP. Balanced nutrition tailored to the patient's needs provides the best support for metabolic demands without introducing these risks.

6. A patient who does not open eyes to any stimulus, moans and mutters when stimulated, and withdraws from painful stimuli would have a Glasgow Coma Scale score of:

A. 11

B. 6

C. 7

D. 9

In the Glasgow Coma Scale, you add three separate responses: eye opening, verbal response, and motor response. Here, eye opening to any stimulus is nil, so that score is 1. Verbal response is moaning and muttering, which corresponds to incomprehensible sounds, giving a score of 2. Motor response is withdrawal from painful stimuli, which is a 4. Adding these together: 1 + 2 + 4 equals 7. This pattern indicates a severe brain injury with a comatose level of arousal.

7. Which drug is used to treat vasogenic edema by stabilizing cell membranes and improving cerebral blood flow?

A. Dexamethasone

B. Mannitol

C. Oxygen administration

D. Pentobarbital

The key idea is using a medication that specifically reduces vasogenic edema by strengthening the blood-brain barrier and decreasing capillary permeability, which in turn improves cerebral blood flow. Dexamethasone is a corticosteroid that decreases capillary permeability and stabilizes the blood-brain barrier. By doing so, it reduces the extracellular fluid accumulation characteristic of vasogenic edema, especially around tumors or inflammatory lesions, and this reduction in edema often leads to better cerebral perfusion and lower intracranial pressure. Mannitol acts by creating an osmotic gradient that pulls water out of the brain tissue, lowering ICP, but it doesn't stabilize cell membranes or directly improve blood flow the way steroids do. Oxygen administration and pentobarbital provide other supportive or metabolic effects rather than addressing the edema mechanism described.

8. A patient with a suspected closed head injury has bloody nasal drainage. Which observation indicates a cerebrospinal fluid leak?

A. Halo sign on the nasal drip pad

B. Decreased blood pressure and urinary output

C. A positive reading for glucose on a test-tape strip

D. Clear nasal drainage along with the bloody discharge

CSF leaks after head injury often present as clear, watery nasal drainage, and the hallmark bedside indicator is a halo sign on the drainage pad. When CSF leaks out and mixes with blood, the clear fluid separates around the central blood stain, forming a ring or halo. CSF does contain glucose, so a glucose test can support the finding, but the halo sign on the pad is the most specific clue that CSF is leaking from the nose. Other observations like low blood pressure and reduced urine output aren't specific to CSF leakage and can reflect other trauma-related issues. A glucose test alone can be helpful but isn't as definitive as the halo sign. Clear drainage with blood could be simply epistaxis unless a halo is present, which points to CSF leaking. If a CSF leak is suspected, notify the care team and take appropriate precautions to reduce infection risk and avoid actions that could worsen the leak.

9. What is the normal intracranial pressure range in adults?

A. 0-5 mm Hg

B. 5-15 mm Hg

C. 15-25 mm Hg

D. 25-35 mm Hg

Normal intracranial pressure in adults is about 5-15 mm Hg. This pressure reflects the balance among brain tissue, cerebrospinal fluid, and blood inside the skull. Keeping ICP in this range helps maintain adequate cerebral perfusion, described by CPP = MAP − ICP. With ICP in the 5-15 range and a typical MAP, CPP stays around the 60-100 mm Hg level, which supports sufficient blood flow to the brain. If ICP rises to 20-25 mm Hg or higher, cerebral perfusion can decrease, risking ischemia and herniation, so clinicians intervene to lower ICP. While some sources list 0-5 mm Hg as normal in certain contexts, the standard reference for this question is 5-15 mm Hg.

10. An inward indentation of the skull is called which type of fracture?

A. Depressed skull fracture

B. Linear skull fracture

C. Comminuted skull fracture

D. Compound skull fracture

An inward indentation of the skull is a depressed skull fracture. The defining feature is bone fragments pushed inward toward the brain, rather than simply cracking or breaking along the bone's surface. This distinguishes it from a linear fracture, which is just a crack without inward displacement; a comminuted fracture, where the bone is broken into several pieces; and a compound fracture, which is open to the outside through a skin wound. Depressed fractures carry a risk of underlying brain contusion or hemorrhage and may require surgical elevation if the fragment is significantly depressed or if there's an open wound.

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://nclexicp.examzify.com

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