Diagnosis and Treatment of Migraine

Evaluation of Headache:

Meets criteria for ED referral? (Table 1)

YES

Refer directly ED

NO

Migraine Screening Questionnaire:
1. Has a headache limited your activities for a day or more in the last three months?
2. Are you nauseated or sick to your stomach when you have a headache?
3. Does light bother you when you have a headache?

≥2/3 positive

Most likely migraine HA

≥ 15 HA days/month?

YES

Start prophylactic therapy (Table 3)

Refractory HA

Refer for Specialist Consult

NO

Start abortive therapy (Table 4)

Refractory HA

Refer for Specialist Consult

≤1/3 positive

Meets criteria for imaging? (Table 2)

YES

Abnormal imaging?

YES

Symptomatic treatment for anxiety/depression/sleep
Empiric trial of abortive or prophylactic therapy

Refractory HA

Refer for Specialist Consult

NO

NO

NO

Refer for Specialist Consult
Table 1. When to refer to Emergency Department/Urgent evaluation

- Acute or sudden onset “thunderclap” headache (refer to ED immediately)
- Associated personality change or level of consciousness
- Headache with fever or neck stiffness
- Headache with papilledema
- New onset headache in pregnancy or postpartum
- Headache with focal neurological signs or atypical features that do not fit the strict definition of migraine or other idiopathic HA syndrome *
- Headache precipitated by exercise, cough or sexual activity *
- Positional headache (exacerbation of HA with lying down, bending over, or upright posture)*

*Can be referred for urgent eConsult rather than ED, based on clinical discretion.

Table 2. Indications for Neuro-imaging in Non-Acute Headache

- Sudden change in pattern, quality, or frequency of headache
- Persistent/refractory headache despite adequate treatment trials
- New onset of headache after age 50
- Headache in the context of risk factors such as immunodeficiency or cancer

Table 3. Abortive treatments for migraine

- NSAIDs (Ibuprofen, aspirin, naproxen, diclofenac)
- Acetaminophen
- Combination medications (acetaminophen, aspirin, caffeine)
- Triptans (sumatriptan, zolmitriptan, naratriptan, rizatriptan, almotriptan, eletriptan, and frovatriptan)
- Ergotamine and dihydroergotamine (DHE)
- Dexamethasone IV/IM
- Antiemetics – metoclopramide, chlorpromazine, diphenhydramine

Notes on Abortive treatment of Migraine:

- Abortive treatment should be administered as close to headache onset as possible to maximize effectiveness.
- Abortive treatment should not be used chronically more than 2-3 times a week to avoid medication overuse headache (“rebound headache”).
- Different triptans should not be given within 24 hours of each other.
- Opioids and butalbital containing products are generally NOT recommended for the acute treatment of migraine because of increased risk of medication overuse headache.
- For concerns regarding oral contraceptive use in migraineurs, please refer to Oral Contraceptive Use in Migraine.
- For a comprehensive list of abortive treatments, please see “Abortive treatment for Headache”
Table 4. Prophylactic treatments for migraine

- Anti-epileptics (valproate, topiramate, gabapentin, zonisamide)
- Antihypertensives (propranolol, metoprolol, atenolol, verapamil)
- Anti-depressants (amitriptyline/nortriptyline, venlafaxine)
- Other (magnesium 400 mg BID, riboflavin 400 mg qd, butterbur - Petadolex 50 mg BID)
- Botulinum toxin injections

Notes on Abortive treatment of Migraine:
- Prophylactic treatment should be considered for migraine of >15 HA days/month, >4 HA/month, or HA >12 hours.
- Prophylactic treatment is given daily, and may take 1 month to take effect.

Prior to Referral for eConsult:
Prior to referral for eConsult, patients with migraine should have tried and failed at least 2 abortive therapies, and (if indicated) have an adequate trial (at least 2 months) of a prophylactic therapy. Education on the avoidance of triggers should also be discussed and patients should be given a HA diary to track their symptoms in response to treatment. An eConsult for headache management should include the following information:
- Headache quality, frequency, duration, and severity
- Abortive medications tried and failed
- Prophylactic medications tried and failed
- Any concerns for secondary headache syndromes

Disclaimer: Information in this clinical guide is intended to guide therapy, and should not be used exclusively for treatment purposes. Providers should exercise best clinical judgment for appropriate treatment and necessity for referral.

*Professional guidance provided by Dr. Jennifer Hui to support Primary Care Providers across Los Angeles County. May 2015.*

Reference - PDF Accessible guidelines:

**Clinician Guide** to Episodic Migraine Prevention in Adults:
[https://www.aan.com/Guidelines/Home/GetGuidelineContent/545](https://www.aan.com/Guidelines/Home/GetGuidelineContent/545)

**Clinician Guide** to NSAIDs and Complementary Treatments for Migraine Prevention in Adults:

**Patient Guide** to Prescription Drugs used in Migraine Prevention:

**Patient Guide** to NSAIDs and Complementary Drugs used in Migraine Prevention: