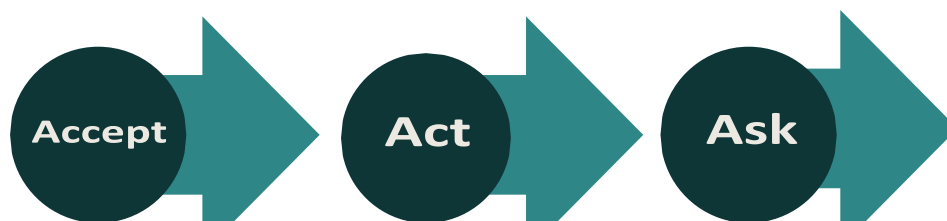


# Heads up - It's time to get to grips with Headache in schools



## Support for School nurses



## Background

- This is a Ted Wragg Academy Trust whole school initiative to reduce the burden and impact of headache in a school age population. See appendix for full programme details.
- Up to 30% of students have problematic headache two or more times a week with impact on quality of life and school performance.
- The needs of children with headache are largely unmet and poorly managed.
- Headache disorders are the second cause of disability in the world under 25 years of age according to the World Health Organisation.

World ranking for disability under 25 years old (WHO 2019)	Problem
1.	Road injury
2.	Headache disorders
3.	Self harm
4.	Depressive disorders
5.	Violence
6.	Anxiety

Table 1. World Health Organisation disability ranking 2019.

### Step 1. Exclude a secondary headache.

A secondary headache is where there is an underlying identifying cause. Secondary headache is rare in children.

- **Features of cerebellar dysfunction**
  - o Ataxia
  - o Nystagmus
  - o Intention tremor
- **Features of increased intracranial pressure**

- o Night time or early morning headache and vomiting
- New focal neurological deficits including recent squint
- Seizures, especially focal
- Personality change
- Unexplained deterioration of schoolwork

**Fig. 1. Some indications for further assessment in children with chronic headache**

See <https://bettersafethantumour.com/>

## 2. Diagnose a primary headache

A primary headache is where there is no underlying identifying cause. Diagnosis is made on pattern recognition.

- Cluster headache is very rare in young people. Attacks of severe periorbital pain ¼-2 hours with agitation and autonomic features.
- Tension type headache. (17% annual prevalence). Pain is usually dull and can be anywhere in the head. Hours to days. No other features.
- Migraine is more problematic. (11% annual prevalence). Mid-teens is most common age of onset of all migraine. Strong family history. Headache can be mixed – tension type and at other times migraine.
- Migraine with aura is contraindicated with combined oral contraception (oestrogen containing). Progesterone only contraception is OK.

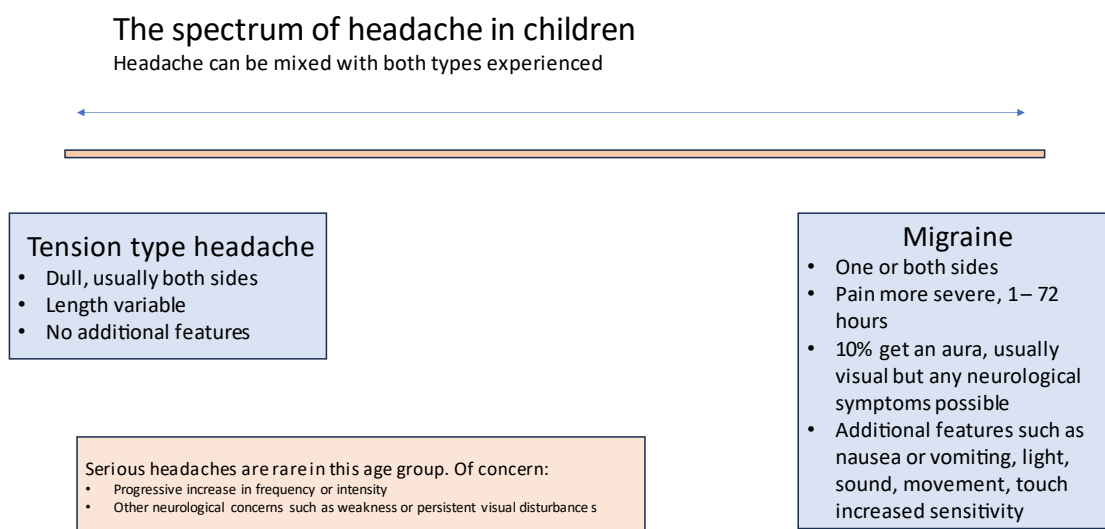


Figure2. The spectrum of problematic headache in children. Often both types will be experienced.

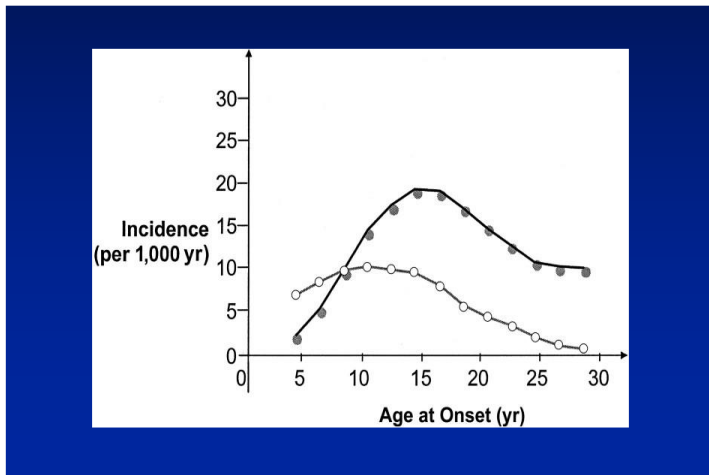


Figure 3. The onset of migraine with age. (Boys - white dots). Mid/early teens is the most common age of incidence.

#### Step 3. Exclude medication overuse headache.

- This will occur if any pain killers or anti-inflammatory drugs are taken on more than 15 days of the month or Triptans more than 10 days of the month. 0.5-1% of young people have medication overuse headache.

#### Step 4. explore psychosocial inputs.

- Migraine and tension headache sit within a complex biopsychosocial framework. Co morbid mental health is very common. Always explore mental health, family, stress factors, school. Adverse childhood events are common.

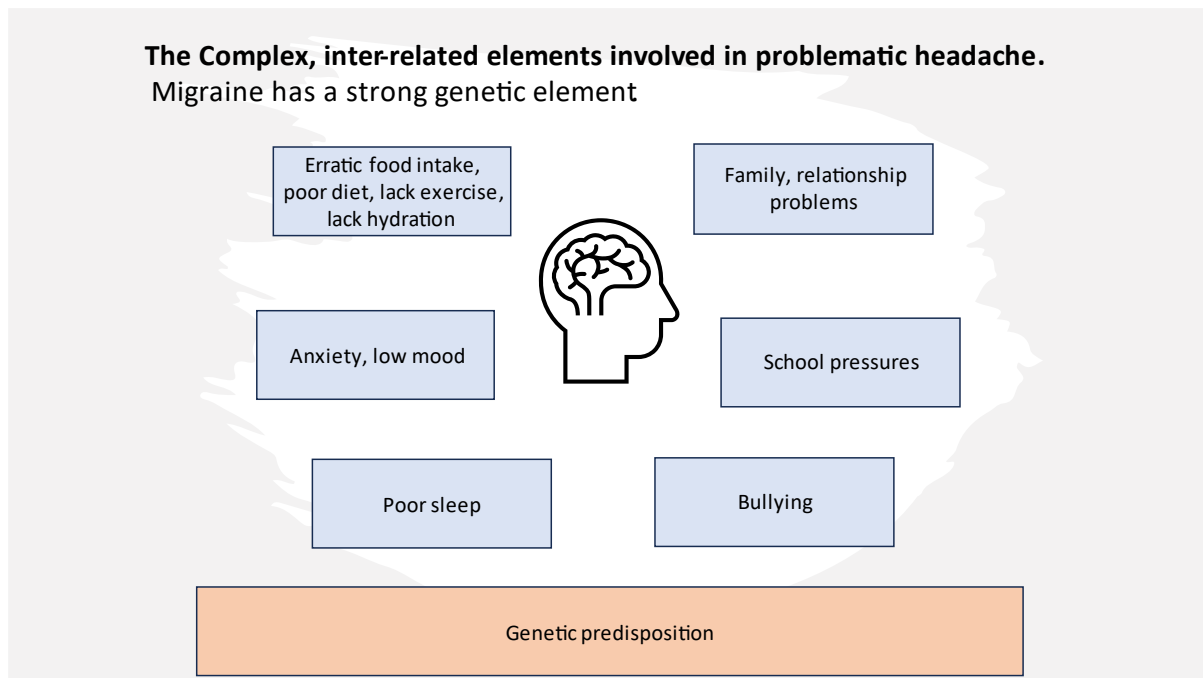


Fig 4. Complex interplay of biopsychosocial factors in primary headache. Migraine also has a strong genetic component.

#### Step 4. Offer lifestyle advise.

- Try and keep things constant. Of particular importance is regular hydration - drink water regularly during the day. Meals shouldn't be skipped, particularly breakfast.
- Regular sleep patterns are important – go to bed and get up at the same time every day.
- Try to avoid too much screen time and certainly not within an hour of bedtime as this can disturb sleep.
- Eat healthily. Avoid caffeine containing and fizzy drinks and drinks with artificial colouring.
- A diary may be helpful to make a note of any headache triggers, particularly for migraine.
- Encourage plenty of exercise.
- Explore anything the child may be worrying about.
- Consider asking school for a health care plan when headache is problematic.

### Step 5. Consider medication advise.

Many children are managed by their parents who may suffer from migraine themselves but many parents will be unaware of the diagnosis or the misconception that there is no effective treatment.

#### **Migraine acute treatment**

- The earlier the treatment is given, the more successful treatment will be. Parents and children should be discouraged from delaying treatment until headache is too severe and nausea is fully established.
- For effective pain relief, analgesics should be given in optimum doses. Paracetamol initial dose of 20 mg/kg and followed by a dose of at 10–15mg/kg every 6–8h if necessary (maximum 60mg/kg/day). Ibuprofen at 7.5-10mg/kg every 6–8h for Ibuprofen.
- In some children, nausea and vomiting are relatively early symptoms. Early treatment with antiemetic drugs such as cyclizine or metoclopramide may help and improve the response to pain killers by avoiding poor absorption due to gastric stasis. (Prescribed drugs)
- Nasal sumatriptan in a dose of 10mg is the only Triptan licensed for children in the UK. The British National Formulary recommends oral sumatriptan, but this is unlicensed due to high placebo rates in clinical trials. Doses are child 6-9, 25mg; child 10-11, 50mg; child 10-17, 50-100mg. (Prescribed drugs).

#### **Preventative medication for migraine in children (all prescription only)**

- Prevention is indicated if episodes are frequent (at least 2 per month), long (over 24 hours) or severe enough to interfere with the quality of life and education.
- There is no ideal medicine that offers consistent results with minimal or no side effects.
- Pizotifen is commonly used for its safety, but the response is unpredictable. Weight gain may be a problem.
- Propranolol can be useful in a dose of 1–3mg/kg/day.
- Other drugs include amitriptyline, topiramate and flunarizine (specialist use only).
- Preventative treatment should be used for at least 6-8 weeks in optimum dose before it can be judged as effective or unhelpful.
- If helpful, the course of preventive is usually 6-12 months, but can be repeated if needed.

### Step 6. Advise parents and school.

- Signpost to....
- Consider school health care plan.
- Consider advising referral to GP.

## Step 7

Follow child up. Very few children with migraine are followed up.

### Sources of further information.

A video to support this document <https://www.youtube.com/watch?v=5rnlwhO12mg>

The Migraine Trust is the patient's organisation with useful advice - [www.migrainetrust.org](http://www.migrainetrust.org)

The Exeter headache clinic contains guidelines and patient information sheets - <http://www.exeterheadacheclinic.org.uk>

## Appendix

See below (needs completion)

TARGET	MATERIAL	LINK
1. Information for staff.	Written info Video	
2. Addressing the personal headache needs of staff.	Self-help handbook	Self-help handbook ( <a href="https://www.exeterheadacheclinic.org.uk/migraine-handbook-for-self-management/">https://www.exeterheadacheclinic.org.uk/migraine-handbook-for-self-management/</a> ).
3. Students.	<ul style="list-style-type: none"> <li>• Whole school approach. Assembly/tutor resource.</li> <li>• PHSE lessons.</li> <li>• Written information.</li> <li>• Cartoon.</li> <li>• Video.</li> </ul>	
4. Parents.	<ul style="list-style-type: none"> <li>• Targeted information for parents of children that have been identified with a problem.</li> <li>• Letter that can be used by parents for GPs to facilitate further management.</li> <li>• Video for parents.</li> </ul>	Draft video at <a href="https://www.youtube.com/watch?v=BR72YupDmh0">https://www.youtube.com/watch?v=BR72YupDmh0</a>
5. First aiders	<ul style="list-style-type: none"> <li>• Algorithm when students present with headache.</li> <li>• Letter to parents.</li> </ul>	



6. School mental health teams	<ul style="list-style-type: none"> <li>• Written support information.</li> <li>• Letter to parents</li> </ul>	
6. School nurses.	<ul style="list-style-type: none"> <li>• Written support information</li> </ul>	
7. GPs	<ul style="list-style-type: none"> <li>• Written support for GP management.</li> </ul>	

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