

1. Primary headache (HA) disorder:

- In Primary HA disorders, there is no concern for a secondary or underlying cause (e.g. prev. neurosurgery, acute head trauma, etc.).
- This algorithm focuses on migraine and tension-type headaches.

2. Cautionary features (NOT exclusionary):

- Age: < 6 years old
- < 6-month headache history
- Atypical presentation
- Progressive severity in the ED
- Position-related headache
- Change in headache type
- Presence of fever
- Thunderclap onset
- Immunosuppression
- Abnormal neuro examination

3. Triptan contraindications:

- Uncontrolled hypertension
- H/o stroke, myocardial infarction or peripheral vascular disease
- Hemiplegic and basilar migraines
- Wolff-Parkinson-White syndrome

Discharge criteria:

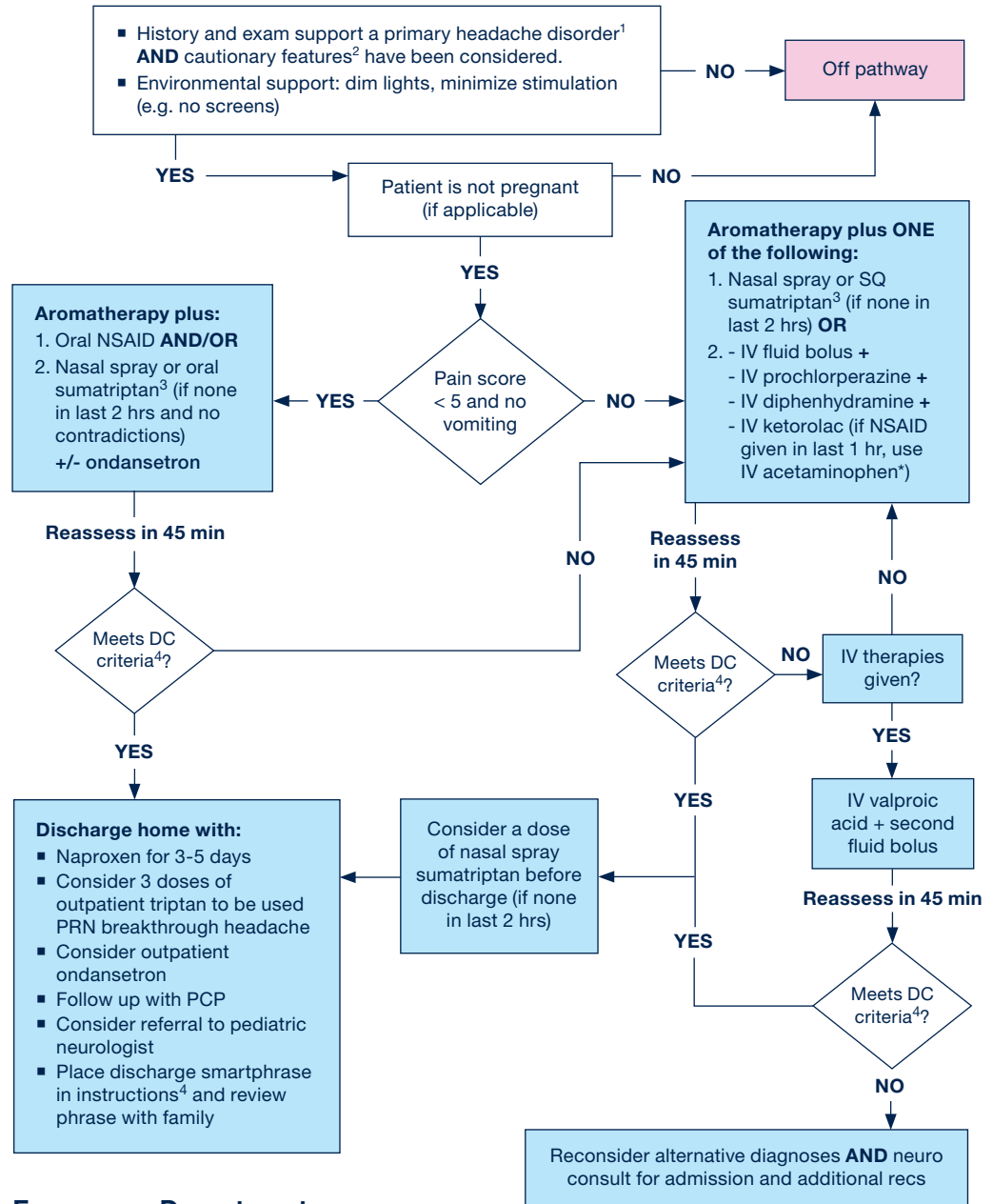
- Patient and family comfortable with home management
- Able to take oral medication
- Headache discharge instructions discussed with patient/family
- Patient able to secure medications for home management

Discharge medications:

- Naproxen: 10 mg/kg/dose BID (max 500 mg BID) x 3-5 days
- Sumatriptan: Oral: 25 mg if < 40 kg | 50-100 mg if ≥ 40 kg Q2 hours PRN (or "as needed") for breakthrough headache, up to 3 doses.
- Rizatriptan or Rizatriptan ODT for > 6yo: 5mg if < 40 kg; 10 mg if ≥ 40 kg
- Ondansetron: 2 mg if < 15 kg | 4 mg if ≥ 15 kg

4. Suggested discharge instructions:

- Use a Headache Diary (forms available at ucsfbenioffchildrens.org/headache)
- SMART Habits: Healthy behaviors and stress-reduction strategies to reduce pain and prevent recurrence of headache are very important.
 - Sleep: At least 8 hours for teens (> 9 hrs for kids 6-12 yrs), go to sleep and awaken around the same time
 - Meals: At least 3, don't skip any, drink plenty of fluids (> 8 cups of water daily for kids > 9 yrs, more for high exertion or athletes), consider avoiding caffeine-containing substances
 - Activity: Exercise is really effective for treating and preventing headache
 - Relaxation: Music, massage, compresses, breathing, yoga, meditation
 - Triggers: Recognize and avoid them; the Headache Diary can help.



Emergency Department Therapeutics

Aromatherapy:

- Inhaled isopropyl alcohol. Deep inhalations with pad held 2 cm from nares for up to 1 min then rest 4 min. Can repeat every 5-10 min with up to 5 pads.

Enteral medications:

- Ibuprofen: 10 mg/kg (max 400 mg/dose)
- Naproxen: 10 mg/kg (max 660 mg/dose)
- Ondansetron: 0.15 mg/kg (max 8 mg/dose)

Sumatriptan:

- Oral: < 40 kg (25 mg) | ≥ 40 kg (50-100 mg)
- Nasal spray: < 40 kg (5 mg) | ≥ 40 kg (20 mg)
- Subcutaneous: < 40 kg (3 mg) | ≥ 40 kg (6 mg)

Parenteral medications:

- Ketorolac: 0.5 mg/kg (max 30 mg/dose)
 - Can be used within 1 hr of PO NSAID if no renal insufficiency
- Acetaminophen: 15 mg/kg (max 1 g/dose)
- Diphenhydramine: 1 mg/kg (max 50mg/dose)
- Prochlorperazine: 0.15 mg/kg (max 10mg/dose)
- Valproic acid: 20 mg/kg over 30 min (max 1 g)
- Metoclopramide: 0.1-0.25 mg/kg (max 10 mg/dose)
- Chlorpromazine: 0.5 mg/kg (max 25 mg/dose)