Pharmacology IV – Headache Therapeutics 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. For cluster headache, an attack lasts how long?

A. 5-10 minutes

B. 15-180 minutes

C. 1-2 days

D. Several hours

2. According to ICHD-3 criteria, what constitutes migraine without aura?

A. A history of recurrent headaches with migrainous features lasting 1–2 hours, with no photophobia.

B. Headache lasting 4–72 hours with aura present.

C. A history of recurrent headaches with migrainous features lasting 4–72 hours, typically unilateral and pulsating, with nausea or photophobia/phonophobia, without aura.

D. Chronic tension-type headache symptoms.

3. Which anti-CGRP monoclonal antibody is marketed as Aimovig?

A. Erenumab

B. Galcanezumab

C. Fremanezumab

D. Eptinezumab

4. What is a typical maximum daily dose for sumatriptan in acute migraine therapy?

A. 100 mg

B. 150 mg

C. 200 mg

D. 300 mg

5. Which option is NOT used for migraine prophylaxis?

A. Antihypertensives

B. Antiseizure medications

C. Botulinum toxin

D. Antibiotics

6. Which of the following is a common adverse drug reaction associated with NSAIDs?

A. Hepatotoxicity.

B. Weight gain.

C. Dyspepsia and abdominal pain.

D. Hyperglycemia.

7. Which of the following is an angiotensin II receptor blocker (ARB) used for migraine prophylaxis?

A. Lisinopril

B. Amlodipine

C. Candesartan

D. Losartan

8. Which CGRP monoclonal antibody is a receptor-targeted therapy?

A. Erenumab

B. Ubrogepant

C. Rimegepant

D. Atogepant

9. Which of the following is an adverse reaction associated with galcanezumab?

A. Injection site reactions

B. Nausea

C. Dizziness

D. Fatigue

10. Which acute migraine therapy is associated with driving impairment and notable CNS effects?

A. Sumatriptan

B. Dihydroergotamine

C. Lasmiditan

D. Naproxen

Answers

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

Explanations

1. For cluster headache, an attack lasts how long?

A. 5-10 minutes

B. 15-180 minutes

C. 1-2 days

D. Several hours

Cluster headaches produce brief, extremely intense attacks. Each attack normally lasts from about 15 minutes up to 3 hours (180 minutes). This specific window is a defining feature and helps distinguish cluster headaches from other headache types, which tend to have longer or shorter durations. So the 15–180 minute range is the best match to how these attacks typically present. Shorter durations like 5–10 minutes are unusually brief for a cluster attack, while 1–2 days would be far too long for a single episode; several hours can occur but the standard, widely accepted range is 15–180 minutes.

2. According to ICHD-3 criteria, what constitutes migraine without aura?

A. A history of recurrent headaches with migrainous features lasting 1–2 hours, with no photophobia.

B. Headache lasting 4–72 hours with aura present.

C. A history of recurrent headaches with migrainous features lasting 4–72 hours, typically unilateral and pulsating, with nausea or photophobia/phonophobia, without aura.

D. Chronic tension-type headache symptoms.

Migraine without aura is characterized by attacks that last 4–72 hours and show migrainous features such as unilateral, pulsating pain with moderate to severe intensity, often worsened by routine activity, plus during the headache there is nausea and/or photophobia or phonophobia, with no aura preceding the headache. The description that best fits this is recurrent headaches lasting 4–72 hours, typically unilateral and pulsating, with nausea or photophobia/phonophobia, and without aura. This aligns with the absence of aura and the key migrainous symptoms and duration. The other descriptions fail because one describes a much shorter duration and lacks photophobia, another includes aura (which would be migraine with aura), and the last describes a tension-type pattern rather than a migrainous one.

3. Which anti-CGRP monoclonal antibody is marketed as Aimovig?

A. Erenumab

B. Galcanezumab

C. Fremanezumab

D. Eptinezumab

Aimovig is the brand name for erenumab, a monoclonal antibody that targets the CGRP receptor and blocks CGRP from activating it. This prevents the CGRP signaling thought to contribute to migraine pathophysiology. The other anti-CGRP antibodies—galcanezumab, fremanezumab, and eptinezumab—bind the CGRP ligand itself rather than the receptor, and are marketed as Emgality, Ajovy, and Vyepti, respectively. So the antibody marketed as Aimovig is erenumab.

4. What is a typical maximum daily dose for sumatriptan in acute migraine therapy?

A. 100 mg

B. 150 mg

C. 200 mg

D. 300 mg

Sumatriptan dosing in acute migraine is limited to a total daily amount to balance symptom relief with safety, especially regarding cardiovascular risk. A single dose can be up to 100 mg, but the overall maximum in 24 hours is 200 mg. If symptoms persist and a second dose is needed, it must be taken after at least 2 hours, and the total should not exceed 200 mg in a day. This 200 mg ceiling helps reduce the risk of coronary vasospasm, heart attack, or stroke, particularly in patients with vascular risk factors. That's why the typical maximum daily dose is 200 mg. The other numbers aren't used as daily limits: 100 mg is the per-dose maximum, while 150 mg or 300 mg are not standard safe daily limits.

5. Which option is NOT used for migraine prophylaxis?

A. Antihypertensives

B. Antiseizure medications

C. Botulinum toxin

D. Antibiotics

The main idea is which drug classes are effective for preventing migraine attacks. Prophylaxis relies on medicines that dampen neuronal excitability or stabilize vascular function to reduce how often migraines occur. Antihypertensives work because they help modulate vascular tone and lower the propensity for migraine-related vascular changes. Beta-blockers such as propranolol and metoprolol are classic options, and calcium-channel blockers like verapamil are used in some cases as well. Antiseizure medications help by decreasing neuronal hyperexcitability. Topiramate is a common preventive agent for migraines, acting on multiple channels and systems to lessen attack frequency. Valproate is another option but comes with more safety considerations, especially in women of childbearing potential. Botulinum toxin injections are approved for chronic migraine prevention. When injected into head and neck muscles, it appears to reduce the release of pain-mediating neurotransmitters, decreasing the number of migraine days in patients with many monthly headaches. Antibiotics, on the other hand, are not used for migraine prophylaxis. They treat infections and have no mechanism or proven benefit in preventing migraine attacks.

6. Which of the following is a common adverse drug reaction associated with NSAIDs?

A. Hepatotoxicity.

B. Weight gain.

C. Dyspepsia and abdominal pain.

D. Hyperglycemia.

The main concept here is that NSAIDs frequently irritate the stomach lining. They block cyclooxygenase enzymes, which reduces prostaglandins that normally protect the gastric mucosa by promoting mucus and bicarbonate production, maintaining blood flow, and supporting the mucosal barrier. With fewer protective prostaglandins, the gastric lining becomes more susceptible to irritation and injury, leading to dyspepsia and abdominal pain. This GI upset is by far the most common adverse effect seen with NSAIDs and is dose- and duration-dependent, and it's more likely in older patients or with concurrent risk factors. Hepatotoxicity from NSAIDs is uncommon, weight gain isn't a typical direct effect (may reflect fluid retention in some settings but not common across NSAIDs), and hyperglycemia is not a characteristic adverse effect of NSAIDs. Therefore, dyspepsia and abdominal pain best represent the common GI-related adverse reaction you would expect with NSAID use.

7. Which of the following is an angiotensin II receptor blocker (ARB) used for migraine prophylaxis?

A. Lisinopril

B. Amlodipine

C. Candesartan

D. Losartan

Blocking the angiotensin II type 1 receptor can help prevent migraine by reducing vascular and inflammatory signals in the trigeminovascular system that drive attacks. Among ARBs, candesartan has been studied in randomized trials for migraine prophylaxis and has shown a meaningful reduction in monthly migraine days with good tolerability. That evidence supports its use specifically for preventing migraines. Lisinopril is an ACE inhibitor, not an ARB; amlodipine is a calcium channel blocker; losartan is an ARB but has less robust evidence for migraine prevention compared with candesartan.

8. Which CGRP monoclonal antibody is a receptor-targeted therapy?

A. Erenumab

B. Ubrogepant

C. Rimegepant

D. Atogepant

CGRP-targeted therapies can be antibodies that either bind the CGRP ligand or bind the CGRP receptor itself. Erenumab is a monoclonal antibody that binds the CGRP receptor, blocking CGRP from activating it, so it functions as a receptor-targeted antibody. The other options are not monoclonal antibodies against the receptor; they are small-molecule antagonists known as gepants that block CGRP signaling without being antibodies. Some CGRP-targeted antibodies do bind the ligand rather than the receptor, but in this set only erenumab acts on the receptor with an antibody.

9. Which of the following is an adverse reaction associated with galcanezumab?

A. Injection site reactions

B. Nausea

C. Dizziness

D. Fatigue

Galcanezumab is a subcutaneously injected monoclonal antibody against CGRP used to prevent migraine. Because it is given by injection, the most common adverse reaction is a local reaction at the injection site. These injection-site reactions manifest as pain, redness, swelling, or induration and are typical with biologic therapies administered by SC injection. Nausea, dizziness, and fatigue can occur with various drugs, but they are not the characteristic adverse effects associated with galcanezumab. The local injection-site reaction is the best-supported adverse event for this medication because it directly relates to the route and nature of administration, whereas the others are less specific to this agent and occur less consistently. These local reactions are usually mild and transient.

10. Which acute migraine therapy is associated with driving impairment and notable CNS effects?

A. Sumatriptan

B. Dihydroergotamine

C. Lasmiditan

D. Naproxen

Driving impairment with acute migraine therapy comes from central nervous system effects rather than just pain relief. Lasmiditan fits this pattern because it is a selective 5-HT1F receptor agonist that acts in the brain to blunt trigeminal nociception, providing acute relief without causing vasoconstriction. However, it readily penetrates the CNS, so common side effects include dizziness, drowsiness, fatigue, and cognitive slowing. These CNS effects can impair activities requiring alertness, such as driving, which is why labeling advises avoiding driving or operating heavy machinery for several hours after a dose (typically around 8 hours). Other acute migraine therapies either work mainly through vascular effects or have different side-effect profiles. Sumatriptan and dihydroergotamine cause vasoconstriction and can produce lightheadedness or chest symptoms but are not primarily noted for driving impairment due to CNS effects. Naproxen is an NSAID with GI and renal considerations and does not typically cause the pronounced CNS impairment seen with lasmiditan.

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://pharm4headachetherapeutics.examzify.com

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