Randall Children's Hospital

Co-Management and Referral Guidelines
Initial Evaluation and Management of Headache
Randall Children's Neurology

Phone: **503-413-3600**
Fax: **503-413-3621**

Introduction

- Recurrent headaches occur in one-third to one-half of children and adolescents. These headaches occur daily or nearly every day in 2–6 percent of children.
- Secondary headaches are rare in children (caused by an underlying process like tumor or aneurysm).
- Tension-type headaches and migraines are the most common primary headache disorders. Migraine patients are more likely to seek care.
  - Migraine is the most likely diagnosis for a recurrent headache that is severe, only temporarily disabling, and associated with a stable pattern and normal physical exam.
  - Chronic tension-type headaches or chronic migraines are most likely when the headaches occur more than 15 days per month.
- Unlike in adults, pediatric migraine can be bilateral and brief (< 1 hour). Young children may have more prominent vomiting and abdominal symptoms. Photophobia and phonophobia may not appear until the teenage years.

Evaluation and Management

History

- A detailed history should be elicited, including headache onset; frequency; impact on activities; pain quality, location and duration; associated features, including aura; frequency and doses of medications.
- Family history should be sought, including headache history.
- Look for **RED FLAGS**: very young age (< 5 years), systemic symptoms (fever, weight loss), progressive worsening over time, postural/positional headache, precipitation by alsalva or exertion, headache primarily awakening patient from sleep.
- **Review lifestyle practices**: regularity of meals, hydration, caffeine intake, sleep habits, exercise, stressors.
- **Take a careful and private social history. Adverse experiences in childhood (eg physical, sexual, or emotional abuse; financial stress; parental divorce; death; mental illness; addiction) predispose to headaches.**
- Keep a headache diary to obtain accurate history on frequency, disability and medication use.

Exam

- Standard general and neurologic exam
- Blood pressure
- Head circumference
- Stigmata of neurocutaneous disease
- Fundoscopic exam for papilledema

Diagnostic Testing

- Imaging might rule out secondary headaches, but does not diagnose primary headaches.
- Neuroimaging is **not** routinely indicated. Consider imaging if there is a(n):
  - Abnormal neurologic exam
  - Change in the character or frequency of preexisting headaches or recent onset of severe headache
  - Associated features that suggest neurologic dysfunction, e.g., seizures

(continued)

- MRI is generally preferred over CT scan.
  - If imaging for suspected idiopathic intracranial hypertension (aka pseudotumor cerebri), include MRV.
- LP for idiopathic intracranial hypertension — call for guidance

Treatment

- Encourage healthy habits.
- Consider biofeedback, relaxation techniques, cognitive behavioral therapy.
- Acute treatment:
  - Rest or sleep in dark, quiet room
  - *See Headache Medication Sheet:*
    - » Ibuprofen (often underdosed)
    - » For migraines: triptans (rizatriptan and zolmitriptan have orally disintegrating tablets for children > 6 years of age)
    - » For nausea and vomiting with migraines: prochlorperazine, promethazine, metoclopramide), ondansetron
- Avoid narcotics.
- Consider daily prophylactic medication if at least 4 headache days per month. There is a high placebo response rate in pediatric migraine. — *See Headache Medication Sheet.*
- Avoid medication overuse.

When to refer

- Complicated migraines, diagnostic uncertainty
- Headaches not responding to treatment
- Parental reassurance

Referral process

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To make a referral, refer via Epic or **fax the Randall Children's Hospital–Specialty Referral form** to **503-413-2419** (Oregon) or **360-487-1033** (Washington).

For urgent referrals, call Legacy One Call Consult & Transfer: 1-800-500-9111 to speak to the on-call pediatric neurologist.

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Additional Resources

Babineau S.E., Green M.W. Headaches in children. *Continuum: Lifelong Learning Neurology* 2012;18:853–862.

Gladstein J. Pediatric Headache. *Current Treatment Options in Neurology* 2006; 8:451–456.

Hershey A.D., Gladstein J., Winner P. Chronic daily headache in the pediatric population. *Current Treatment Options in Neurology* 2007; 9:14–22. **http://www.ncbi.nlm.nih.gov/pubmed/17288885**

Szperka C. Headache in Children and Adolescents. *Continnuum* 2021;27:703-731.

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Find this and other co-management/referral guidelines online at: **legacyhealth.org/randallguidelines**

RANDALL CHILDREN'S HOSPITAL
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