

ED Headache Treatment Algorithm

Orderset: ED headache

For the treatment of migraines, tension headaches, and post-concussive headaches (age 6-21 years)

Maximized or Declined PO therapy?

No

PO NSAIDs & PO fluid hydration

Goals met?

Yes

Discharge home

No

IV Prochlorperazine + IV Ketorolac +NS bolus

Goals met?

Yes

Discharge home

No

Eligible for DHE (and DHE available)?

Yes

DHE IV (see next page)

Goals met (1h after DHE)?

Yes

Discharge home

No

Consult and admit to neuro

No

Valproate available?

Yes

Valproate IV (see next page)

Goals met?

Yes

Discharge home (with rx for po valproate – see next page)

No

IF HA severe and patient requires additional treatment consult neurology (they may recommend IV dexamethasone for repeat visits, or earlier HA clinic follow up, or admission)

ED treatment goals:

- Headache free **OR**
- Headache back to baseline **OR**
- Headache is mild (pain score 1-3)

Discharge considerations:

- Maximize po therapy – each HA episode treated with 1-2 doses of NSAIDs with no more than 3 episodes treated in a week
- IF DHE given in the ED, discharge if goals met 1h after DHE, and recommend no triptan for 24 hours after last DHE
- IF VPA was helpful in the ED, give 1st dose po in the ED and rx for 14 days VPA ER bid (see next page)

Admission considerations:

- Main inpatient therapy is DHE, so if not eligible, not tolerated, or **if not available (on shortage), admission is unlikely to be helpful**
- If pain still above goals despite maximizing ED therapy, discuss options with neurology
- If admission still necessary, patient should go to neurology (not HM)

Reassessments should take place within one hour after each intervention.

Prochlorperazine (Compazine):

- Preferred first-line agent
- 0.15 mg/kg IV; max of 10 mg
- For patients with previous adverse reactions who refuse prochlorperazine, consider:
 - Metoclopramide (Reglan)
 - Give a half-dose of Prochlorperazine
 - Slow the infusion rate by half
 - Have patient walk during infusion if able and not dizzy to help with akathisia

Valproic Acid:

- Utilize “ED headache order” set to assure correct dosing and rate
- Patients who are discharged after treatment with valproic acid should be sent home on a 14-day course of oral valproic acid.
- < 10 years OR < 50 kg: Depakote ER 250 mg PO BID x 2 weeks
- >= 10 years AND >=50 kg: Depakote ER 500 mg PO BID x 2 weeks
- Give 1st oral dose in the ED
- If IV Valproic Acid unavailable do not give PO valproic acid in ED or send home with 14-day prescription

Dihydroergotamine (DHE) – See Lexicomp for additional details:

- Contraindications: (1) Triptan within 24 hours; (2) DHE within 14 days.
- MUST obtain pregnancy test in adolescent females
- < 30 kg: 0.5 mg; >= 30 kg: 1 mg
- Administer 50% of dose first (over 3 minutes) then remaining 50% in 30 minutes
- Expected Side Effects (counsel patient to anticipate): nausea, vomiting, flushing, and hypertension – most resolve within 1 hour so if patient has symptoms resolve and HA resolve, can go home
- ALL patients who receive DHE in the ED will be automatically admitted to Neurology, unless the headache has completely resolved or is at baseline and the family prefers to be discharged.
- If patient discharged home, advise no triptan for 24 hours after last dose of DHE

Steroids:

- Should be considered in children with recurrent headaches despite ED treatment (return visits within 72 hours for rebound headache)
 - Dexamethasone 0.6 mg/kg IV x1; max of 10 mg IV (No medications for discharge home)