



Manging Migraine in Children & Adults

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What are migraines and what triggers them?

How do migraines affect different age groups?

How to deal with migraines.

How to support children, young people and adults who suffer from migraines.

Downloadable factsheet Migraine in Children & Adolescents available on our website:

<http://www.nationalmigrainecentre.org.uk/migraine-and-headaches/migraine-and-headache-factsheets/migraine-in-children-and-adolescents/>

What is a migraine?



Classical symptoms

- Throbbing headache
- One side of the head
- Nausea and/or vomiting
- Visual changes “flashing lights”
- Sensitive to light
(movement, noise, touch and smell)
- Limits usual activities
- Recurrent

But...

- Not always throbbing
- Head, shoulders, both sides, neck, sinuses
- Not always
- Only 1/3 of sufferers have aura
- Light - often but not always
- Can be mild

Another take...

Stigma and trivialisation are common problems

- “Just a bad headache”
- Low pain threshold
- Throwing a sickie
- Headache version of “Man Flu”
- “We all get headaches: some people make a fuss”
- “Attention seeking child”

Migraine



Genetic condition

15% of the population in the UK affected.

3:1 female preponderance

Costs the UK economy £3.42 billion annually

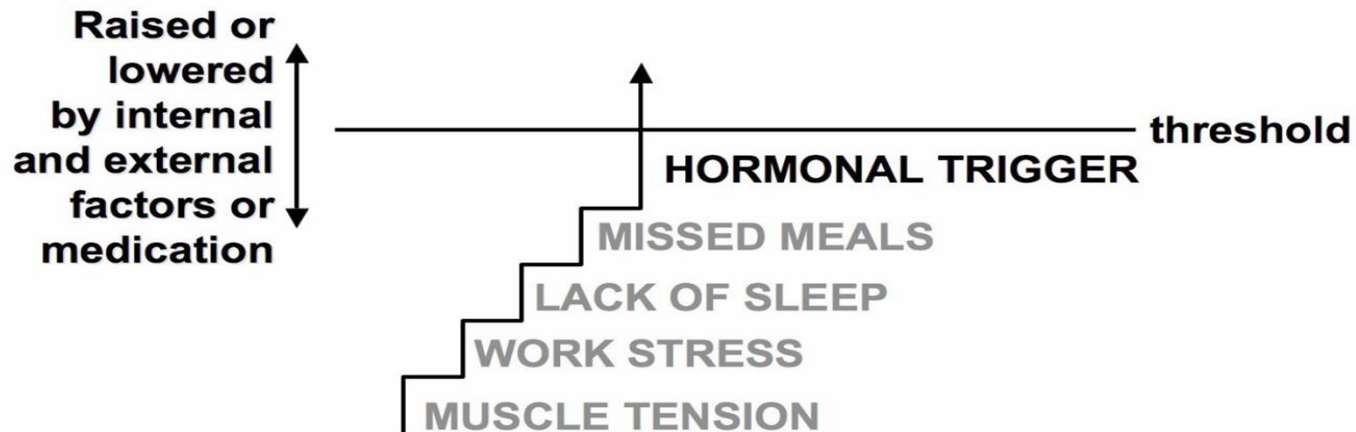
WHO Global Burden of Disease 2000-2012, rates migraine as 10th highest cause of years lost due to disability.

What causes migraine?



- Migraine sufferers have inherited a tendency to have an irritable brain even when they do not have a headache
- Whether or not they get a migraine depends on how irritated the brain becomes
- The brain of a migraineur is very sensitive to changes in its environment
- Changes which irritate the brain add together to push the brain into a migraine attack
- Changes can start to irritate the brain up to 24 hours before the pain occurs
- Triggers can be anything which has changed and they may vary

The Threshold Theory



Triggers are changes



- Low blood sugar – skipping or delaying meals
- Dehydration
- Irregular sleep pattern – beware the lie-in
- Head and neck pains
- Emotional triggers – changes in stress or excitement + or -
- Hormonal factors – puberty, periods, menopause
- Certain foods & alcohol – red wine & cheese
- Environmental
 - bright or flickering lights
 - over exertion/exercise
 - travel
 - weather changes – barometric pressure changes
 - strong smells
 - air quality – stuffy rooms, air conditioning

What's happening in the brain?



- The irritation of the brain switches on pain pathways and neurochemical changes spread out over the brain
- It depends on which area the spreading changes go into as to whether aura occurs and where the pain is felt
- Migraine is **not** caused by blood vessel constriction in the brain
- Blood vessel changes are caused by the migraine as a secondary effect

Headache in Children



- Youngest reported age of diagnosis of migraine 4 months
- 2 peak ages: 5 years and 10-12 years
- Equal in boys and girls before puberty
- More girls than boys after puberty 3:1
- Approx 10% of school children have migraine
- About half have their first attack before age 12
- In some the predominant symptom is abdominal pain – headache may be absent
- Link with travel sickness and cyclical vomiting

How is migraine diagnosed?



- Diagnosis based on the story
 - Family history, childhood history
- Physical examination shows no abnormalities
- Brain scan shows no abnormalities
 - But beware “incidentalomas” on scans
- About 95% going to GP with headache will have migraine
- Brain tumours don’t cause much headache

How children see migraine

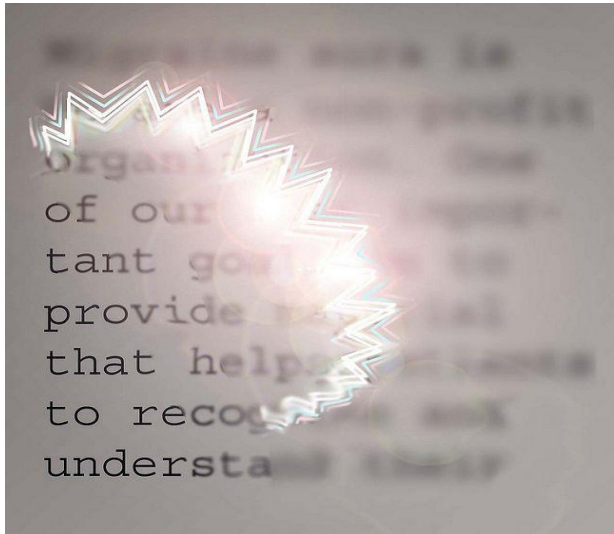
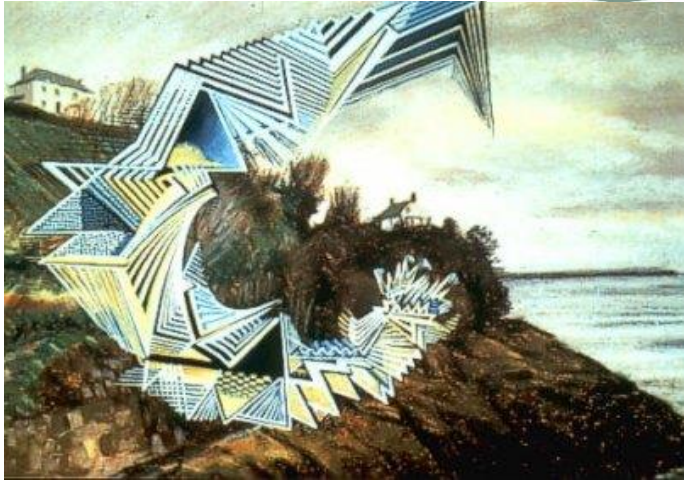






Migrain

Migraine aura





The Impact of Migraine



Poorly managed migraine attacks lead to :

- Lost days from school or reduction in performance
- Lost days from work
- Reduction or cessation of social and sporting activities
- Depression and anxiety
- Interruption of normal activities with family and friends
- Frequent use of medication which can lead to medication overuse headache
- A closing down of life – we hear “I’ve got my life back” when it’s managed well
- Loss of education, job and career

Management of Migraine in Schools - 1

Duty of schools to make reasonable adjustments to accommodate the needs of those with a disability (Equality Act 2010 & DfE May 2014)

- Type of adjustments depend on circumstances
- May change and need review
- Downloadable printable 'Advice to Schools' available on line:
<http://www.nationalmigrainecentre.org.uk/migraine-and-headaches/migraine-and-headache-factsheets/migraine-advice-to-schools/>

Management of Migraine in Schools -2



Reasonable adjustments may include:

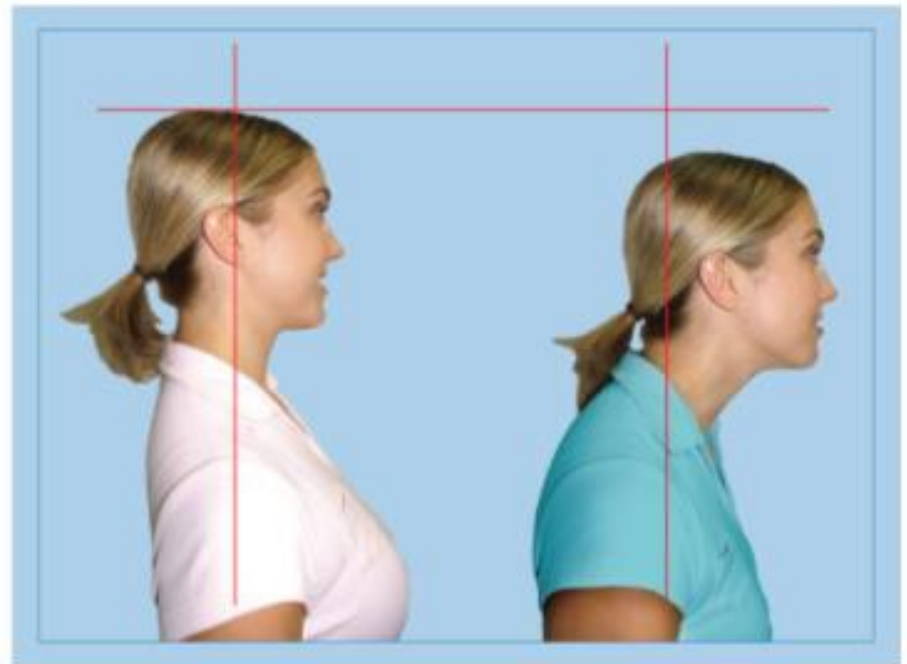
- Devise a Health Care Plan
- Allow opportunities to drink frequently
- Provide opportunities for healthy snacks
- Enable children to have a healthy snack & plenty of fluid before games and also at half-time
- Permit breaks from working on computer screens
- Giving extended timescales for completion of work
- Provide additional time in exams as a way of relieving stress
- Opportunities to self-medicate (subject to medical advice) within school or college
- Allow access to a quiet, dark room (medical room) to lie down to manage an attack

Migraine and posture

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Spot the difference!



Managing migraine attacks

- 'Lifestyle'
- Rescue treatments
- Preventatives

Four phases of a migraine



- 1st - **Prodromal phase** starts in the 24 hours before the migraine is noticed
 - part of the effect is that the stomach muscles stop working & so gastric stasis occurs
 - this is why people may feel sick or vomit
 - also reduces the absorption of pain-killers

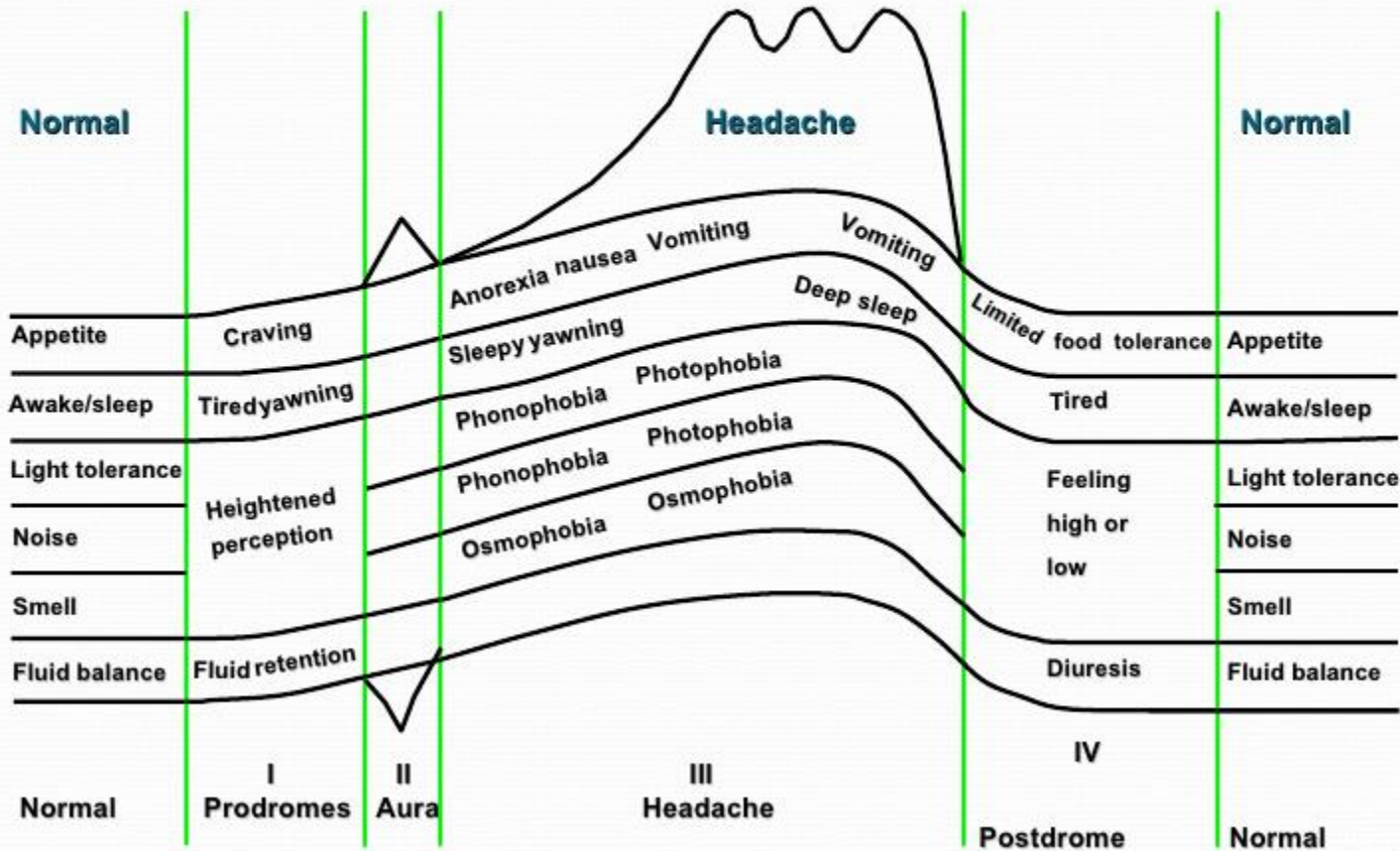
- 2nd - **Aura phase** only about 30% of migraine sufferers get this

- 3rd - **Headache phase** this may last several days

- 4th - **Postdromal phase** when the migraine is going away & some symptoms may linger on

Migraine Phases

Resolution



Blau (1992)

Managing your migraine:
think of it as a rolling snowball!

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How people can help themselves?

- Routine is key
 - Have something to eat every 3-4 hours and a bedtime snack
 - Snacks of slow release energy foods e.g. protein & fat are better than carbs
 - Eat and drink suitable snacks before and after exercise
 - Stay hydrated
 - Beware the lie-in at the weekend!
- Be a migraine detective - Keep a migraine diary
 - What has been changing? What is going to change?
- Take medication early
 - improve gastric motility to enhance absorption
- Treat with high doses and repeat in the first 24 hours if necessary
- **DON'T TAKE CODEINE or other Opioids FOR MIGRAINE**

Headache diaries



Migraine diaries are hugely helpful

- establishing patterns of headache - menstrual, weekend, etc
- efficacy of treatment – pain scores, duration of attack, frequency
- essential for referral for Botox therapy on the NHS
- Downloadable printable diaries are easily available on line

<http://www.nationalmigrainecentre.org.uk/migraine-and-headaches/migraine-and-headache-diary/>

Apps:

Many apps are available for tracking migraine

Video of attacks - very useful if Cluster headache is suspected

Alternatives to medication



Physical:

Ice packs/cold flannel

Forehead menthol sticks and patches

Physiotherapy / Pilates / yoga for neck pain and posture

Regular exercise

Acupuncture

Mindfulness and relaxation techniques

Neurostimulation devices e.g. Gammacore, Cefaly, Spring TMS

Supplements

- Magnesium 600mg
- Riboflavin (vitamin B2) 400mg
- Coenzyme Q10 300mg

Rescue treatment



Migraine affects the head and the gut!



As a migraine starts, stomach emptying slows down

This means the medication doesn't get to the right place for maximum and speedy absorption

This means the "snowball" gathers momentum and medication is less effective

Rescue treatment : The Migraine Clinic Cocktail!

- Domperidone 10mg or Metoclopramide 10mg (Buccastem for early vomiters)
- 3 x 300mg Soluble Aspirin (or NSAID)
- in a sugary, fizzy drink
e.g. Cola,
or sparkling water & sweet coffee



If initial treatment is not effective in 30 - 40 minutes, then take a triptan.

Triptans

Sumatriptan Tablets OTC, injections, nasal spray

Frovatriptan Longest half-life. (useful in menstrual migraine, unlicensed for this indication, but recommended by NICE.)

Naratriptan Fewer side effects, less recurrence

Rizatriptan Faster onset. Available as Maxalt Melt

Zolmitriptan Faster onset. Long half life.
Tablets, oral dispersible and nasal spray.

Almotriptan & Eletriptan

Rescue treatment or Preventer?



Try a Preventer if:

- number of migraine attacks per month is more than 4-6
- attacks are prolonged or not responding to rescue treatment
- migraine significantly interferes with daily routine despite rescue treatment
- rescue treatments are contra-indicated, ineffective, intolerable side effects or being used too frequently

A Preventer should be tried in a high enough dose for 3 months before being rejected

- may be a lag of 2 months after optimum dose is reached before migraine improves
- side effects may be troublesome
- start low, build slow

Treating Younger Patients

Reassurance of parents is an important aspect of treating children

Understanding the condition is vital

Rest in a dark, quiet room

Encourage to eat, drink & to sleep

Paracetamol &/or ibuprofen syrup

Domperidone 0.25-0.5mg/kg

Sumatriptan nasal spray in over 12s. 1x 10mg spray at onset of attack. - Warn patients about effects

Teenage Girls



Menarche common time for migraines to start.

COC may be used as preventative if thought to be hormone sensitive.

BUT COC contraindicated with aura.

Are they eating breakfast???

Max's story: Childhood migraine

www.nationalmigrainecentre.org.uk/success_story/maxs-story



Don't struggle with migraine – get some good advice!



Professional advice & self-referrals welcome:

National Migraine Centre

226 Walmer Road

London

W11 4ET

Phone number: 020 7251 3322

Email: info@nationalmigrainecentre.org.uk

Factsheets: <http://www.nationalmigrainecentre.org.uk/migraine-and-headaches/migraine-and-headache-factsheets/>



Any questions?