What is it?

Headache is common in children, increasing in incidence from early childhood to adolescence. Chronic daily headache is headache experienced for more than 15 days per month for at least 3 consecutive months.

Two types:

Primary: Headache has no specific underlying cause. These are the most common causes of chronic headaches in children. e.g.: Tension-type headache, Migraine and Cluster headache.

Secondary: Headache due to underlying causes such as sinusitis, raised intracranial pressure, medication overuse, hypertension, giant cell arteritis. Less commonly seen in children, with the likelihood of a potential serious secondary cause for chronic headache being less than 3 per 1000 children.

Headache feature	Tension type headache		Migraine (with or without aura)		Cluster headache	
Pain location	Bilateral		Unilateral or bilateral		Unilateral (around the eye, above the eye and along the side of the head/face)	
Pain quality	Pressing/tightening band (non pulsating)		Pulsating (throbbing or banging in young people aged 12–17 years)		Variable (can be sharp, boring, burning, throbbing or tightening)	
Pain intensity	Mild or moderate		Moderate or severe		Severe or very severe	
Effect on activities	Not aggravated by routine activities of daily living		Aggravated by, or causes avoidance of, routine activities of daily living		Restlessness or agitation	
Other symptoms	None		Unusual sensitivity to light and/or sound or nausea and/or vomiting Aura Typical aura symptoms include visual symptoms such as flickering lights, spots or lines and/or partial loss of vision; sensory symptoms such as numbness and/or pins and needles; and/or speech disturbance. Aura symptoms can occur with or without headache and: are fully reversible develop over at least 5 minutes last 5–60 minutes		 On the same side as the headache: red and/or watery eye nasal congestion and/or runny nose swollen eyelid forehead and facial sweating constricted pupil and/or drooping eyelid 	
Duration of headache	30 minutes – continuous		1–72 hours in young people aged 12–17 years		15–180 minutes	
Frequency of headache	less than 15 days per month	more than 15 days per month for more than 3 months	less than 15 days per month	more than15 days per month for more than 3 months	1 every other day to 8 per day, with remission for more than 1 month	1 every other day to 8 per day, with a continuous remission less than 1 month in a 12 month period
Diagnosis	Episodic tension type headache	Chronic tension type headache	Episodic migraine (with or without aura)	Chronic migraine (with or without aura)	Episodic cluster headache	Chronic cluster headache

What should I do?

A) HISTORY

- Details of the headache: onset, timing, location, associated symptoms, exacerbating and relieving factors
- Medication history, School absences, Sleep habits, Stress, Screen time
- Family history of headaches

B) EXAMINATION:

- Weight and height: Plot on growth chart
- Check blood pressure
- Local pathology: Check for dental, eye and ENT pathology
- Neurological examination

C) INVESTIGATIONS:

- Not routinely indicated
- Cranial imaging only if clinically indicated

D) MANAGEMENT:

- 1. General measures: (Tension type headaches generally improve with these measures)
 - Reassure that a sinister underlying cause is unlikely, if clinical assessment is normal.
 - Headache diary (for 2-3 weeks) to identify patterns and precipitants
 - Lifestyle advice: Good fluid intake, sleep hygiene, reducing screen time, regular exercise, avoiding possible triggers
 - Rest, relaxation, distraction to manage headache non-pharmacologically
 - Simple analgesia: use sparingly, with warning about risk of medication overuse headache
 - Cognitive Behavioural therapy (CBT) and behavioural support, where indicated

2. Migraine treatment :

a. Acute episode:

- Sumatriptan or zolmitriptan: not licensed in children but recommended by NICE for children above 12 years. (Follow local APC recommendations on prescription licensing)
- Migraleve
- Paracetamol, Ibuprofen

b. Prophylaxis:

- Propranolol (licensed) or Topiramate (unlicensed but recommended by NICE)
- Pizotifen (licensed but not recommended by NICE)
- Review the need for continuing migraine prophylaxis 6 months after starting treatment.

When should I refer?

Any of the features below should lead to an urgent referral; if there is high level of concern about possible brain tumour, immediate referral to acute paediatric services.

RED FLAGS:

- Age < 4 years
- Headache waking child from sleep
- Persistent vomiting
- Focal neurological signs
- Co-ordination problems
- Non-acute visual problems

- Headache with cough/strain/activity/ postural change
- Change in personality/behaviour/activity level
- Deteriorating cognitive function
- Growth/pubertal failure
- Progressively severe headaches

Resources:

NICE Clinical guideline updated July 2017: Headache in children and young people: diagnosis and management (CG99)