

Headache

About the Guideline

- The guideline was created by a work group that consisted of experts from both the Department of Veterans Affairs (VA) and the Department of Defense (DoD), together with outside experts, who did a systemic review of clinical studies between March 6, 2019, and August 6, 2022.
- The work group also solicited input from a patient focus group whose members experienced headaches for more than 10 years and who ranged in age between 40 and 60.
- The ambulatory setting is the primary emphasis of this guideline's recommendations; it thus does not thoroughly address emergency management of headaches.
- The purpose of the guideline is to support primary health care providers in the management and prevention of headache in patients ages 18 and older through accurate assessment and treatment.
- The guideline should not be considered a standard of care or the only treatment method. Each patient's input through shared decision-making, along with consideration of each patient's individual needs and resources, should assist in determining the course of treatment.

Key Clinical Considerations

Become familiar with the recommendations and best-practice statements provided in this guideline if you work in an acute care or ambulatory care setting.

Headache Classifications

- Primary headache disorders
 - Primary headaches occur spontaneously with an unknown cause, are stereotypical, and may recur.
 - Examples include migraine, cluster type headache, and tension-type headache.
- Secondary headache disorders
 - Secondary headache presents as a new onset and parallel to an illness that is known to cause headaches.
 - Examples include head and/or neck trauma; a cranial or cervical vascular disorder; a nonvascular intracranial disorder; substance use and/or withdrawal, infection; homeostasis illness; illness of the cranium, neck, eyes, ears, nose, sinuses, mouth, or other facial or cervical structure; or a psychiatric disorder.
- Assessment should be made to determine whether the patient is experiencing a primary headache versus a secondary headache.
 - Consider duration and frequency; characteristics such as severity, location, quality, and what activities exacerbate it; features such as light sensitivity or noise aggravating the headache; and nausea and vomiting or autonomic dysfunction.
- The guiding principle in assessing for secondary headache is determining whether there is a parallel cause that can be associated with headache onset. Resolution of the parallel disorder may in turn resolve the headache.

Screening and Healthcare Settings

- Assess patients with headache for medication overuse headache. The following are indicators:
 - Headache frequency (7 or more days per month)
 - Migraine diagnosis

- Sick leave of more than 2 weeks in the last year
- Recurrent use of analgesics, anxiolytics, or sedatives
- Inactivity
- History of whiplash as reported by the patient
- Depression or anxiety, without gastrointestinal or musculoskeletal ailments
- Absenteeism from work for more than two weeks in the last year
- Smoking
- There is no recommendation for or against a specific medication withdrawal treatment or strategy.

Pharmacotherapy

Headache - Preventive

- Insufficient data is available to recommend for or against the following for the prevention of headaches:
 - Coenzyme Q10
 - Feverfew
 - Melatonin
 - Omega-3
 - Vitamin B2
 - Vitamin B6
 - Fluoxetine
 - Venlafaxine

Migraine - Preventive

- Candesartan or telmisartan is recommended for episodic migraine.
- Erenumab, fremanezumab, or galcanezumab is recommended for episodic or chronic migraine.
- Intravenous eptinezumab is suggested for episodic or chronic migraine.
- Lisinopril is suggested for episodic migraine.
- Oral magnesium is suggested (nonspecific to the type of migraine).
- Topiramate is suggested for episodic migraine and chronic migraine.
- Propranolol is suggested (nonspecific to the type of migraine).
- Valproate is suggested for episodic migraine.
- Memantine is suggested for episodic migraine.
- Atogepant is suggested for episodic migraine.
- OnabotulinumtoxinA injection is suggested for chronic migraine.
- OnabotulinumtoxinA or abobotulinumtoxinA injection is not suggested for episodic migraines.
- Gabapentin is not suggested to prevent episodic migraines.
- There is no recommendation either for or against the following:
 - Rimegepant for the prevention of episodic migraine.
 - Levetiracetam for episodic migraine.

Abortive

- For acute treatment, eletriptan, frovatriptan, rizatriptan, SUMAtriptan (oral or subcutaneous), the combination of SUMAtriptan and naproxen, or zolmitriptan (oral or intranasal) is recommended.
- A combination of aspirin, acetaminophen, and caffeine are recommended for acute treatment.

- The use of intravenous ketamine is not suggested.
- Insufficient data is available to make a recommendation for the use of lasmiditan.
- The following acute therapies are suggested:
 - Rimegepant or ubrogepant
 - Ibuprofen, aspirin, acetaminophen, and naproxen

Tension-Type Headache

Preventive

- Amitriptyline for chronic tension-type headaches is suggested.
- Botulinum/neurotoxin injection is not suggested for chronic tension-type headaches.

Abortive

- Ibuprofen 400 mg or acetaminophen 1000 mg is suggested as acute therapy.

Cluster Headache

Preventive

- Galcanezumab is suggested for episodic cluster headaches; however, galcanezumab is not suggested for chronic cluster headaches.
- Insufficient data is available to make a recommendation for the use of verapamil to prevent episodic or chronic cluster headaches.

Abortive

- Subcutaneous sumatriptan (6 mg) or intranasal zolmitriptan (10 mg) is suggested for acute treatment.
- Normobaric oxygen therapy is suggested for acute treatment.

Medication Overuse

- Insufficient data is available to make a recommendation for the use of any specific preventive or withdrawal strategy to direct treatment.

Injections, Procedures, and Invasive Interventions

- For the acute treatment of migraine, a greater occipital nerve block is suggested.
- Implantable sphenopalatine ganglion stimulator is not suggested for the treatment of cluster headaches.
- Patent foramen ovale closure is not suggested for the prevention or treatment of migraines.
- Insufficient data is available to recommend the following:
 - Greater occipital nerve block for the prevention of chronic migraines.
 - Supraorbital nerve block for the acute treatment of migraines.
 - Intravenous antiemetics, such as chlorpromazine, metoclopramide, and prochlorperazine, intravenous magnesium, or intranasal lidocaine for acute therapy of headaches.
 - Pulsed radiofrequency procedure of the upper cervical nerves or sphenopalatine ganglion block for the treatment of chronic migraines.

Nonpharmacologic Therapy

- Noninvasive vagus nerve stimulation is suggested for the acute treatment of episodic cluster headache.

- Physical therapy is suggested for the management of tension-type, migraine, or cervicogenic headache.
- Aerobic exercise or progressive strength training is suggested for the prevention of tension-type and migraine headaches.
- Immunoglobulin G antibody testing for dietary trigger avoidance is not suggested for the prevention of headaches.
- Insufficient data is available to recommend the following:
 - Behavioral interventions for the prevention and/or treatment of headaches, including:
 - Biofeedback and application-based heartrate variability monitoring
 - Progressive muscle relaxation
 - Cognitive behavioral therapy
 - Mindfulness-based therapies
 - Acupuncture, dry needling, or yoga for prevention and/or treatment.
 - Dietary trigger avoidance for the prevention of headaches.
 - Any form of neuromodulation for the prevention and/or treatment of migraines.

Comparative Effectiveness and Combination Therapies

- Insufficient data is available to recommend the following:
 - Specific treatment for posttraumatic headache.
 - Any specific medication over another for the acute treatment of migraines.
 - Any specific medication over another for the prevention of migraines, tension headaches, or cluster headaches.
 - Any specific combination of therapies for the prevention of headaches.

Reference

Department of Veteran Affairs and Department of Defense. (2023). VA/DoD clinical practice guideline for the management of headache: Version 2.0, 1-150. <https://www.healthquality.va.gov/guidelines/pain/headache/VA-DoD-CPG-Headache-Full-CPG.pdf>