



# Recommendations for the Treatment of Migraine Headaches

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## Introduction

Clinical Practice Capsules (CPC) are short summaries of diseases and syndromes written for all prescribers. The CPCs contain a description of the disease/syndrome, diagnostic criteria, treatment algorithms including options and prices. We welcome submissions from all students and practicing pharmacists. Multiple examples are available on the CPhA Journal website.

Headache is one of the most common health complaints among patients and is treated based on the specific category it falls under (i.e., migraine, tension-type, or cluster headache). Although tension-type headache is the most frequent, primary care physicians more commonly diagnose patients presenting with headaches as migraines. The exact cause for migraines is unknown; however, it may be due to changes in the brainstem and its interactions with major pain pathways or an imbalance in brain chemicals.

Headache Type	Migraine	Tension-Type	Cluster
<b>Location</b>	Around the eye or temple area	Forehead, temples, or the back of head and/or neck	Always one-sided and behind the eye. May radiate to forehead, temple, nose, cheek on affected side.
<b>Symptoms</b>	Nausea, vomiting, sensitivity to light/sounds, or pulsing pain	Tightening sensation around the neck and/or head	Swollen eyelid, congested nostril, nasal discharge, and tearing from the eye

## Triggers

- **Hormones:** Estrogen fluctuations in women (e.g., before or during their periods)
- **Foods:** Aged cheese, salty/processed foods, or fasting
- **Stress:** Work or home stress
- **Sensory:** Bright lights, loud sounds, or unusual smells
- **Wake-Sleep Pattern:** Too much or too little sleep
- **Medications:** Oral contraceptives, vasodilators, and several others

## International Headache Society (ICHD) Diagnostic Criteria

Migraine without aura	Migraine with aura
<p>At least 5 attacks per year with the following criteria</p> <ol style="list-style-type: none"> <li>1. Lasting 4–72 hours</li> <li>2. At least 2 of the following: <ul style="list-style-type: none"> <li>• Unilateral location</li> <li>• Pulsating quality</li> <li>• Moderate or severe pain</li> <li>• Avoidance of routine physical activity</li> </ul> </li> <li>3. At least 1 of the following: <ul style="list-style-type: none"> <li>• Nausea and/or vomiting</li> <li>• Photophobia and phonophobia</li> </ul> </li> </ol>	<p>At least 2 attacks per year with the following criteria</p> <ol style="list-style-type: none"> <li>1. At least 1 of the following aura symptoms: <ul style="list-style-type: none"> <li>• Visual</li> <li>• Sensory</li> <li>• Speech and/or language</li> <li>• Motor</li> <li>• Brainstem</li> <li>• Retinal</li> </ul> </li> <li>2. At least 2 of the following: <ul style="list-style-type: none"> <li>• <math>\geq 1</math> aura symptom spreads over <math>\geq 5</math> minutes, and/or <math>\geq 2</math> symptoms occur in succession</li> <li>• Aura symptom lasts 5–60 minutes</li> <li>• <math>\geq 1</math> aura symptom is unilateral</li> <li>• Headache within 60 minutes</li> </ul> </li> </ol>

## Choice of Therapy

Mild to Moderate	Analgesic or NSAID
Moderate to Severe	<p><b>Triptan</b> or <b>Sumatriptan/Naproxen</b> combination</p> <ul style="list-style-type: none"> <li>All are considered effective and well tolerated. Choice in Triptan must be individualized. <ul style="list-style-type: none"> <li><b>Route:</b> Sumatriptan is available orally, intranasally, and subcutaneously.</li> <li><b>Onset/Efficacy:</b> Naratriptan and Frovatriptan demonstrated slowest onset and lower efficacy.</li> <li><b>Cost:</b> Eletriptan and Frovatriptan do not have generic formulations.</li> </ul> </li> </ul>

## Treatment Options

Analgesic and NSAID	Dosing	
<b>Aspirin</b>	1000 mg PO once (MAX: 1000 mg/day)	
<b>Ibuprofen (Advil, Motrin)</b>	400 mg PO every 4–6 hours as needed (MAX: 3.2 g/day)	
<b>Naproxen (Aleve)</b>	275 to 825 mg PO loading dose, then 275 mg PO every 4 hours (MAX: 1250 mg/day)	
<b>Diclofenac (Cambia)</b>	<b>Oral solution:</b> 50 mg (one packet) as a single dose	
<b>Acetaminophen (Tylenol)</b>	<p><b>Regular strength</b> – MAX 3250 mg/day</p> <p><b>Extra strength</b> – MAX 3000 mg/day</p> <p>4 g/day maximum if under supervision of health care provider</p>	
Triptans	Dosing	AWP Cost
<b>Sumatriptan (Imitrex)</b>	<b>Oral:</b> 25 mg, 50 mg, or 100 mg; may repeat after 2 hours (MAX: 200 mg/day)	\$24
	<b>Intranasal:</b> 5 mg, 10 mg, or 20 mg administered in one nostril; may repeat once after 2 hours (MAX: 40 mg/day)	\$43
	<b>Subcutaneous:</b> 6 mg; may repeat after 1 hour (MAX: 12 mg/day)	\$58
<b>Zolmitriptan (Zomig)</b>	<b>Oral:</b> 1.25–2.5 mg; may repeat after 2 hours (MAX: 10 mg/day)	\$25
	<b>Intranasal:</b> 2.5 mg; may repeat after 2 hours (MAX: 10 mg/day)	\$68 (B)
<b>Almotriptan (Axert)</b>	6.25–12.5 mg PO; may repeat once after 2 hours (MAX: 25 mg/day)	\$42
<b>Rizatriptan (Maxalt)</b>	5–10 mg PO; may repeat after 2 hours (MAX: 30 mg/day)	\$32
<b>Naratriptan (Amerge)</b>	1–2.5 mg; may repeat once after 4 hours (MAX: 5 mg/day)	\$2
<b>Frovatriptan (Frova)</b>	2.5 mg; may repeat after 2 hours (MAX: 7.5 mg/day)	\$80 (B)
<b>Eletriptan (Relpax)</b>	20–40 mg PO; may repeat after 2 hours (MAX: 80 mg/day)	\$51 (B)

\*Cost based on lowest AWP Unit Price for all strengths available. (B) indicates price for brand medication.

## About the Author

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