Ashford and St. Peter's Hospitals NHS
NHS Trust

WOMEN'S HEALTH AND PAEDIATRICS
PAEDIATRIC DEPT

HEADACHE GUIDELINE

Amendments			
Date	Page(s)	Comments	Approved by
January 2014	New Guideline		Paediatric Guideline Group
March 2018		Whole document review - no changes	Paediatric Guideline Group

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In Consultation with:	
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Impact Assessment Carried Out By:	
Comments on this document to:	Dr Kate Irwin – Consultant Paediatrician

HEADACHE GUIDELINE

INTRODUCTION

Headaches are a common childhood complaint and frequency increases with age. 20% of preschool children will complain of headache at some point and this rises to 82% by age 15 years of age

The differential diagnosis is large and the possibility of serious brain disorder can cause great anxiety. It is important to identify those that warrant further investigation and equally important to diagnose primary headache disorders and reassure families when no further investigations are warranted.

ASSESSMENT

History

Adapted from International Headache Society Criteria for Primary headache disorders. The italics highlight how children may differ from classical criteria:

	TENSION-TYPE	**MIGRAINE**	**CLUSTER**
Age	Any age: Most common in adolescence	Any age.	Very rare in <10y
Location	Bilateral	***Usually bilateral in children below adolescence and unilateral in those above***	Unilateral, usually starts around eye or temple
Pain Quality	Pressing/ tightening	***Pulsating/ banging (less typical in children or difficult to characterize)***	Deep, continuous, explosive
Intensity	Mild-moderate	Moderate to severe	Severe
Duration	30mins-continuous	***1-***72 hours	15min-3h
Effect on activities	Nil effect	Aggravated by or causes avoidance of usual activities	Often nil effect
Associated symptoms	Nil	Photophobia or phonophobia ***(maybe inferred from behaviour)*** Nausea and vomiting Aura=symptoms (e.g. flickering lights) that occur with or without headache that are: • Fully reversible • Develop over at least 5 mins • Last 5-60mins ***Aura is rare in preschool children***	Ipsilateral autonomic symptoms; lacrimation or redness of eye, blocked nose or rinorrhoea, horner syndrome, rarely focal neurological symptoms

Other causes of the headache must be excluded based on Hx & examination.

Ask about previous symptoms in keeping with cyclical vomiting, abdominal migraines and benign paroxysmal vertigo of childhood that are often precursors to migraines.

Clarify if there is a FHx of migraines, particularly predictive if on maternal side.

Primary headache disorders are often comorbid with psychiatric disorder so ask about anxiety and depression as a minimum. Take a social history for contributory factors and headache impact e.g. on school attendance[7].

REDFLAGS that warrant senior opinion +/- further investigations:

Headache character	**Associated symptoms/ factors**	**Examination**
Persistent* and waking from sleep or present on waking	Change in behavior esp. lethargy	Abnormal head position – head tilt, wry neck, neck stiffness
Persistent* and <4y of age	Confusion	Papilloedema
Triggered by cough, sneeze or exercise	Change in motor ability (e.g clumsiness)	Abnormal neurology
Occipital	Developmental regression	High blood pressure
Worsening & ass with fever	Persistent visual symptoms	
Sudden onset and max intensity <5mins	Persistent* nausea or vomiting	
Orthostatic	Seizures	
Different to 'usual' headache in those with primary headaches	Recent head trauma (<3/12)	

*Persistent is >4 weeks

EXAMINATION

- Plot growth and in those less than 2y of age head circumference – is there evidence of growth failure, obesity or disproportionately enlarged head size?
- Check blood pressure
- Examine ENT (including palpation of sinuses) and oropharynx for evidence of infection
- Full neurological examination in particular visual and motor system
- Attempt fundoscopy – if limited and significant concern, consider referral to ophthalmology team

MANAGEMENT OF PRIMARY HEADACHE DISORDER

Non-Pharmocological:

- Explanation of diagnosis, reassurance re other causes if appropriate and information leaflet (see links at end).

- Consider treatment for any psychological co-morbidity identified via appropriate referrals.

- Encourage headache diary to be kept, to recognise pattern and potential triggers e.g. certain foods, excitement.

- Encourage regular sleep, hydration, regular meals, and exercise

- Empower parents to seek attention for reassessment if the headache changes or worsens. In particular ensure they understand about red flags (see information print for parents at the end).

Pharmacological:

MIGRAINE

Acute

- Paracetamol and Ibruprofen found to be effective and have a safe profile. The key is to give it as **early as possible** to the onset of the headache

- Nasal triptan is shown to be effective in children rather than oral due to better absorption. It is only licensed for use in children >12y old. Warn about the side effects of bad taste (commonest) and low risks (<7%) of nausea, vomiting, warmth, lightheadedness and paraesthesia.

- Oral triptan can be offered for children >6y but lack of evidence re effect in the paediatric population.

- There is some evidence that triptan combined with paracetamol or ibruprofen has greater effect and is the best first line treatment

- Consider use of antiemetic in combination with paracetamol (limited evidence that this is more beneficial than analgesia alone). Nausea and vomiting occur in up to 90% of children with migraines and is an important symptom to address

- No evidence re benefits of opioids.

Prevention

Only consider in those whose headaches are having a significant detrimental social impact. Only to be started after discussion with Paediatric team/ Senior and follow up to be considered.

- Propranolol (best evidence though still limited studies of good quality). Contraindicated in children with asthma

- Topiramate (evidence of benefit in children above 16 years of age and only licensed in this age group)
- Pizotifen (no good quality evidence re efficacy but has been used for this purpose for twenty years and in practice many have found it helpful)

TENSION HEADACHE

Acute

- Paracetamol and ibuprofen both effective.
- Limited evidence of combined benefit of paracetamol and codeine together.

Prevention : Nil medication proven to be effective.

INFORMATION LEAFLETS:

- **Red flags**

http://www.headsmart.org.uk/admin/uploads/symptoms-card-final-v4_-printready.pdf

- **Migraines – either give website or print relevant part:**

http://www.migrainetrust.org/factsheet-parents-carers-of-young-sufferers-guide-10921

- **General headache**

- **Headache diary**

http://www.headaches.org/pdf/Headache_Diary.pdf

REFERENCES

1. Headsmart. http://headsmart.org.uk

2. NICE. Headaches (CG150). 2015 September.

3. Headache Classification Subcomittee of the International Headache Society. The international classification of headache disorders. *Cephalagia* 2004.; 24:1-160.

4. Suresh V, Steven Ryan. Drugs for preventing migraine headaches in children. The Cochrane Library. November 2012. DOI: 10.1002/14651858.CD002761