The Primary Care Management of Headache



Sidebar 1: General History and Physical Examination

Headache history: Frequency, character, onset, location, duration, exacerbating factors, relieving factors, prodrome/aura, associated symptoms, jaw symptoms, neck symptoms, visual deficits/changes, dizziness/imbalance, current medications, abortive dose and frequency per month, prophylactic dose, prior medication trials, hydration, meals, caffeine, sleep, exercise, nicotine/stimulant use, other comorbid conditions that may contribute to or exacerbate headaches, risk factors for MOH, history of trauma to the head and/or neck

(e.g., fever, chills, myalgias, night sweats, weight loss or weight gain cancer, infection, giant cell arteritis, pregnancy or postpartum, or an immunocompromised state – including HIV) Neurologic symptoms or abnormal signs (e.g., confusion, impaired alertness

Red flags SNOOP(4)E: Systemic symptoms, illness, or condition

or consciousness, changes in behavior or personality, diplopia, pulsatile tinnitus, focal neurologic symptoms or signs, meningismus, or seizures ptosis, proptosis, pain with eye movements) Onset (e.g., abrupt or "thunderclap" where pain reaches maximal intensity

immediately or within minutes after onset; first ever, severe, or "worst headache of life")

Older onset (age ≥50-years)

Progression or change pattern (e.g., in attack frequency, severity, or clinical features)

Precipitated by Valsalva (e.g., coughing or bearing down)

Postural aggravation

Papilledema

Exertion

Examination: Cranial nerves (including funduscopic exam), cervical spine & surrounding musculature (palpation, ROM, Spurling's), temporomandibular joint (palpation, ROM, symmetry, jaw claudication), pericranial muscle palpation, general neurologic (upper extremities reflexes, sensation, strength, UMN, pathologic reflexes), temporal artery palpation (tenderness, cord-like artery, or lack of pulse), blood pressure

Standardized headache assessments: MIDAS, HIT-6, MSQL

Module A: Evaluation and Treatment of Headache Adults with headache General history and physical exam (see Sidebar 1) Does this patient need urgent/emergent Yes Consider evaluation evaluation/treatment or have red flags? in urgent care or ED (see Sidebar 1) Is there a secondary headache (see Refer for further Sidebar 2), complicated headache diagnosis and presentation, or multiple headache types? evaluation No Is there clinical concern for TTH? Including: Bilateral headache Yes Non-pulsatile pain Diagnosis of TTH Mild to moderate pain Not worsened by activity Continue (see Sidebar 3) TTH treatment (see Sidebar 4): effective also, assess for MOH No treatment and (see Sidebar 5) Is there clinical concern for migraine? reassess as needed Including: Nausea Yes Diagnosis of migraine Throbbing Yes Headache-related interference in activities Did the patient's Migraine treatment (see (see Sidebar 3) Sidebar 6): also, assess condition improve? for MOH (see Sidebar 5) Is there clinical concern for cluster headache? Including: No Frequent headache Yes Severe and brief (<3-hours per attack) Diagnosis of cluster Refer to Unilateral (always same side) headache specialist · Ipsilateral autonomic signs · Restlessness during attacks Cluster headache treatmen (see Sidebar 3) (see Sidebar 7); also, 19 No assess for MOH (see Revisit general history and physical exam and consider alternate Sidebar 5) diagnoses or referral for specialty evaluation

Sidebar 2: Criteria for Determining Primary Versus Secondary Headache Disorders

Initial evaluation of headache should be targeted at determining if there is a secondary cause for the headache or if the diagnosis of a primary headache disorder is appropriate. Emergent evaluation should be considered based on red flag features. In general, a secondary headache can be diagnosed if the headache is new and occurs in close temporal relation to another disorder that is known to cause headache. It can also be diagnosed when a pre-existing headache disorder significantly worsens in close temporal relation to a causative disorder in which case both the

primary and secondary headache diagnoses should be given. ICHD-3

General diagnostic criteria for secondary headaches

A. Any headache fulfilling C

diagnostic criteria are below.

B. Another disorder scientifically documented to be able to cause headache has been diagnosed. Evidence of causation demonstrated by at least two of the following: a. Headache has developed in temporal relation to the onset of the

presumed causative disorder b. Either or both of the following: headache has significantly worsened in parallel with worsening of the presumed causative disorder or

headache has significantly improved in parallel with improvement of the presumed causative disorder

Headache has characteristics typical for the causative disorder Other evidence exists of causation

C. Not better accounted for by another ICHD-3 diagnosis

The secondary headaches include: headache attributed to: trauma or injury to the head and/or neck, cranial or cervical vascular disorder, non-vascular intracranial disorder, a substance or its withdrawal, infection, disorder of homeostasis, disorder of the cranium, neck, eyes, ears, nose, sinuses, teeth, mouth, other facial or cervical structure, or psychiatric disorder

Access to the full guideline and additional resources are available at the following link: https://www.healthquality.va.gov/quidelines/Pain/headache/ VA/DoD CLINICAL PRACTICE GUIDELINES **July 2020**

Sidebar 3: Primary Headache Disorders Criteria							
		Tension-type headache	Migraine headache	Cluster headache			
	Duration	30-minutes – 7-days	4 – 72 hours	15 – 180 minutes			
Attack duration and frequency	Frequency	Variable	Variable	Once every other day to eight per day; often occurring at the same time of day			
	Severity	Mild to moderate	Moderate to severe	Severe or very severe			
	Location	Bilateral	Unilateral	Unilateral orbital, supraorbital, and/ or temporal			
Headache characteristics	Quality	Pressing or tightening, non-pulsating	Throbbing or pulsating	Stabbing, boring			
	Aggravated by routine physical activity	Not aggravated by routine activity	Aggravated by routine activity	Causes a sense of agitation or restlessness; routine activity may improve symptoms			
Associated	Photophobia and phonophobia	Can have one but not both	Both	Variably present			
features	Nausea and/or vomiting	Neither	Either or both	May be present			
Other features	Autonomic features	None	May occur, but are often subtle and not noticed by the patient	Prominent autonomic features ipsilateral to the pain (see Appendix A in the full text Headache CPG)			

Sidebar 4: Treatment Options for Tension-type Headache*					
Treatment					
Amitriptyline [↑] ♦					
Botulinum toxin/neurotoxin [↓] ♦					
Ibuprofen 400 mg or acetaminophen 1,000 mg [↑] ◆◆					
Physical therapy [↑] +					
Sidebar 8 presents additional treatment options for general headache					

	Sidebar 5: Common Medications and their Association with MOH				
	MOH Type		Medication Overuse Frequency		
	Acetaminophen overuse		≥15-days/month for >3-months		
	NSAID overuse				
	Other non-opioid analgesic overuse				
	Triptan overuse		>10 days/month for >2 months		
	Ergotamine overuse		≥10-days/month for >3-months		
	Opioid overuse		>10 days/month for >2 months		
	Combination-analgesic overuse		≥10-days/month for >3-months		
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Abbreviations: CBT: cognitive behavioral therapy; CoQ10: coenzyme Q10; CPG: clinical practice guideline; ED: emergency department; FDA: U.S. Food ar Drug Administration; GON: greater occipital nerve; HIT-6: Headache Impact Tes edition; HIV: human immunodeficiency virus; IV: intravenous; mg: milligram; MIDAS: Migraine Disability Assessment Test; MOH: medication overuse headact MSQL: Migraine-Specific Quality of Life questionnaire; N/A: not applicable; NSAID: nonsteroidal anti-inflammatory drug; ROM: range of motion; SNOOPE-4: Systemic, Neurologic, Onset sudden, Onset after 50, Pattern change, precipitated, postural, papilledema, Exertion; SPG: sphenopalatine ganglion; SQ: subcutaneous; TTH: tension-type headache; UMN: upper motor neuron

Treatment	
AbobotulinumtoxinA and onabotulinumtoxinA ↓◆	Galcanezumab [↑] ◆
Candesartan or telmisartan ^{↑↑} ♦	Lovastatin [#] ◆
Combination pharmacotherapy → ♦	Non-invasive vagu
Erenumab, fremanezumab, or galcanezumab [↑] ♦	Oxygen therapy [←]
Frovatriptan or rizatriptan ↑♦♦	Pharmacotherapy #
	Pravastatin [#] ♦
GON block [↑] ◆◆	Sumatriptan SQ (r
lbuprofen, naproxen, aspirin, acetaminophen ↑♦♦	Zolmitriptan nasal *Sidebar 8 presents a
	oldebal o presento e
Lisinopril [↑] ♦	Sidebar 8:
Magnesium, oral Î♦	
Nimodipine or nifedipine ↔	Acupuncture +
Nutraceuticals: CoQ10, feverfew, melatonin, omega-3, vitamin B2, and	Aerobic exercise/p
vitamin B6 [↔] ♦	CBT or biofeedbac
OnabotulinumtoxinA [↑] ♦	Dietary trigger edu
Propranolol [↑] ♦	Dry needling [↔] +
Sumatriptan, sumatriptan/naproxen, or zolmitriptan ^{↑↑} ◆◆	Elimination-based
	Fluoxetine or venla
	IV ketamine [↓] ◆◆
'	IV metoclopramide
'	Mindfulness-base
Sidebar 8 presents additional treatment options for general headache	Neuromodulation
↑↑ Indicates a "Strong for" recommendation strength ↑ Indicates a "Weak for" recommendation strength	Pulsed radiofreque
	AbobotulinumtoxinA and onabotulinumtoxinA↓♦ Candesartan or telmisartan↑♦ Combination pharmacotherapy → ♦ Erenumab, fremanezumab, or galcanezumab↑♦ Frovatriptan or rizatriptan ↑ ♦ ♦ Gabapentin → ♦ GON block ↑ ♦ ♦ Ibuprofen, naproxen, aspirin, acetaminophen ↑ ♦ ♦ IV magnesium ↑ ♦ ♦ Lisinopril ↑ ♦ Magnesium, oral ↑ ♦ Nimodipine or nifedipine → ♦ Nutraceuticals: CoQ10, feverfew, melatonin, omega-3, vitamin B2, and vitamin B6 → ♦ OnabotulinumtoxinA ↑ ♦ Propranolol ↑ ♦ Sumatriptan, sumatriptan/naproxen, or zolmitriptan ↑ ↑ ♦ ♦ Topiramate ↑ ♦ Triptans ↑ ♦ ♦ Valproate → ♦ *Sidebar 8 presents additional treatment options for general headache ↑↑ Indicates a "Strong for" recommendation strength

← Indicates a "Neither for nor against" recommendation strength

Indicates the treatment was not included in the CPG's evidence review

Sidebar 6: Treatment Options for Migraine Headache*

Sidebar 7: Treatment Options for Cluster Headache* **Treatment** Galcanezumab[↑] ♦ Lovastatin[#]♦ Non-invasive vagus nerve stimulation[↑]++ Oxygen therapy ↔ Pharmacotherapy for acute treatment → ◆ ◆ Pravastatin[#]♦ Sumatriptan SQ (not oral)[#]◆◆ Zolmitriptan nasal spray[#]♦♦ Sidebar 8 presents additional treatment options for general headache Sidebar 8: Treatment Options for Headache in General Treatment Acupuncture ++

Aerobic exercise/progressive strength training[↑]+ CBT or biofeedback ++

Dietary trigger education[↑]+

Elimination-based diet testing ++

Fluoxetine or venlafaxine →

IV metoclopramide, IV prochlorperazine, or intranasal lidocaine →◆◆

Mindfulness-based therapy[↑]+

Neuromodulation ←+

Pulsed radiofrequency or SPG[↔]+

+ indicates non-pharmacologic therapy - preventive; ++ indicates nonpharmacologic therapy – abortive; ◆ indicates pharmacotherapy – preventive; ◆◆ indicates pharmacotherapy – abortive