HESI Seizure Case Study Disorder 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. Why is therapeutic drug monitoring used for certain antiseizure medications, and which drug often requires it?

A. To maintain efficacy and minimize toxicity for drugs with narrow therapeutic ranges (e.g., phenytoin, valproic acid).

B. To measure blood pressure.

C. To monitor kidney function only.

D. To measure patient satisfaction.

2. What rescue meds are commonly prescribed for home use to stop a seizure, and how are they administered?

A. Benzodiazepines such as diazepam rectal gel or buccal/mucosal midazolam; administered by a caregiver per prescribed instructions.

B. Oral glucose tablets.

C. Antibiotics.

D. Insulin.

3. What is the role of family and caregivers in epilepsy management?

A. They assist in recognizing seizures, administering rescue medications, and seeking emergency care as needed

B. They should not be involved

C. They should prescribe medications

D. They should replace clinicians

4. When administering Dilantin IV, which practice is correct?

A. Question the prescription since 7 mcg/mL is above the therapeutic level.

B. Dilute the medication and flush the tubing before and after with normal saline.

C. Administer the medication undiluted in the port closest to the intravenous site.

D. Determine the time when the patient took the last oral dose of Dilantin.

5. How was the phenytoin dose administered in this case?

A. Intravenous push.

B. Oral tablet.

C. Intramuscular injection.

D. Subcutaneous injection.

6. Which statement accurately reflects the impact of epilepsy on fertility and childbearing?

A. Research shows that women with epilepsy have a more difficult time conceiving.

B. Anticonvulsant therapy is contraindicated in pregnancy.

C. Epilepsy does not prevent women from having children.

D. Genetic counseling is needed for women with epilepsy.

7. In the immediate postictal period after the seizure, which intervention is appropriate?

A. Perform a complete neurological assessment.

B. Transfer the client to the emergency department.

C. Turn the client to the side, and allow him to sleep.

D. Interview the client to find out what caused the seizure.

8. Phenytoin can cause a gingival overgrowth as a notable adverse effect requiring monitoring.

A. Rash including Stevens-Johnson syndrome.

B. Gingival hyperplasia.

C. Weight gain.

D. Photosensitivity.

9. What conditions contraindicate a ketogenic diet?

A. Fat oxidation disorders

B. Well-controlled type 2 diabetes

C. Mild iron deficiency

D. Low blood pressure

10. Which monitoring parameters are important for patients on chronic phenytoin therapy?

A. Therapeutic range 40–60 mcg/mL; monitor only for drug interactions.

B. Therapeutic range 10–20 mcg/mL; monitor for CYP induction and drug interactions; CBC/LFTs; assess gingival changes and coordination.

C. Therapeutic range 0.5–1 mcg/mL; monitor for platelet counts.

D. No routine monitoring is required.

Answers

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

Explanations

1. Why is therapeutic drug monitoring used for certain antiseizure medications, and which drug often requires it?

A. To maintain efficacy and minimize toxicity for drugs with narrow therapeutic ranges (e.g., phenytoin, valproic acid).

B. To measure blood pressure.

C. To monitor kidney function only.

D. To measure patient satisfaction.

Therapeutic drug monitoring is used to keep drug exposure within a range that reliably controls seizures while minimizing harmful effects. Some antiseizure medications have a narrow therapeutic window and highly variable pharmacokinetics between people, so small changes in dose or factors like liver function, protein levels, or drug interactions can cause big shifts in blood levels. By measuring trough (pre-dose) levels and adjusting the dose, clinicians aim to maintain efficacy and avoid toxicity. Phenytoin and valproic acid are classic examples where monitoring is often necessary because their effectiveness and risk of adverse effects closely track their blood concentrations. Other options don't fit because they target measurements (like blood pressure, kidney function, or patient satisfaction) that aren't about keeping antiseizure drug levels within a therapeutic range.

2. What rescue meds are commonly prescribed for home use to stop a seizure, and how are they administered?

A. Benzodiazepines such as diazepam rectal gel or buccal/mucosal midazolam; administered by a caregiver per prescribed instructions.

B. Oral glucose tablets.

C. Antibiotics.

D. Insulin.

Rescue medications for home use to stop a seizure are fast-acting benzodiazepines, such as diazepam rectal gel or buccal/mucosal midazolam, and they're given by a caregiver according to the prescription. These drugs are chosen because they rapidly quiet abnormal brain activity during a seizure and can be administered outside a hospital setting without IV access. How they're used matters: the dose is tailored to the person's age and weight and the caregiver administers it exactly as directed, using the rectal applicator for diazepam gel or the buccal/mucosal route for midazolam. They're typically employed when a seizure lasts more than a few minutes or when multiple seizures occur without full recovery between them. After giving the medication, stay with the person, protect from harm, monitor breathing, and avoid giving anything by mouth until they're fully awake. Call emergency services if the seizure continues beyond the time specified in the instructions or if a second dose is needed and the seizure persists. Other options listed are not used to stop a seizure in the moment: they address different conditions (hypoglycemia, infection, diabetes) and do not act to halt seizures.

3. What is the role of family and caregivers in epilepsy management?

A. They assist in recognizing seizures, administering rescue medications, and seeking emergency care as needed

B. They should not be involved

C. They should prescribe medications

D. They should replace clinicians

Family and caregivers play a vital role in epilepsy management by recognizing seizures, administering rescue medications, and seeking emergency care when needed. They are trained to identify when a seizure begins, time its duration, and implement the person's seizure action plan to keep them safe during the event. They know when to give rescue medications as prescribed and understand how to monitor response, including when to repeat a dose if the plan allows and when to contact a clinician for guidance. They also know the signs that mean urgent medical evaluation is necessary, such as a seizure lasting longer than a typical duration, seizures that occur in succession without recovery, or if the person is injured, has trouble breathing, or does not regain consciousness after the seizure ends. Beyond the seizure itself, caregivers help with daily management—tracking seizure frequency, triggers, and medication adherence, maintaining safety at home, and communicating changes to the healthcare team to adjust treatment as needed. They should not prescribe medications or replace clinicians; those responsibilities belong to healthcare professionals who determine diagnosis, treatment plans, and medication choices.

4. When administering Dilantin IV, which practice is correct?

A. Question the prescription since 7 mcg/mL is above the therapeutic level.

B. Dilute the medication and flush the tubing before and after with normal saline.

C. Administer the medication undiluted in the port closest to the intravenous site.

D. Determine the time when the patient took the last oral dose of Dilantin.

When giving IV phenytoin, the key practice is to dilute the medication in normal saline and flush the tubing with saline before and after administration. Phenytoin has limited IV solubility and can precipitate if given undiluted or in dextrose-containing solutions, which can damage the vein and lead to poor delivery of the dose. Diluting in saline reduces the risk of precipitation, and flushing before and after helps keep the line clear and ensures the full dose is delivered. Giving the medication undiluted, especially through a port near the IV site, increases the risk of local irritation and precipitation, so that approach isn't correct. The timing of the last oral dose isn't the primary concern for the IV administration technique, and the statement about the numeric level being above the therapeutic range isn't accurate—phenytoin's typical therapeutic range is roughly 10–20 mcg/mL, so a level of 7 would be subtherapeutic, not indicating a need to change the IV administration method.

5. How was the phenytoin dose administered in this case?

A. Intravenous push.

B. Oral tablet.

C. Intramuscular injection.

D. Subcutaneous injection.

In acute seizure management, delivering the drug quickly into the bloodstream is essential, so an intravenous route is used. In this case, the dose was given by intravenous push, meaning it was injected directly into the vein as a bolus to achieve rapid systemic levels and act promptly to control the seizure. Oral tablets would take too long to absorb and reach therapeutic levels, making them unsuitable for urgent control. Intramuscular or subcutaneous injections yield slower, less predictable absorption and are not standard for rapid seizure treatment. (Note: while IV push delivers quickly, in many settings phenytoin is given as a slow IV infusion to minimize cardiovascular risks.)

6. Which statement accurately reflects the impact of epilepsy on fertility and childbearing?

A. Research shows that women with epilepsy have a more difficult time conceiving.

B. Anticonvulsant therapy is contraindicated in pregnancy.

C. Epilepsy does not prevent women from having children.

D. Genetic counseling is needed for women with epilepsy.

Epilepsy does not prevent a woman from conceiving or having children; fertility is generally not reduced by the condition. The important point is how pregnancy is managed. Some anti-seizure medications carry risks for the developing fetus, so planning before conception matters and doctors may adjust therapy to use safer drugs and the lowest effective doses. For example, certain medications have higher teratogenic risk, so switching to safer options and taking folic acid before and during early pregnancy can help reduce potential issues, while seizure control remains crucial for both maternal and fetal well-being. Genetic factors can play a role in epilepsy, so genetic counseling might be considered in specific situations, such as a strong family history or a known genetic syndrome, but it is not a blanket requirement for all women with epilepsy.

7. In the immediate postictal period after the seizure, which intervention is appropriate?

A. Perform a complete neurological assessment.

B. Transfer the client to the emergency department.

C. Turn the client to the side, and allow him to sleep.

D. Interview the client to find out what caused the seizure.

In the immediate post-seizure recovery period, airway safety is the top priority. Placing the person on their side in the recovery position helps keep the airway clear, reduces the risk of choking or aspiration if vomiting occurs, and allows Secretions to drain more easily. The individual is often drowsy and disoriented during this time, so permitting rest and avoiding unnecessary stimulation supports a safer, smoother return to baseline. A full neurological exam isn't reliable while the patient is still recovering from the seizure, and interviewing them about causes should wait until they're fully awake and oriented. Monitoring breathing and vital signs is important, and transfer to emergency care is indicated only if complications arise (prolonged seizure, repeated seizures, injury, or inability to maintain airway).

8. Phenytoin can cause a gingival overgrowth as a notable adverse effect requiring monitoring.

A. Rash including Stevens-Johnson syndrome.

B. Gingival hyperplasia.

C. Weight gain.

D. Photosensitivity.

Phenytoin commonly causes gingival hyperplasia, a noticeable overgrowth of gum tissue that requires monitoring. This occurs because the drug stimulates gingival fibroblasts and increases extracellular matrix production in the gums while slowing its breakdown, leading to thickened, enlarged gingiva. The condition often develops after months of therapy and can be worse with poor oral hygiene, so regular dental care and good oral hygiene are important parts of management. In some cases, dose adjustments or switching anticonvulsants may be considered if the overgrowth is severe. Rash, including Stevens-Johnson syndrome, can occur with anticonvulsants but is not the most characteristic or routinely monitored adverse effect for phenytoin. Weight gain is more commonly associated with other medications, and photosensitivity is not a hallmark adverse effect of phenytoin.

9. What conditions contraindicate a ketogenic diet?

A. Fat oxidation disorders

B. Well-controlled type 2 diabetes

C. Mild iron deficiency

D. Low blood pressure

Ketogenic diets rely on fat as the primary fuel and ketone production to meet energy needs when carbohydrate intake is low. In fatty acid oxidation disorders, the body cannot properly break down fatty acids to generate energy. When carbohydrate intake is restricted and fat becomes the main energy source, these individuals can't produce enough usable energy, leading to dangerous hypoglycemia, energy deficits, liver stress, and potential metabolic crises. Because the diet depends on intact fat metabolism, these conditions are contraindications. The other scenarios don't inherently prevent ketosis. Well-controlled type 2 diabetes may be managed on a ketogenic plan under medical supervision. Mild iron deficiency doesn't impair fat metabolism, and low blood pressure isn't a specific contraindication, though it warrants monitoring.

10. Which monitoring parameters are important for patients on chronic phenytoin therapy?

A. Therapeutic range 40–60 mcg/mL; monitor only for drug interactions.

B. Therapeutic range 10–20 mcg/mL; monitor for CYP induction and drug interactions; CBC/LFTs; assess gingival changes and coordination.

C. Therapeutic range 0.5–1 mcg/mL; monitor for platelet counts.

D. No routine monitoring is required.

Phenytoin has a narrow therapeutic index, so keeping its level in the commonly cited range of about 10–20 mcg/mL helps maintain seizure control while avoiding toxicity. Because of this narrow window, ongoing monitoring is essential. In chronic therapy, you watch for drug interactions since phenytoin is a powerful enzyme inducer of hepatic cytochrome P450 enzymes. That means many other drugs can be metabolized faster and become less effective, so checking for interactions and adjusting other medications as needed is a key part of care. Labs are also routinely checked: CBC to catch potential hematologic effects (like thrombocytopenia or leukopenia) and LFTs to monitor for liver-related issues. Phenytoin can cause gingival hyperplasia over time and can affect coordination and balance, so clinical assessments of the gums and neuromotor function are part of follow-up. The other options either give an incorrect therapeutic range, omit essential monitoring (labs, interactions, and physical signs), or suggest no routine monitoring, which is unsafe with this drug.

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://hesiseizurecasestudydisorder.examzify.com

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