

Scope and Target Population:

Patients age 12 years and older who present with headache. For the purpose of this guideline, pain that primarily involves the back of the neck and only involves the head to a limited extent is not considered a headache. This guideline does not specifically address occipital neuralgia.

Aims:

1. Increase the accurate diagnosis of primary headaches in patients age 12 years and older.
2. Increase the percentage of patients with primary headache diagnosis who receive educational materials about headache.
3. Increase the percentage of patients with primary headache syndrome who receive prophylactic treatment.
4. Increase the percentage of patients with migraine headache who have improvement in their functional status.
5. Increase the percentage of patients with migraine headache who have a treatment plan or report adherence to a treatment plan.
6. Decrease the percentage of patients with migraine headache who are prescribed opiates and barbiturates for the treatment of migraines to less than 5%.
7. Increase the percentage of patients with migraine headache who have appropriate acute treatment.

Clinical Highlights:

- Headache is diagnosed by history and physical examination with limited need for imaging or laboratory tests.
- Warning signs of possible disorder other than primary headache:
 - Subacute and/or progressive headaches that worsen over time (months)
 - A new or different headache
 - Any headache of maximum severity at onset
 - Headache of new onset after age 50
 - Persistent headache precipitated by a Valsalva maneuver
 - Evidence such as fever, hypertension, myalgias, weight loss or scalp tenderness suggesting a systemic disorder
 - Presence of neurological signs that may suggest a secondary cause
 - Seizures
- Migraine-associated symptoms are often misdiagnosed as "sinus headache" by patients and clinicians. Most headaches characterized as "sinus headaches" are migraines.
- Early treatment of migraines with effective medications improves a variety of outcomes including duration, severity and associated disability.
- Drug treatment of acute headache should generally not exceed more than two days per week on a regular basis. More frequent treatment other than this may result in medication-overuse chronic daily headaches.
- Inability to work or carry out usual activities during a headache is an important issue for migraineurs.
- Prophylactic therapy should be considered for all patients.
- Migraines occurring in association with menses and not responsive to standard cyclic prophylaxis may respond to hormonal prophylaxis with the use of estradiol patches, creams or estrogen-containing contraceptives.
- Women who have migraines with aura have a substantially higher risk of stroke with the use of estrogen-containing contraceptive compared to those without migraines. Headaches occurring during perimenopause or after menopause may respond to hormonal therapy.
- Most prophylactic medications should be started in a low dose and titrated to a therapeutic dose to minimize side effects and maintained at target dose for 8-12 weeks to obtain maximum efficacy.

Additional Background:

This guideline discusses the headache disorders most commonly seen in primary care offices. It is not a comprehensive discussion of diagnosis and treatment of all headache syndromes, since many headaches are rare and felt best treated by headache specialists or neurologists with specialization in headache. It is intended for primary care clinicians to help with their diagnosis and treatment of four main types of headache: migraine, tension-type headache, cluster headache and chronic daily headache. This guideline is necessarily long and may be considered by some to be cumbersome. However, extensive information pertaining to headaches is covered, along with the typical medications. As there are multiple easy-to-access information sources available containing current detailed drug information, drug tables in the appendices highlight only selected drugs whose dosing, side effects and contraindications might otherwise be challenging to locate.

For most headaches, diagnosis is made on the basis of history and physical exam with no imaging or laboratory assistance. There are, however, causes for concern listed in the algorithms, which may direct clinicians to specific testing or referral.

Headache is a very common problem presenting to primary care clinicians, with about 3% of emergency department visits and 1.3% of outpatient visits for headaches. While tension-type headache is the most common type of headache overall, migraine is the most common headache type seen in clinical practice, with visits for tension-type headache and cluster headaches being much less common in clinician's offices. Therefore migraine is the first and primary headache type reviewed.

Migraine is a genetically influenced chronic brain condition marked by paroxysmal attacks of moderate to severe throbbing headache. About 324 million persons suffer from migraine worldwide according to the World Health Organization. Nearly 18% of women and 8% of men in the United States suffer from migraine in any given year. Typically the disorder begins in adolescence and young adults but the lifetime cumulative incidence is 43% for women and 18% for men. Over 25% of migraine sufferers have more than three headache days per .

Women headache sufferers may present with a hormonal component to the course of headaches over their lifetime, and an algorithm for treatment of hormone-related headache is also included. Headaches over three times a month are often treated with prophylactic treatment as overuse of medication for acute migraine may actually cause chronic headache.

Because headache is such a common disorder that is often misdiagnosed and undertreated or mistreated, improved diagnosis of headache syndromes will improve the patient's experience of care, notably quality of and satisfaction with care. Morbidity due to headaches is substantial, so improved diagnosis and treatment will improve the health of the population. Reducing office visits, emergency department visits, and inpatient admissions for uncontrolled headache syndromes along with reducing unnecessary tests and procedures for headache diagnosis is likely to reduce total costs of care even if there are more visits for diagnosis of headache and increased costs for headache-specific drugs.