Geriatric Pain Management Guide: Headache (HA)

Discussion: There are differences in the causes and types of headaches; therefore, the diagnosis and management of headache in older adults differ from that in younger individuals. They are associated with vascular disease, head trauma, and neoplasms, where urgent intervention becomes increasingly important. Proper treatment of headache in older adults requires the recognition of secondary causes, comorbid diseases, and drug-induced or medication overuse headaches. Special attention should be paid to depression and obstructive sleep apnea in such patients suffering from headache disorders. When different headache presentations are understood, prompt assessment can be completed and early intervention provided. Differentiating between nonemergent and emergent headaches is critical.

Headache Condition

Non-Emergent	Prevalence/Key history	Key Signs & Symptoms	Management
Tension-type headache (most common type)	Prevalence: 44.5% over age 65. Triggers: lack of sleep and emotional or physical stress.	Constant *bilateral* tightening pressure; (can mimic a serious cause). Physical exam: bilateral mild/moderate pain, normal neuro exam is reassuring.	Non-pharmacologic; Stress management and acetaminophen or NSAID where indicated. Call provider.
Migraine (second most common)	Prevalence: without prior history 5-10% new onset is unusual after age 65. Some experience only the aura, without the HA.	Unilateral *(one-sided),* pulsating often with nausea/vomiting and light sensitivity with or without aura. Physical exam: normal neuro exam.	Non-pharmacologic; cool compress to forehead, lie down in a dark room. Over-the-counter antiemetic. Call provider.
Rhinosinusitis Chronic Sinusitis	Prevalence of chronic sinusitis: 14.1% over 65; 13.5% over 75; History of thick nasal drainage.	Nasal obstruction, discharge, and congestion; facial pressure/pain, HA, loss of smell, halitosis.	Call provider; may try saline nasal irrigation to provide humidification.
HA from Cervical spine disease	Prevalence: nearly universal with aging (as cervical degenerative disk disease is so common).	One side of the head/doesn't change sides, is triggered by neck movement, or is sustained by awkward neck positions. Physical exam: may have shoulder pain/ stiff neck on same side.	Call Provider.

Medication-induced HA (Older adults with hx of episodic migraine can transform to chronic daily headache if taking analgesics frequently enough)	Prevalence: fairly common due to polypharmacy. Medications which can cause HA are indomethacin, nifedipine, atenolol, Bactrim, isosorbide dinitrate, and methyldopa (often cardiac medications). Med-overuse or misuse HA: barbiturate-analgesic-caffeine combos, codeine, opioids, caffeine, acetaminophen, salicylates, and NSAIDS.	Daily or near-daily HA associated with overuse or misuse of "pain relievers" (listed to the left); appears to interfere with the brain centers worsening HA pain.	Call Provider; may be instructed to taper offending analgesic and evaluation of cardiac drugs.
Emergent	**Prevalence/Key history**	**Key Signs & Symptoms**	**Management**
Head bleed-Subarachnoid hemorrhage Minor aneurysm leak can produce a "sentinel headache" days to weeks before rupture	Highest incidence: women > 70. Most occur during the morning or evening hours.	Sudden onset of the "worst headache" in their life (can occur in any location**,** mild, resolve, or may be relieved by analgesics). Nausea/vomiting - common (75%), also syncope, neck pain, coma, confusion, lethargy, and seizure.	**Call 911**, stay with individual, notify provider.
Vasculitis Giant Cell Arteritis "Temporal arteritis"	Incidence: increases after age 50; is greater in 70-80-year-olds. Can lose vision permanently.	Unilateral HA over temporal/occipital area, visual changes, and pain with chewing. Physical exam: thick, tender nodularity over temporal artery region.	Notify provider urgently for pharmacologic treatment.
Stroke/CVA	Stroke can present with HA (up to 17%).	Described as dull or throbbing; mild to severe; diffuse or on one side associated with vomiting.	Call 911, stay with individual, notify provider.
Brain tumor (Intracranial lesion)	Incidence increases with age; 61% are metastases.	Severe morning HA that worsens on positional change and associated with nausea/vomiting; closely resembles a tension HA, evaluate what makes it worse.	Notify provider.
Infection Meningitis/ encephalitis	Usually viral (herpes simplex HSV-1) most common for encephalitis.	HA, fever, mental status changes, neck stiffness and inability to move neck muscles; face and mouth pain.	Notify provider.
Acute angle closure glaucoma	Prevalence: increases with age, more common in females.	Severe unilateral HA with associated blurred vision, nausea/vomiting, severe eye pain; Physical exam – eye redness.	Notify provider of "ocular emergency."

Initial Nursing Care: Initial nursing care starts with an accurate and thorough assessment to identify the probable type and cause of the headache.

Physical Exam/History: Obtain as many specifics of the headache pattern as possible (duration, distribution, severity, radiation, prior history, precipitating/alleviating factors, any fall or trauma or obstructive sleep apnea). Assess vital signs.

Neurological Exam: Assess mentation and focus on the cranial structures assessing for scalp and facial tenderness over the affected area(s); identify if symptoms are unilateral or bilateral. Assess vision and pupils.

Any patient who has a headache and focal neurologic abnormality requires emergent neuroimaging to exclude an intracranial lesion or bleed.

Typical Treatments/Medications:
If an emergent headache is ruled out, a trial of rest, quiet environment, cool compress, and/or decreased lighting is indicated. Discuss analgesics with the provider. If trauma preceded the head pain, stay with the individual until emergency personnel arrive.

Communication: (SBAR to the Provider)

- **S**ituation: What is happening at present time? Describe the symptoms, location, and degree of pain.
- **B**ackground: What led up to this situation? Was awakened with the symptoms; may have been brought on by exercise, or just appeared suddenly? Was there any trauma associated with onset of pain? Does the older adult have a history of a similar occurrence, if so - when and what relieved the pain?
- **A**ssessment or Appearance: Report physical exam results, vital signs. What are the results of physical exam (redness, swelling, warmth to touch)? Describe what you think is occurring.
- **R**equest/Recommendations: What do you think should be done to correct the problem? Should medications, lab work, imaging, additional testing, and specific monitoring be considered?

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References:
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Robblee, J., Singh, R.H. Headache in the Older Population: Causes, Diagnoses, and Treatments. *Curr Pain Headache Rep* 24, 34 (2020). https://doi.org/10.1007/s11916-020-00866-8.