Migraine can affect children too

Headache, stomach ache, nausea, vomiting, lack of attention? It could be migraine!

A booklet for parents and carers of children and young people with migraine
Foreword

Many people think of migraine as a condition only affecting adults. In reality it affects people of all ages, including over 10% of schoolchildren. Although migraine does not cause long-term neurological damage, the condition can be extremely distressing and frightening. I regularly see parents and children in clinic who have gone through periods of feeling very isolated and misunderstood; there is no need for this to be the case.

Although there is not yet a cure for migraine, with adequate information and support there are many ways to help manage the condition and lessen its impact. As part of Migraine Action’s Young Migraineurs Project Steering Committee, I have been involved in creating this booklet - and a number of other resources – to give practical advice to help children and young people with migraine, their families, teachers and healthcare professionals. Further information on the range of resources available is included in this booklet, or please contact Migraine Action for more information.

I hope you find these resources useful and wish you and your child success on the road to managing their migraine.

Ishaq Abu-Arafeh
Consultant Paediatrician, Royal Hospital for Sick Children, Glasgow, and Stirling Royal Infirmary, Stirling.

Most children with headache will be taken to see their general practitioner before they are referred to a specialist hospital consultant. Using this booklet for parents and carers will enable you to explain all your child’s headache symptoms in the time available, which, sadly, is so limited in general practice. You will find taking a diary of your child’s headaches and exact details of when, where, how often and which symptoms your child gets, will help you get the best care for your child. This is one of the reasons this booklet has been written. Remember that you should see the doctor regularly if your child is continuing to get headaches, while they are on any treatment, or, if the headaches change in anyway.

I believe all parents want the best for their child and helping a child with headaches involves not only your care, but also help from a healthcare professional too. If you have any worries about your child’s headaches, do seek help and, if you are unhappy at any point, go back and ask further questions. Most children’s headaches will be able to be managed in primary care and only a few will need to go to hospital, if parents, schools, children and healthcare professionals all work together. Migraine Action has been fundamental in setting up this partnership and alliance of all concerned with children.

With warmest wishes to all parents and children.

Sue Lipscombe
GP in Brighton, and Headache Specialist, The Royal Sussex County Hospital.
Although a severe headache is common in adults, it is less of a feature in children who may not experience a headache at all, or it may only be moderate and mentioned when questioned. If they have some of the symptoms listed above and follow a pattern of attacks, but are well in between, it is likely to be migraine.

Common migraine misunderstandings
As migraine is extremely individual, complicated and misunderstood, the condition can often go unrecognised or be incorrectly diagnosed:

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<table>
<thead>
<tr>
<th>Increased sensitivity to light, sound and / or smells</th>
<th>Abdominal pain</th>
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<td>Aches, pains and excessive tiredness</td>
<td>Dizziness</td>
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<td>‘Aura’ - neurological symptoms such as visual disturbances, confusion, numbness or pins and needles</td>
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The difference between a headache and migraine
Many children will experience occasional headaches with around 70% of schoolchildren having a headache at least once a year. In most cases this is an isolated occurrence and the cause of the headache is clear, such as a bump on the head, or an infection, such as a common cold.

Children with migraine often describe their headache as “just sore” (rather than throbbing) and in the middle of the forehead (rather than on the side of the head, as is commonly the case in adults).

A migraine headache may also be accompanied by:

The child gets lots of stomach bugs / infections | The child is exaggerating the symptoms of a common headache
The child is trying to avoid school, or a stressful situation or event | They have an allergy
They have an eyesight problem | They are being ‘difficult’ or have behavioural issues

Over 10% of schoolchildren have migraine
When is it migraine?
With headaches or abdominal pain which:
- Occur in defined episodes
- Do not come and go during the attack
- Disrupt normal activities
- May be associated with other symptoms
- The child is completely normal between attacks...

...it is likely to be migraine and it is appropriate to seek advice from your GP.

What age do children get migraine?
Migraine can occur at any age and it has been reported in infants as young as four months (in which case the child has episodes of distress, crying, pallor, vomiting and misery lasting a few hours to a couple of days with a complete recovery between episodes). [1]. Two peaks have been noted when migraines may begin: one at age five years and the second at age 10 - 12 years. Migraine occurs equally in both sexes up to the age of 12 years, after which it becomes more common in girls. [2]. The general tendency is for boys to “grow out” of migraine, whereas girls “grow into” it and may experience their first attack around puberty.

Age and migraine facts
- Migraine is most common in those aged between 20 – 40 years but it can affect individuals at any age
- Approximately 10% of schoolchildren are estimated to have migraine
- Around half of all migraineurs will have had their first attack by the age of 12 years
A survey conducted with nearly 600 Migraine Action members in 2008 showed that over 73% experienced their first migraine attack during childhood and adolescence [3].

Duration of an attack increases with age:
- 8 years: duration 1 – 2 hours
- 15 years: duration over 2 hours [4]

A migraine attack in children may last for as little as an hour but can be as long as three days. The frequency of attacks varies between 2 - 3 attacks per year and 2 - 3 attacks per week, but the average is one per month.

Migraine equivalents and variants:
The terms migraine equivalents and variants are used to describe forms of migraine where headache is less prominent and other migraine symptoms are more prominent. There are three different types within the international headache classification. These are abdominal migraine, cyclical vomiting syndrome and benign paroxysmal vertigo.

Abdominal migraine
In at least 4% of children, [5] the predominant symptom of migraine is recurrent abdominal pain, possibly without headache, or the headache is mild. In the absence of headache the condition may easily go unrecognised.

In abdominal migraine, the abdominal pain occurs in defined episodes; it is often dull in nature and centred around the umbilicus. The pain is severe enough to interfere with activities. During attacks the child is likely to complain of an increased sensitivity to light, sound or smell, look flushed or pale, have a loss of appetite and may also experience nausea and vomiting. The child will be completely normal between attacks. Abdominal migraine may only be diagnosed after excluding other abdominal conditions. In about half of children with abdominal migraine, the symptoms evolve to the more recognised migraine pattern as the child grows.
Cyclical vomiting syndrome (CVS)

It is estimated that up to 2% of children have CVS, a condition often referred to as a cousin of migraine. [6.]. CVS often affects young children - mainly those under six years. When children grow up they often find that their CVS is traded for the more traditional form of migraine.

During attacks of CVS the child is listless, has intense nausea and vomiting, pallor, severe abdominal pain and may need carrying to the bathroom. Vomiting can be repetitive (every few minutes with no relief), may result in dehydration and may require hospital admission for intravenous (IV) therapy. Episodes of CVS resolve gradually over a period of 24 - 36 hours. The child is usually well until the next attack - which seems to occur at regular intervals of between two and six weeks.

CVS can be devastating for the child (who may miss many school days) and the family in general. Children with CVS may be prescribed anti-sickness medication, medication used to treat traditional migraines and IV fluids.

Children may have several episodes over a long period of time before a diagnosis of CVS is made. It is often the parents or carers that begin to recognise that their child is unlikely to be having a stomach bug or other illness so regularly.

Minor illnesses, psychological factors (such as stress or excitement), dietary factors and not getting enough sleep can trigger attacks of CVS.

Contact details for the Cyclical Vomiting Syndrome Association, who can provide further information, can be found in the ‘Useful contacts’ section of this booklet.

Benign paroxysmal vertigo of childhood (BPV)

Vertigo is defined as an unreal sensation of movement of the person or the room around him / her. BPV is characterised by recurrent and sudden episodes of vertigo (dizziness). This can be very frightening for a child and may be so severe that they fall over. They may also vomit. This migraine equivalent usually affects preschool children and often spontaneously improves by school age but it is frequently replaced by the more usual migraine symptoms. [7.].

Recurrent limb pain

Although not officially classified, recurrent limb pain, sometimes referred to as ‘growing pains’, may also be a migraine equivalent when it cannot be attributed to any other cause. [8.].
Other types of headache

**Tension type headache**
Children as well as adults can get tension headache and the term really refers to the symptoms rather than the cause. In tension type headache there are no other associated symptoms, such as sensitivity to light, sound or smell, nausea or vomiting. It is often described as tightness or pressure around the head and the pain is mild to moderate. It can vary in length from just a few minutes to a period of days. Painkillers can provide temporary relief but it is better to treat the cause rather than the symptoms of this type of headache. Relaxation techniques may also prove helpful. In some children the cause may not be obvious and expert help may be needed to uncover the underlying tension.

**Substance induced headache**
Headaches due to analgesia overuse in children occur on almost every day as a result of frequent use of painkillers over a period of a few weeks. Taking regular painkillers can become the problem for frequent headaches rather than the solution. It is important to follow the instructions given with medications or those given by your GP or pharmacist and not to exceed the recommended dose. Medication overuse headache is risked if headaches are being treated through the use of painkillers on two or more days a week, and can mean that headaches actually get worse rather than better. In this instance it can become hard to distinguish the migraine attack from the medication induced headache and you should seek advice from your GP. It may be necessary to withdraw analgesia completely.

An intake of large amounts of other substances such as caffeine (cola, coffee, tea etc.) can cause headaches in a similar way as analgesia and therefore daily ingestion of large amounts of caffeine should be avoided. It is not unusual to find children as young as ten using cannabis or other drugs that may induce headache. With progressively more alcohol abuse in very young children, this is also an area to be considered.

**Chronic daily headache**
Although not common, children can also get chronic daily headache. Chronic daily headache is believed to affect around 1% of the population of children and is when the sufferer has a headache on more than half of the month, i.e. 15 days. They may also have exacerbations of this headache several times a month which can have features of migraine, such as nausea or sensitivity to light. This type of headache can be caused by a neck or head injury and medication overuse.

Too much caffeine can trigger a migraine
Cluster headache

Children can get cluster headaches, although they are rare and most commonly occur in middle aged men. The pain is very intense, often centred around one eye, and is described as searing, excruciating, knife-like or as boring into the eye. Sufferers are unable to sit still; the eyelid will often droop and the eye becomes red and watery. The nostril on the affected side may also run. Attacks often wake the sufferer from sleep and although attacks only last a short time (usually between 15 minutes and one hour) the attacks occur in ‘clusters’ ranging from once every other day to up to eight times a day. Clusters usually last for 6 - 8 weeks, with periods of remission lasting months or even years (although some have no periods of remission).

Headaches and more serious conditions

Parents and carers – and sometimes children – can worry that a bad headache is the sign of something more sinister going on, for example a brain tumour, haemorrhage or meningitis, but it is extremely rare for headaches alone to be an indication of a life threatening illness. A serious neurological disorder may be seen in 1 in 1000 children when headache is the only symptom. [9].

‘Secondary headaches’ are referred to as such as the pain is actually caused by a more serious underlying condition (whereas migraine is a primary headache, as it is itself the condition). Some signs that may suggest a headache is secondary (and therefore needs further advice from your GP) include:

- Sudden headaches which are severe in nature and do not have the other signs and symptoms of migraine - especially if your child has experienced a blow to the head
- Headaches which are constant - they do not go in between attacks, as is the pattern with migraine
- A change in the symptoms or pattern of attacks has occurred
- It occurs with fever, neurological problems or fits
- Progression of symptoms, getting worse all the time

If you have any concerns visit your GP.
The five stages of a migraine attack
Not all migraine attacks follow the same pattern but there are generally considered to be five phases of a migraine attack:

The prodrome (warning) stage
This is the warning stage that an attack may be imminent. Children and young people may get an unusual hunger or thirst, have a loss of or excess energy, they may yawn, have mood swings or feel run down. Signs can be present up to 72 hours before the main stage of the attack. Like attack triggers, prodrome signs are numerous and very individual. Quite often families and friends notice these changes. If action / medication is taken at this stage it can be possible for a full-blown migraine attack to be prevented, or its severity / duration greatly reduced. If it is possible to recognise the signs it can be extremely helpful in managing attacks.

The aura
Around 20% of children with migraine will sometimes experience aura (neurological) symptoms. These usually take the form of visual disturbances, such as blurred vision, flashing lights, blind spots or zigzag patterns. Less common symptoms include pins and needles, weakness of a limb, confusion or speech difficulties. Younger children may not have the vocabulary to describe what is happening to them and say things like, “I can’t see”; “It’s like fireworks”; “The light is hurting my eyes”. The aura phase of the attack – which can be very frightening for the child – can last up to 30 minutes and usually precedes the headache / abdominal pain by 20 – 30 minutes.

The main attack
This is the stage when the headache or abdominal pain will be present, along with other symptoms. During an attack a child with migraine will become withdrawn and may want to be left alone. He / she may feel nauseous or will vomit; a study showed that 90% of children with migraine will feel nauseous and 60% will vomit. [5]. Many children lose their appetite; they may also look pale or flushed. They may complain of an intolerance to normal light, sound and smell. Migraine is a disabling condition which will prevent the child from continuing with normal daily activities. A child who complains of a headache and then runs to play, watches television or spends time on a computer is very unlikely to have migraine!

Resolution / postdrome stage
The pain gradually eases or may disappear after sleep; if a child vomits this also may ease the attack.

Recovery
After the main symptoms have gone, children can often experience a ‘washed out’ feeling. It can take up to around 48 hours for a child to feel completely back to normal again. For others it can be surprising how quickly they can recover and be back to ‘normal’. They will then usually be completely normal and well – until the next attack.
Diagnosing migraine

It is important to have migraine confirmed by a GP if your child is experiencing regular headaches and / or other symptoms. Having a confirmed diagnosis can be a relief for both parents / carers and children; it enables you to gain the appropriate information and advice to move forward, take steps to lessen its impact and gain more control. However, migraine in adults is often under or incorrectly diagnosed. For children who cannot articulate their symptoms this may be an even greater problem. Incorrect diagnoses can include: sinus problems, eyesight or dental issues, behavioural problems and / or allergies.

As children, especially younger children, can find it hard to describe what they are feeling, asking them to draw how they feel can be useful.

You can also draw clues from watching how the child looks and acts: are they pale, do they often rub or hold their head, do they stop eating, do they carry on with activities or choose to lie down or be alone, do they need darkness, how quickly do they recover? All of these points can be helpful in establishing a diagnosis.

The use of a migraine diary may also be vital in establishing the pattern of attacks and helping your GP to identify migraine and a suitable management plan going forward. You and your child can record important factors, such as when an attack occurs, the signs and symptoms, severity, length and lifestyle factors which may have contributed to the attack. See ‘Migraine triggers’ section opposite for more information.

PedMIDAS

When you visit your GP they may use something called the PedMIDAS scale: the Paediatric Migraine Disability Assessment Scale. [10]. This involves asking your child a series of questions that have been especially designed to recognise migraine in children. The answers are used to work out the number of days of disability caused by migraine in a three month period. They are then given one of four different PedMIDAS scores and a doctor can easily use and interpret these grades.
Why do children get migraine?

It is believed that all children and adults have the capacity to suffer from migraine, but that in 10 - 15% of the population there is an increased susceptibility - a lower threshold at which an attack is triggered.

It is believed that the release of serotonin (a natural chemical in the body) from its storage sites into the bloodstream causes changes to the neurotransmitters (chemical messengers) and blood vessels in the brain, causing a migraine. However, exactly what prompts these changes is still a subject for research and debate.

Hereditary factors

There is a genetic predisposition to migraine, so parents or grandparents may also have a history of migraine. Researchers know that there are a number of genes linked to migraine and work continues in this area. It is estimated that if you have one parent who is affected by migraine you have around a 30% chance of being a migraineur; if both parents are affected by migraine you have around a 60% chance of suffering attacks. This risk increases if your parent(s) suffered severe migraines at an early age. However, in many cases no other family members are known to have migraine, and there are lots of internal and external factors which can cause someone to suffer a migraine attack. These are often referred to as migraine ‘triggers’.

Migraine triggers

Often it can be possible to recognise certain circumstances in which an individual may be more likely to have a migraine attack – trigger factors. Some are fairly common, sometimes they can be more unusual. Often what may trigger a migraine in one person may have no effect on another. For many people there is not just one trigger, but a combination of factors which individually can be tolerated, but when several occur together a threshold is passed and an attack occurs.

If triggers can be identified it may be possible to make changes to the child’s lifestyle and / or diet to help reduce the number of attacks, and so reduce the need for medication. Whilst we advise people of all ages to keep a migraine diary to help recognise any possible triggers for their migraine, we are also aware that for many a pattern cannot be established and that this ‘search’ can be a bit of a red herring. However, by helping to ensure your child follows a healthy lifestyle many of the common triggers can be addressed.

Migraine can run in families
**Common triggers**

- **Dehydration** – it can be easy for a child to go for long periods of time without drinking fluids and this can be a key migraine trigger.

- **Not eating regularly** – for example, skipping breakfast or having a long overnight fast (if a child eats at 6pm at night and then not until 8am the next day they risk having a low blood sugar level).

- **Trigger foods** – at least 15% of children with migraine can identify a food trigger for headaches. (It is likely the food or drink was consumed at least 8 - 24 hours prior to the attack itself). Drinks containing caffeine (cola, for example), cheese, chocolate and citrus fruits, are commonly reported. Culprits can also be aspartame (found in many soft drinks, desserts and confectionary) and monosodium glutamate (found in a huge variety of manufactured foods).

- **Stress and anxiety** – stress is a key migraine trigger. Stresses for children may include pressure of school or tests / exams, problems at home or bullying.

- **Changes in sleep patterns** – children are more prone to migraines if they are not getting enough sleep or have irregular sleep patterns (late night sleep-overs or long lie-ins).
• **Excitement** – looking forward to a special trip or event or over stimulation (such as a frightening film) can contribute to an attack

• **Television, computers and video games** – spending too much time looking at screens or the flashing and flickering that may be viewed

• **Exercise** – although exercise is important, a migraine attack can be triggered if a child does not have enough food to provide the extra energy required, or if exercise is not balanced with enough rest. Sudden or unusual exercise could also trigger an attack

• **Environmental aspects** – a stuffy atmosphere, bright, flashing or flickering lights (bright sunlight, reflected glare from water, artificial lighting, such as lighting at school discos) and film / television techniques which cut quickly from frame to frame, even plain white walls and changes in the weather can contribute to an attack

• **Dental** (e.g. tooth grinding, misalignment of bite) or **eyesight** problems – these can be trigger factors and it is important that these are eliminated by a visit to the dentist or optician

• **Puberty** – in girls, migraine may coincide with puberty and the start of menstruation – hormonal fluctuations are commonly linked with migraine

• **Muscle tensions** – muscle pains, such as in the back, neck and shoulders can be a contributing factor. This can sometimes be caused by regularly carrying heavy school bags on the shoulders or when doing a paper round. This can be avoided by using a wheelie bag when possible, or a well fitting rucksack, and ensuring that bags are not overloaded unnecessarily

• **Ill health** – migraine attacks may be more likely when a child is feeling under the weather, for example they have a cold or a stomach bug
Keeping a migraine diary

A migraine diary can be helpful when trying to discover factors which may be triggering your child’s migraine attacks. As well as recording the attacks you can also list foods, events, stresses and sleep patterns.

You will need to keep records like this for several migraine attacks (or several months) before a pattern might begin to appear. It may also take some analysis because, as previously mentioned, it may be a number of factors which, only when combined, trigger an attack. For example:

- Eating a chocolate bar on a normal day = no attack
- Eating a chocolate bar, a stressful day at school, drinking little water, three hours on the computer = a migraine attack

Triggers can have an effect up to 48 hours prior to the attack, so the chocolate bar mentioned above may have been consumed the day prior to the attack itself.

Encourage your child to participate in the detective work to identify potential triggers.

If you suspect you have identified any triggers, avoid or eliminate them one at a time for a period of at least one month. If no difference is noted, reintroduce them and try eliminating another suspect. (It may be preferable to do this in consultation with your GP / healthcare team).

Migraine Action’s diary is available as part of our full Parents Information Pack. If you have not yet received it or require further copies, please contact us.

There are also plan of action sheets available; these enable you and your child to record the key actions you’ve agreed they need to do to help manage their migraine.
Often children with migraine do not require medication. During an attack itself rest and sleep can be enough to end the attack; vomiting also often eases or relieves the attack. Addressing some lifestyle factors, like making sure children drink enough water and eat regularly, may also make a huge difference to the frequency and severity of attacks. For detailed advice please see the ‘Managing your migraine’ section in this booklet. However, for many, further support and medication is required.

It should be remembered that migraine is a very individual condition; children are not all the same and headaches are not all the same. Treatment will need to be based on many factors and will need to be reviewed as your child grows and develops. For example, some medication is weight based, so as your child grows different doses of medication may be required. It may also be necessary to try a number of different options prior to finding the most suitable management programme for your child. Even if your child is prescribed medication, lifestyle factors will also play a key part in helping to manage the condition.

Timing is of key importance when taking medication for migraine. The earlier medication is taken, the more effective it is likely to be in treating the attack.

A good treatment is one that is effective, takes the pain away quickly, causes few (or no) side effects and prevents the headache or other symptoms returning in the short term (24 – 48 hours).

**Over the counter treatments**

Over the counter analgesics, such as paracetamol and ibuprofen, often bring sufficient relief during an attack. Both of these may help if they are taken early enough and at an adequate dose (see the information sheet with the medication or ask your pharmacist or GP for detailed advice). These may also be taken with or without other medication to stop sickness if this is a symptom. Ibuprofen may work better than paracetamol and some may find that taking them both together may be a preferred option. If your child has aura, taking something like ibuprofen as soon as the aura starts may help ‘attack the attack’. It is often a case of trying the options to see what works best for your child.
The exact dose that can be taken over a 24 hour period will depend on your child’s age and weight, but as a guide:

**Ibuprofen**
- In 1 – 2 year olds: 50mg, 3 or 4 times a day
- In 3 – 7 year olds: 100mg, 3 or 4 times a day
- In 8 – 12 year olds: 200mg, 3 or 4 times a day

**Paracetamol**
- Under 3 months: using the formula of 10mg per kg body weight
- 3 months to 1 year: 60 to 120mg every 4 – 6 hours
- 1 to 5 years: 120 – 250 mg every 4 – 6 hours
- 6 – 12 years: 250 to 500 mg every 4 – 6 hours

Your GP or pharmacist may advise higher doses if the above doses are ineffective. Paracetamol in liquid form is available but it is important to check the dosage of the liquid used. For children, especially younger children who find it hard to swallow tablets, this and other liquid painkillers such as Calpol can be effective.

Paracetamol is a safe drug when used in normal doses but it is important not to take too much as it can cause severe liver damage in excess. Its main problem is related to toxicity if large amounts are taken accidentally and therefore children’s intake of paracetamol should be monitored by adults. Ibuprofen is generally well tolerated but can cause stomach irritation in some children.

Aspirin based products should not be given to children under 16 years old.

**Prescribed medications**
There are two main forms of medication that can be prescribed for children with migraine – acute medications which are taken during an attack to ease the symptoms and preventative (prophylactic) medications which will aim to reduce the frequency and /or severity of the attacks. Some children may only be prescribed acute treatments, others may be prescribed both acute treatments and preventative treatments (preventative medication will not completely stop the attacks so acute medication is still required).

**Acute treatments**
Acute treatments aim to relieve the pain and symptoms of a migraine attack; if medication is taken early enough, it can reduce the length or severity of a migraine. In some children, by taking early treatment, the migraine can be resolved in an hour. If over the counter medication does not give sufficient relief your child’s GP or healthcare team may prescribe an acute treatment, known as triptans.
Triptans
A group of drugs called triptans have been specially developed for the treatment of migraines (primarily in adults).

There are currently seven different triptans in the UK.

Triptans come in various forms: tablets, nasal sprays, melt in the mouth wafers and injections. Nasal sprays are particularly useful for those who feel sick or vomit during their migraine attacks. There is one triptan available over the counter from pharmacies for adults (called Imigran Recovery) but there are currently no over the counter triptans available for the use in children or adolescents.

Triptans licensed for children:
There is only one triptan licensed for use in adolescents from the age of 12 years - sumatriptan. Imigran is the product brand name for sumatriptan (sumatriptan is the active ingredient). Imigran nasal spray (10 mg for the adolescent spray, in comparison with 20 mg for adults) is administered into one nostril to relieve a migraine attack just as the migraine pain starts. The medicine starts to work within about 15 minutes.

Sumatriptan nasal spray
- Children 12 - 17 years: 10 mg as a single dose, repeated once after at least 2 hours if migraine recurs; max. 20 mg in 24 hours. The appropriate dose for your child will be advised by your healthcare team.

In some instances, your child’s neurologist, migraine specialist, paediatrician or GP may also consider the use of ‘off licence’ doses of sumatriptan or other triptans.

Don’t be afraid to ask your GP for help.
Off licence medications

In a small number of children unlicensed drugs may offer a good option for treatment if other drugs have failed. The main reason for the drug to be unlicensed in children is the lack of data on its use in this age group and the difficulties in recruiting child volunteers in clinical studies. Specialist doctors may recommend an unlicensed drug on the basis of its known safety and effectiveness in adults. The family will be informed of the licence status of the drug and they should all agree to its use before the prescription is made.

Reviewing how acute medication is working

If your child is prescribed acute medication your doctor may wish to start your child on a lower dose and review its effect. You may find that the treatment is not suitable (too many side effects, little impact etc.) and it is therefore important to keep a record of how your child’s attacks change once medication begins. If the initial dose is not successful, it may be appropriate to increase the dose before it is decided that a change of medication is needed. Continuing to use a migraine diary to chart this may prove helpful.

Other medications for an attack

There may be times when acute treatments do not bring sufficient relief during an attack. Your child’s doctor may therefore prescribe / recommend different treatments to use on these occasions. They may be:

- Anti-nausea (antiemetic) medication – to stop sickness
  - Domperidone - this is sold as Motilium tablets and can be bought at a pharmacy for those who are 16 years and over
  - Metaclopramide - this is given on prescription only
  - Buccastem M - this is available on prescription but can be bought at a pharmacy for those who are 18 years and over
  - Other medicine at your chemist - well known brands such as Gaviscon, Rennie etc. can work when taken with painkillers. These can be bought at a pharmacy for those who are 16 years and over
- Anti-inflammatories - such as ibuprofen
- Pain relief - such as paracetamol

If there is often a need to use this type of medication, it is likely that the acute treatments are not working sufficiently and need reviewing.
Preventative treatments

If your child has regular and/or severe migraines that are having a big impact on their quality of life, the use of preventative (prophylactic) medication is something that you may wish to talk to your doctor about, or that they may suggest.

Preventative medications are taken daily to help reduce the frequency and severity of attacks, rather than treating an attack itself.

Before deciding on a preventative treatment your doctor will assess the effect migraine is having on your child, the number of days your child is unwell (and to what extent), the impact acute medication has had, side effects, and any concerns about medication overuse if acute treatments are being used regularly. As preventative medications need to be taken daily this does have an impact on lifestyle and needs commitment from both the child and parents/carers.

Like triptans, little research has been conducted into the use of preventative medications in children. Therefore your doctor will use his/her judgment and experience when considering this as a treatment option. The same medications used in adults with migraine are used in children but in an appropriate dose. Usually this form of medicine will start at a low dose and be built up until the best and most appropriate dose for the child is reached. Preventative medications need to be taken for an appropriate period of time before reviewing their effect – usually around three months. During this time the dose may have to be adjusted either up or down.

Migraine preventatives have actually been developed by researchers as a treatment for other conditions, but during trials they were found to also have significant benefits for migraineurs.

Preventative options include:

- Anti-convulsants, such as divalproex sodium or sodium valproate (Epilim) or topiramate (Topamax)
- Anti-depressants, such as amitriptyline
- Anti-histamines, such as cyproheptadine
- Anti-inflammatory drugs, such as diclofenac
- Anti-serotonin drugs, such as pizotifin
- Betablockers, such as propranolol

Preventatives may reduce the number of attacks
More about preventative medications

Sanomigran is the brand name for pizotifen and is a commonly prescribed medication for children with migraine. It is safe and the only side effects noted in some children are gaining weight (this should be avoided in overweight children) and drowsiness at the start of treatment. Therefore it is given as a single dose per day in the evening.

Other drugs, such as propranolol, topiramate and amitriptyline, are given under specialist supervision. These are associated with some side effects and should be discussed fully with children and parents / carers.

If your child is taking preventative medication you should continue to record any attacks so that these can be discussed with your doctor during reviews of their treatment. Careful monitoring is essential when using preventative medications.

Preventative medications are not taken permanently, they are usually used for between three and 12 months. A longer period may be required, especially if it has taken some time to find a suitable medication.

The improvement in attack frequency and severity carries on once the child stops taking the medication. Your doctor will let you know when it is recommended that preventative treatments should come to an end, or you can discuss this with him / her. Preventative treatments should not simply be stopped - it is a gradual process of reducing the dose to ensure that there are no adverse effects.

Parents and carers can be concerned about their child taking medication. Your doctor recommends the most appropriate treatment at the time. However, if you are unhappy or have concerns, talk to your GP (or if you feel unable to do this, call Migraine Action for advice). It is extremely frustrating for the doctor if, on a return visit, your child hasn’t tried the medication and nothing has changed.

Along with treatment options, lifestyle changes and complementary treatments can also be tried (it is advisable to discuss these with your GP).
**Gastric stasis**
During a migraine attack the digestive system can slow down, a condition known as gastric stasis. This means that medication taken later in an attack may not be quickly absorbed into the bloodstream and thus has a delayed effect. Therefore it is important that any medication is taken as early as possible. Suppositories can be a helpful format to give painkillers, as along with the issue of gastric stasis, many children have nausea and vomiting.

**Side effects**
When taking medication there can sometimes be an effect on other areas of the body or functions other than those that the medication is designed to treat or prevent - side effects. When your doctor prescribes either acute treatments or preventative options for your child, he / she should discuss any possible side effects with you. It is also compulsory for any possible side effects to be listed in the information booklet accompanying medication, even if they are highly unlikely to occur. Reading some of these lists can be enough to put anyone off! Your doctor will have considered the risks involved before prescribing any medications. However, if you do notice any side effects it is important to keep a record of these and discuss these on your next visit. Some side effects may be present when treatment begins but gradually reduce as the body accepts the medication - it is therefore important to give medication time to ‘settle in’. Other side effects may be more unexpected or may be more severe and it is inappropriate to continue use. Again, record these and consult your doctor as soon as possible. A simple change to the dose may be all that is required.

Common side effects include:
Losing / gaining weight, loss of appetite, nausea, mood changes, feeling drowsy, problems sleeping and a tingling feeling in the skin.

If you are worried about any side effects, particularly changes in mood or behaviour – discuss this with your doctor.
As part of your migraine ‘journey’ you may come in to contact with a number of healthcare professionals, from the school nurse, to your GP or pharmacist and in some cases paediatric neurologists or other migraine specialists. (For details of children’s migraine clinics within hospitals, please visit www.migraine.org.uk/youngmigraineurs or contact the office).

**Pharmacists**

Pharmacies are one-stop health shops. Their services range from dispensing medicines and offering advice on minor ailments to running clinics and helping people manage conditions. Pharmacists can give advice on medicines and their use, and can be helpful to talk to if you are unsure whether you need to see your GP, you feel uncomfortable doing so, or it is out of consultation hours. Pharmacists can also give you information about other local health services.

**Visiting your GP**

If you suspect that your child may be suffering from migraine this diagnosis should be confirmed by your GP. On an ongoing basis, especially if the frequency or severity of your child’s headaches has changed, or there has been a change in symptoms, we would recommend another visit to the GP.

There is no definitive test for migraine; it is likely that your GP will rely on the information you and your child give about the pattern of attacks and symptoms during consultations.

Questions you should consider beforehand include:

- When the symptoms started?
- How often the attacks occur?
- How long do they last?
- What are the symptoms: headache, nausea, stomach ache?
- How severe is any pain?
- Which part of the head, if any, is affected?
- How does your child react – do they need to sleep, do they avoid bright lights, do they rub their head?
- Was there anything specific that happened at the onset, e.g. a head injury, break-up of a marriage, problems at school?
- Is your child completely well between attacks?
- Does he/she have any other illnesses?
- The effect the attacks are having on your child’s day to day activities – are they missing regular time off school, are they avoiding or missing leisure activities?
- Does anyone in the family suffer from migraines or headaches?
- Any prodrome symptoms you’ve recognised?
- Have you noticed any possible triggers?
- Have you noticed any pattern?
- What medication, if any, has been tried before? If so how long, at what dose and what effect did this have?
- If your child has drawn a picture of what their attacks are like, this can also be helpful to take along

Take a completed migraine diary along with you if possible. This is far more useful in identifying any patterns than a simple list of attacks (although this is better than simply trying to recall things from memory).

Once all the information is given and a diagnosis of migraine is confirmed, your GP will use this to judge the most suitable action for your child. Your GP may offer advice on the best use of over the counter options, or if necessary prescribe an acute and/or preventative option.

If you are going on a second or subsequent visit it is again important to take along a diary recording how things have progressed. (Even if the headaches have got better, your GP will be pleased and interested to hear this).

Some challenges faced by GPs:
- Time constraints of appointments – if you know that you have a lot of information to go through (such as a migraine diary and history) you may want to ask if it is possible to book a double appointment
- GPs have to keep to budgets and guidelines when prescribing medications
- Inadequate information or poor communication with parents and carers – try to help your GP to help you by giving them the information needed (such as the migraine diary) during a consultation. If you have any concerns or don’t understand or agree with something they have said, discuss this with them – don’t go home and worry or not take up their advice and therefore not move forward. Parents/carers sometimes find taking information, such as this booklet, in to consultations can be helpful

GPs are expected to know everything about all health conditions and this is unrealistic. However, your GP should have a general understanding of migraine and the management options. GPs are often more than happy to manage migraine, but, if it is proving difficult, they may feel it necessary to refer your child to someone with a more specialised knowledge, such as a paediatrician, a neurologist or a migraine specialist.

Be prepared for your GP consultation
Although clinical evidence for the use of complementary therapies can be limited, many children, like adults, find therapies can bring relief or help to manage their migraine. It is important that a qualified practitioner is used for each therapy and ideally they should have specific experience in treating migraine in children. The governing body / organisation for each therapy can be contacted for advice (or contact Migraine Action for more information).

There are many options including:

**Oriental medicine:** includes acupuncture, acupressure, tuina massage, cupping, moxibustion, food energetics, and various tapping and rolling techniques. A combination of these may be used by an oriental medicine practitioner depending on their training and expertise in any of these different fields within oriental medicine.

**Acupuncture:** can be used on children of all ages, from birth onwards, providing the practitioner has had some extra training and experience with children. The careful insertion of a few needles in appropriate places on the hands, arms, legs, neck and on the head itself can help to release tension that can be one of the underlying causes of migraines and other types of pain. Acupuncture consists of small fine sterile needles being inserted into the skin at certain points along the body’s energy meridians (acupressure, another option, is a method of applying pressure at various points along the energy meridians). With younger children, acupuncture needles are not left in for any length of time and are taken out after a few seconds. There are also foods that may help because they are energetically balancing for the child. For instance, if they are hot, practitioners can suggest cooling foods and vice versa. They may also consider any aggravating foods, which may be identified as being inappropriate for the child at the time. (Sometimes a break from an unsuitable food can give the body the chance to readjust and to cope better when the food is reintroduced). With the combination of dietary adjustment plus acupuncture, practitioners believe a child’s digestion is better able to cope and therefore the reaction will be less severe. Many practitioners believe that although the approach is often the same as with adults, it may be possible to make a difference with children more quickly, since they have had less time with the ailment and it is easier to shift if it is of recent origin. Practitioners would work alongside any medication taken, but may aim in the longer term to help reduce its need. Treatments would be expected to last from half an hour to an hour and are usually recommended at weekly intervals to start with. Then after a few sessions, if improvement is noticed, the appointments can be made at longer intervals. For further information visit [www.acupuncture.org.uk](http://www.acupuncture.org.uk)
The Bowen Technique: safe for all ages – from newborns to the elderly – the Bowen Technique is used for treating a variety of ailments, including migraine and headache. Bowen therapists treat people holistically, making gentle precise rolling movements over the muscles and other soft tissues at key structural points, with frequent pauses between moves giving the body time to benefit from each set. There is no vigorous ‘pulling about’; rolling moves are made on the skin, muscles and tendons and elicit a powerful effect. Treatment is usually performed through light clothing. Depending on the age of the child, a therapist may conduct the treatment with the child on a couch or on a parent’s lap. It is important to visit a certified Bowen practitioner who will adhere to a stringent code of conduct, be insured and be required to undertake 16 hours of Continuous Professional Development (CPD) training every year. For further information visit www.bowen-technique.co.uk

Osteopathy: people with migraine, including children, can be helped by osteopathy. The Foundation for Paediatric Osteopathy states that amongst the predisposing causes of migraine is mechanical dysfunction of the spine which includes abnormal tension in the muscles, joint disturbances and altered blood flow; osteopaths detect these faults by gentle palpation and mobility testing. The treatment of children is gentle - a typical case may require several sessions of careful manual balancing with occasional refresher treatment during times of transition, as, for example, at the beginning of a new school year or during a growth spurt. A list of practitioners with a post graduate qualification in paediatric care can be found on the Foundation for Paediatric Osteopathy website at www.fpo.org.uk. The foundation itself operates clinics in Manchester and London where treatment is available on a voluntary donation basis.

Biofeedback: this technique teaches people of all ages to control certain body functions that they do not normally think of controlling, for example heart rate and muscle tension. This has helped some migraineurs, including children and is helpful in that the technique, once learnt, can be practised anywhere.

Relaxation: anything to help lower stress levels and aid relaxation can be beneficial, from a few minutes of deep breathing each day to a yoga class. For example, ‘The Child’s Pose’: sit on your heels with your big toes touching and knees hip width apart. Fold forward, cross your arms, rest your head on a bolster and relax.

Homeopathy: a principle of treating like with like. Particular substances have been shown to produce certain symptoms in healthy individuals; a heavily diluted form is given to cure a sick person who has these symptoms. Because of this dilution, homeopathic remedies are safe for children (unlike herbal medicines for migraine, including Chinese herbal medicine, feverfew and butterbur, which are not recommended in children due to lack of safety data). Remedies are often supplied in very small tablets to be dissolved on the tongue. Homeopathic remedies do not interfere with orthodox medicines.

It is a good idea to check with your GP before beginning any complementary therapy treatment.

Simple relaxation techniques can be helpful
The ‘ideal’, of course, is to help avoid migraine attacks all together. Whilst this may not be possible, most are able to go some way to reducing the frequency or length / severity of attacks if they do occur. By taking steps now to help manage the condition in childhood, it may also be possible to reduce its impact in later life – as triggers, treatments and lifestyle factors will have already been addressed.

As a starting principle you should ensure that your child follows a healthy lifestyle and many of the lifestyle tips given below apply for all children, not just those affected by migraine. If it is necessary to place restrictions (for example, reducing the time your child spends on the computer or watching TV) explain why these are necessary and the benefit that will be felt; it is important that children do not feel punished.

**Lifestyle tips**

Eat and drink regularly and healthily: (see ‘Nutrition and migraine’ section).

Exercise with enough fuel: Children should aim for 30 minutes of aerobic activity at least three times a week. However, sudden exercise, especially without adequate food to provide the extra energy required, can trigger an attack. Ensure your child has ‘enough fuel in the tank’ for any exercise they are undertaking: a starchy snack, such as fruit or a sandwich prior to exercise, and water to drink afterwards will help prevent an attack. This should be balanced with enough rest.

Keep regular sleep patterns: A regular bedtime and wake up routine is important; the aim should be 8 - 10 hours sleep a night.

Reduce stress and anxiety: Children, like adults, should have plenty of time for rest and relaxation (exercise can be a good outlet for built up tensions). Whilst it isn’t always possible to remove stress factors, by encouraging your child to talk about any worries he/she has it may be possible to ease his/her concerns and lessen stress as a trigger. Hobbies can be a good way to relieve stress.

Television, computers and video games: a child should not spend over 45 minutes on these without rest. It can be difficult to monitor a child’s usage, especially if they have a TV, computer or video games in their room, so this may be something to look at. Make sure your child doesn’t do this for more than three hours a day and they stop at least an hour before they go to bed.

Environment: Although some children can be affected by environmental factors, such as stuffy atmospheres, bright lights or changes in temperature it is important for you and your child not to get too obsessed about avoiding these. (It may not always be possible to avoid these and the worrying may actually contribute to future attacks). In general your child should spend time in the fresh air each day. The issue of bright light can be addressed by wearing a sun hat / sunglasses in bright light which is best practice for all children.
Puberty and migraine
Some children find that they experience their first migraine attack around the time of puberty. This is also around the time that it becomes more common for girls to suffer from migraines than boys. During puberty (often between the ages of 8 and 13 years), the body starts to release hormones that make the body mature physically, and in girls, menstruation starts, and there is a recognised link between hormones and migraine. 50% of women with migraine feel that their attacks are linked to the menstrual cycle. True menstrual migraine associated with known hormonal triggers is defined as attacks which occur within two days either side of a period and at no other time. However, females can be more susceptible to other factors around the time of their period which can make attacks more common. In addition, puberty is often a time of general anxiety – another key migraine trigger - with lots of changes going on in the body and in life in general.

Contraception
Young girls are seeking contraceptive advice from a very young age and parents may be unaware of this. It is important that girls who need contraception inform their doctor about their migraine, especially if combined hormonal methods are being considered. These methods contain ethinylestradiol, a synthetic type of oestrogen. Combined hormonal methods include the combined pill, patches (Evra®), and the vaginal ring (NuvaRing®). Girls who have migraine with aura are advised that these methods for contraception may increase the risk of stroke. For girls who have migraine without aura, combined hormonal contraceptives may be acceptable and may actually help their migraine. If aura occurs after starting this type of contraception, it should be stopped as soon as possible under the advice of her healthcare team and different methods discussed. These include the progestogen-only methods such as the implant (Implanon®) and the progestogen-only pill (Cerazette®). The injection (Depo-Provera®) may also be offered if other methods are unsuitable.

Drugs and alcohol
Often drinking and drug taking may be unknown to the parents. Sadly it is a real problem in today’s world and if you take your child to see a doctor, do not be surprised if your child is asked about drinking and taking drugs. Be vigilant if your child is at risk or vulnerable to peer pressure. Headaches occurring after sleep-overs may not be due to just tiredness. Illegal drugs can have a wide range of health implications. They often leave the body run down and therefore children who take drugs are more likely to have an attack. It is important to talk to children about the risks.
It is important not to become too obsessed with diet; only limit certain foods or drinks if you have identified them to be a likely migraine trigger for your child - and not because you have heard that they may be a trigger in others. The key aim, as for all children, is to have a sensible and regular diet. Some key, but sometimes easy to forget rules for children (especially those susceptible to migraine), are:

**Keep hydrated:** children should drink 1 – 2 litres of water each day. Ensure your child has enough fluid with them at school and remind them to drink through the day (it is common for children to forget!)

**Eat regularly:** to keep blood sugar levels stable, children should not go longer than 3 – 4 hours without food during the day, or 13 hours overnight. It can be easy to exceed these times without realising. For example, if a child eats their tea at 6pm at the weekend and then doesn’t eat their breakfast until 9am, this gap is too long. Therefore, as well as regular meals, children may need one or two wholesome snacks during the day, including one shortly before bedtime. Children can often be tempted to run off to school or play without eating anything but breakfast should not be skipped. Children should eat a good portion of protein and complex carbohydrates in their diet, as they balance the blood sugar levels better.

**Identify any food / drink triggers:** if you do suspect a food or drink may be contributing to an attack, keep a diary to try to clarify if this is the case. (It is likely that the food or drink may have been consumed up to 8 - 24 hours prior to the attack itself). More information on this area can be found opposite.

**Avoid lots of additives and limit caffeine intake:** Children should avoid eating foods which have lots of additives and preservatives, eating instead freshly prepared home cooked food where possible. Large amounts of caffeine, found in drinks like cola, should be limited especially if it appears to be a trigger.
Prodrome vs trigger
Brain imaging techniques have shown that changes can be occurring in the brain as much as 48 hours before we notice the symptoms of a migraine attack. Some people have recognised their own or their child’s ‘prodrome symptoms’ which can occur during this time. This could be excessive yawning or low energy levels, or for some it could be an unusual hunger or a craving for sweet things. During this time a child may eat a chocolate bar and then, when the migraine attack occurs, a link is made and the chocolate is seen as a ‘trigger’. In fact the chocolate could actually be a symptom of an attack which was already developing, rather than being the cause.

Further nutritional support for children with migraine
Nutritional therapy for children is essentially the same as it would be for adults, which is to identify any triggers and avoid them. For general wellbeing and health, it is also vital that all the essential nutrients are being consumed. Therapeutic supplementation can be used where appropriate but only under the advice of a qualified nutritional practitioner. The basics of finding food triggers are as follows:

- If you suspect that nutrition may be a factor in your child’s migraine, it is advisable to keep a really detailed diary, where the exact foods and the brand of food (as different brands of the same food may contain different ingredients) are listed. It is important to keep the food / lifestyle diary for at least one month (but ideally three), to allow time for a pattern to emerge (if there is one!). The summer holiday, when there is a long break from school, could be a good time for monitoring food. Record all activities undertaken: if the child is particularly sporty, is there a higher incidence of a migraine after a sporting activity? It is also important to identify any stress triggers (exams or assignments etc.). Such diaries are often difficult to interpret and your GP may need to refer you to a children’s dietician for extra help

- On the food diary, record the drinks which are consumed. For example, orange squash, how much and which brand, water intake etc.

- Can you see a pattern emerge from your recordings? Did your child have an attack on days when certain foods or drinks were consumed? For example, could it be an ingredient in the drinks? One of the main drawbacks of using a diary to pinpoint any food sensitivity is that there can be a delayed reaction to the food, so it might show up 48 hours (sometimes up to 72 hours) later. This can make it very difficult to find the association between food and symptoms

- If you sense that there may be certain foods or drinks which seem to be causing the migraine, eliminate those foods from the diet (one at a time if there is more than one). Has there been any improvement?
A note about food allergies and intolerances
Food allergy and food intolerance are both a type of food sensitivity. When someone has a food allergy, their immune system reacts to a particular food as if it isn’t safe. If someone has a severe food allergy, this can cause a life-threatening reaction. This means that people with food allergies, particularly a peanut allergy, need to be extremely careful what they eat. Food intolerance doesn’t involve the immune system and is generally not life-threatening. But if someone eats a food they are intolerant to, this could make them feel ill or affect their long term health.

Food triggers
As outlined in this booklet it is important that all children eat regular meals and have a healthy diet in accordance with general nutritional advice. However, there are certain foods identified by nutritionists as being more common migraine triggers for adults and children. These can include:

- **Tyramine foods**: Aged meats, avocados, bananas, cabbage, canned fish, dairy products, aubergines, hard cheeses, potatoes, raspberries, red plums, tomatoes and yeast
- **Fatty, greasy and fried foods**
- **Salicylate foods**: Granny Smith apples, grapes, apricots, peaches, plums, raisins, berries, prunes, tomatoes, oranges, potato skins, spinach, carrots, broccoli, asparagus, curry powder, dill, thyme, oregano, turmeric, mace, cinnamon, aniseed, paprika, tarragon, sage, rosemary, mustard, mixed dried herbs, Chinese five herbs, cayenne, peppermint, liquorice, coffee, cola, Worcestershire sauce, tea and tomato juice
- **Histamine foods**: Fermented cheeses, salami, spinach, egg white, alcohol, fermented soy and certain fish
- **Flavanoid foods**: Berries, black and red grapes
- **Other food triggers**: Artificial vanilla, cow’s milk, chocolate, foods which contain MSG (monosodium glutamate) and foods which contain nitrates (cured ham, frankfurters, salami, smoked fish, smoked bacon, deli meats, aged cheeses)
These may give you a starting point of things to consider. It is important to remember that not all foods cause the same reaction in different people, so it is vital that you clearly identify which food (if any) is the culprit. You may wish to seek the advice of a qualified nutritional therapist in conjunction with your healthcare team. It is important to reiterate that many children will not have any specific food triggers. Greatly restricting a child’s diet, especially without cause, may do more harm than good.

**Therapeutic supplementation**
Nutritionists believe that some supplements and herbal formulas can be effective in the prevention and management of migraine. Any nutritional supplements, herbs and other complementary treatments can interfere with prescribed medication. Doses for children may also be very different to those taken by adults. Therefore, it is essential that you seek the advice of a qualified nutritional therapist before giving your child any supplements. Examples of supplements which may be used when managing migraine include: vitamin B2, multi-vitamins and minerals, essential fatty acids, co-enzyme Q10 (taken with caution), magnesium, and calcium combinations.

**Effective management**
Looking at nutrition can help to effectively manage migraines by understanding any triggers, carrying out the appropriate elimination of those triggers and by therapeutic supplementation where necessary. It is also essential to understand the lifestyle needs of a young migraineur, and to incorporate a nutritional diet for growth and development. Simply eliminating foods can hold back a child whilst they are growing, hence a balanced diet with all the right foods is vital and the advice of an expert may be helpful.
Headache is a very common complaint in schools – not only with children but with teachers themselves! When a classroom or school is very busy, a child complaining of a headache may get the response, “I am sure it will be better soon.” Rather than being addressed and possibly an attack aborted in the early stages, this can mean a full blown attack occurs.

A study showed that children with migraine lost an average of 2.8 days per year due to migraine and 5 days per year due to other illnesses (total 7.8 days per year) compared to a control group of children with no headache who lost an average of 3.7 days per year due to different illnesses. [2]. These statistics do not take into account the days that a child may remain at school during an attack but the condition has a detrimental affect on their school work (and social interactions).

If your child has regular migraine attacks at school it is important to try to work together with teachers and staff to help address and manage their condition in this environment.

Common reasons that children may get a migraine at school include:

- Becoming dehydrated
- Lack of food (especially if exercise is also taking place)
- Overheating – many schools don’t have cloakrooms; children often wear a number of layers in between classes and can get uncomfortable or overheated without taking action about this
- Stress – from anxiety about performance expectations to bullying
- Lengthy periods at a computer
- Lengthy periods looking at a white board
- Lack of fresh air – especially if spending breaks inside

Communicating with teachers / schools

There can sometimes be a lack of understanding within schools about migraine. The more informed teachers and other staff are about your child’s condition, the better able they will be to work with you and your child to reduce any impact on their schooling.
The preferred option would normally be a face to face meeting with a key teacher. This will give you the opportunity to discuss:

- Your child’s migraine generally to aid understanding: how long they have been affected, how regularly they have been experiencing attacks, symptoms, how they may act at the beginning of an attack etc.
- Likely triggers for your child, if known
- How the attacks may be prevented in the school setting. For example:
  - Allowing your child to always carry a water bottle for them to drink when necessary
  - Allowing them to snack if necessary and particularly before exercise
  - Allowing them to be dismissed from class quickly if an attack is being experienced / prodrome symptoms are apparent (see the ‘Migraine Action! card’ overleaf)
- The impact on their schooling – are they having regular days off school due to their migraine?
- How their migraine is being addressed at home
- Medical advice being sought / the medication they take during an attack, if any (you may feel that a letter from your GP is necessary to reinforce the impact of the condition on your child*)
- How an attack should be handled at the school
- When you should / should not be called (if your child experiences regular attacks and they normally recover quickly with rest, you may not need to pick them up on each occasion if this is understood)
- If your child normally takes medication, if so what, will they have this with them, when should they be allowed to take it? Although school staff do not have a legal duty to give medication or to supervise a child taking medication, often they are willing to do so on a voluntary basis if adequate information and support is given. (Information from the Department for Education and Skills states that parents / carers should authorise and supply appropriate painkillers for their child’s use with written instructions about when the child should take the medication and that a member of staff should supervise the pupil taking the medication and notify the parents, in writing, on the day the painkillers are taken)
- Any other staff at the school who should be made aware of the child’s condition. For example, the school nurse or education welfare officer (especially if your child is regularly absent)
- Anything that the school would like you to take into consideration and any ‘next steps’

* If your child is under the support of a GP for their migraine and the school wishes to have professional guidance on the condition, Migraine Action has produced a template letter for GPs. This can be used when writing to inform your child’s teachers about their condition and the impact migraine can have on schooling. To order a copy contact us.
This type of discussion should lead to better management of the condition during the school period. Setting up a situation where your child is able to snack when others are unable to or to leave the classroom quickly and without fuss has a large element of trust. It is important that your child understands this and doesn’t take advantage of the situation.

**Migraine Action packs for teachers and school nurses**

You can order our information packs for teachers and school nurses by contacting us. These aim to aid understanding and give practical tips for how young migraineurs can be supported in the school environment.

**Medical conditions at school**

Every school should have a medical conditions policy to help children stay healthy and safe, make a positive contribution and achieve their academic potential. Schools devise their own policy but are encouraged to do so taking into consideration current legislation and guidance. This covers things like the storage of medicines and an anaphylaxis policy. You can find out more at [www.medicalconditionsatschool.org.uk](http://www.medicalconditionsatschool.org.uk). We are aware that not all schools give suitable support for children with different health conditions including migraine. Migraine Action is currently working with a number of other charities to look at ways of improving this in the future and for setting best practice.

**The Migraine ACTION! card**

The ‘Migraine ACTION! card’ has been designed to assist children and young people who experience a migraine attack (or recognise the initial stages of an attack) whilst under the supervision of an adult, such as a teacher.

The primary aim of the card is to enable your child to be excused quickly and simply from the class or activity:

- Lessening any embarrassment felt by them by not having to explain their symptoms on each occasion (often in front of many of their peers)
- Without delay, which is of great importance if they are feeling nauseous or need to visit the toilet. Taking action quickly may also lessen the length or severity of the attack

To obtain a Migraine ACTION! card pack please contact us by calling 0116 275 8317 or emailing info@migraine.org.uk.
Exams and migraine
There is obvious stress that comes from studying for and sitting exams and it is not surprising that for some children this can trigger attacks. It is important to remind your child that along with suitable time for study, they should also make time to eat regularly and healthily, keep hydrated, spend time in the fresh air, take exercise, maintain sleep patterns and have time for rest and relaxation.

A day at school - missing tea - research on the computer - reading into the early hours - caffeinated drink to stay awake = migraine?

Children with migraine can feel extra stress at exam time if they have had periods absent from school and feel behind on their schooling. It can be worthwhile speaking to the school to find out how to manage this in a productive way and in good time before exams begin.

For children whose schooling has been substantially affected by migraine, this can be taken into account by exam boards if medical support is available. Migraine Action has a template letter for GPs who are asked to give confirmation of this. (A copy can be requested by contacting the office).
Some commonly asked questions

Will my child always have migraine?
Unfortunately there is no definite answer to this question. As this booklet shows, migraine is an extremely individual and unpredictable condition. Although some children do grow out of their migraine, there is a high risk of it persisting into adulthood. However, the earlier the condition is recognised, addressed and managed, the less of an impact it is likely to have in later life.

I believe my child has migraine but when I consulted my GP he was unsympathetic and said she would just ‘grow out of it’. I hate to see my child suffering and feel that we are not getting the help we need. What can I do?
In a perfect world, every GP would be extremely knowledgeable about migraine, every child would be correctly diagnosed and a suitable way forward would be discussed. Unfortunately, this is not always the case and parents sometimes come away from a consultation feeling worried, misunderstood, frustrated or angry. There are huge challenges faced by GPs, but of course you and your child deserve appropriate medical support. Some things to consider / suggestions for a way forward include:

• Do you feel that you gave a good overview of your child’s symptoms during the consultation / were you able to answer all the questions asked of you by the GP? Do you think it may be helpful to make another appointment where you can give a more detailed account / show a migraine diary which may help your GP gain a better picture?

• Continue to record all attacks, symptoms etc. and take this along to another appointment to share. You may find it useful to take along information on childhood migraine—such as this. It is impossible for every GP to be an expert in every condition, so this may open up the dialogue and help identify suggestions for ways forward

• Remember that if you are unhappy with the advice offered or you feel that communication has broken down with a particular GP, you are entitled to seek a second opinion. You can also ask to be referred to a specialist, such as a paediatric neurologist

• You can also contact Migraine Action for further advice

My child had a migraine after going to the cinema, but I don’t want to prevent her from going in the future. Are there ways to help reduce the chance of an attack?
Make sure your child has something to eat and drink prior to the film – especially if it is a long feature (or some food and drink whilst watching). Try to avoid films which are very long as watching the screen and sitting in the same position is not ideal. Encourage your child to look away from the screen occasionally and to move her head, neck, shoulders and legs to avoid becoming stiff. Also try to avoid films with lots of fast paced editing, flashing etc. if possible, especially if you believe this to be a trigger.
My child wants to attend a sleep-over with friends but I am worried what will happen if he has an attack. How can I reduce the chances?

There are likely to be numerous occasions as your child grows when he is away from home, including school trips, outings or attending sleep-overs. In general, following a few principles may help prevent an attack (outlined in the ‘Lifestyle tips’ section of this booklet), such as keeping hydrated and not consuming too many sugary drinks. Although you don’t want to take the enjoyment out of an event or make your child feel different or isolated, it is important to talk to your child about what could be the consequences if he doesn’t follow advice; is it better to eat fewer sweets than to have the outing ruined by an attack or what could happen if he doesn’t get much sleep? Peer pressure can be an important factor; talk to your child about how to say no. If he can be open with his friends about his migraine it will really help. When away from home it is important that your child feels able to ask for help if he does begin to feel unwell. The earlier he does so the more chance that a full blown attack can be prevented or its severity and length reduced. By feeling worried or embarrassed, and therefore not asking for help, the chance of a full blown attack is increased. Using the Migraine ACTION! Card can be helpful in situations where your child is part of a large group (the adults supervising will need to have been made aware of its use beforehand). For more intimate situations, such as a sleep-over at a friend’s house, it is a good idea to talk with the parents beforehand or send a letter outlining your child’s condition, what may happen if they experience an attack and how to handle this. If your child knows that he can ask for help and will be understood, this will make the situation much easier.

My child gets more migraine attacks during Ramadan. What can I do to help?

Muslim children who are fasting for Ramadan can, not surprisingly given some of the common triggers, be prone to attacks during this period. If your child feels the beginnings of an attack, going out and getting some fresh air can really make a difference for some. Ensuring they have adequate food and drink at suitable times is also of course important. Exercise should be appropriate to the time of day and fasting pattern.

I’ve read that the preventative medication my child has been prescribed is actually for depression. Does this mean that depression is causing their migraine?

It is true that some preventative medicines are used for depression, such as amitriptyline. Many preventative medications used to treat migraine were initially developed to treat other conditions but, by coincidence, were shown to also be effective in helping people with migraine. The doses used to treat migraine are usually very different to the doses used to treat the other condition, in this case depression. That being said, in some children, migraine and depression co-exist and treating young people with medication that treats both may be helpful and appropriate in some cases.
**My child doesn’t like to admit she has migraine and she often doesn’t follow advice. How can I help and encourage her to take responsibility for her condition?**

Often children want to ‘fit in’ and do not want to be seen as different. This can mean not facing up to having migraine, instead pretending that it doesn’t exist in the hope it will just go away. Unfortunately, this is likely to mean that the frequency and severity of attacks actually gets worse and that migraine has a greater impact on their life. Playing their part in understanding and managing the condition will ultimately help children feel much more in control, especially for those times when they are away from home without the usual support network. There are no ‘fits all’ answers but some tips include:

- **Sitting down and talking through any concerns, worries, difficulties and ways to address these is the first (not always easy!) step.** Is she embarrassed about her peers knowing, if so why is this? Could any of the Migraine Action resources available help, such as the Migraine ACTION! card or an information booklet for her friends or teachers?
- **Suggest she visits Migraine Action’s young migraineurs website – there are three websites for different ages where she can find information on her own.** Finding out about other young migraineurs experiences may help her to feel less isolated or different
- **Reiterate that she is not alone; migraine affects around 1 in 10 schoolchildren**

**My child opts out of sports and other activities because he is worried about having an attack. I feel he is missing out. How can I help?**

Sport is good for children but in some it can induce migraine attacks. It is worthwhile seeing which sports are good for each individual child. Swimming may be good for some but in others the chlorine may induce an attack. It is important to make sure that your child is not using their migraine as an excuse not to join in sports. Assessing their activities out of school usually gives parents an idea what their child is capable of. Some children find they can enjoy sport if it is not competitive and if this is the case, then it is important to draw the school’s attention to this. Most children enjoy some sort of sporting activity and it is important to encourage them to do the activities they can. Children who are taking part in exercise and sport should have enough ‘fuel in the tank’ to do so and a starchy snack a short time beforehand can help. Any exercise should be complemented by enough rest. Exercise can also be a productive outlet for stress.

**My child often gets a migraine at the weekend. Is this normal?**

Some children, like some adults, find that they experience migraines more commonly at the weekends (and sometimes also during holiday periods). Often we think of migraines as being caused by stress or not enough sleep, but for some people the change in routine and / or the release of stress can be a trigger. Encouraging children to maintain a regular sleep pattern throughout the weekend may help, as will continuing to eat regularly and healthily.
My child is being bullied because of her migraine. How can I help?

Raising awareness of migraine amongst her peers (including the bullies), the teachers and the school community in general will help. Could you use the resources available from Migraine Action and distribute them amongst her teachers? You could also suggest the school holds a health day, possibly linking to Migraine Awareness Week in September which is often around the time that attacks in school can be common, as children change schools or start a new term. Ask if the school would welcome you (or your child if they feel able) to give a talk about migraine. Migraine Action has template talks you can use. There are also specific bullying organisations and websites you can consult.

My child is having a MRI scan. What is this?

This is a harmless test where by magnetic waves map out the brain and a picture of the anatomy of the brain is seen. The machine is a white tube, open to light at both ends. The child is laid down on a sliding bed and is gently put into the machine. The head is often fixed inside a little mask to prevent movement. The child will wear earphones and hear and feel vibrations in short bursts. The whole procedure typically lasts 20 minutes and is totally painless. In young children a sedative is sometimes needed to prevent the child from moving. Although harmless, children can find the experience frightening. It is a good idea to speak to them beforehand to explain what will happen and to allow them to ask any questions. Your medical team will be familiar with this and will also try to alleviate any fears that your child (and you) may have before the procedure takes place. Some parents / carers will be offered a CT scan for their child instead of an MRI scan; the choice between the two is often simply a case of waiting times but both are appropriate tests. The primary purpose of either scan is usually to reassure rather than to pick up sinister causes for headache (this is extremely rare). Most scans come back normal. There may be other tests that your medical team wishes to carry out but these are usually for other reasons than headache alone.

Will migraine affect my child’s job prospects?

Unfortunately migraine can mean that children miss considerable time at school. In turn they may not reach their full potential or be unable to perform at their best in exams. It is vital that if migraine is impacting in this way that this is discussed with their school in good time to enable appropriate allowances to be made, especially during examination time. This will give your child the best start possible when they enter the workplace. At work, some people are undoubtedly discriminated against due to their condition. The often unpredictable nature of migraine can mean that migraineurs are seen as unreliable. In reality they are often the most conscientious and hard working of employees, striving to prove themselves continually. Migraine Action is working to improve understanding of migraine in the workplace. We have booklets to help educate employers which contain practical tips to help companies support employees with migraine; often with just a little consideration (such as having appropriate lighting) migraineurs can be extremely valued employees. Migraine Action, alongside other organisations, is also lobbying parliamentarians about the condition to ensure that migraineurs are not discriminated against in the future.

www.migraine.org.uk/youngmigraineurs
A selection of some key words found in this booklet / you might see in other places:

- **Abdominal migraine**: for some young migraineurs, especially younger children, stomach pain is the main symptom. As they get older abdominal migraine may decrease and headache becomes the main symptom.

- **Acute treatment**: this is medicine that is given to relieve a migraine attack when it actually happens.

- **Alternative treatments**: see complementary therapies.

- **Analgesics**: a drug that takes away pain and can also be called ‘acute’ medications.

- **Antiemetic**: anti-nausea and anti-vomiting medication.

- **Aura**: can happen about 30 minutes before the main symptoms (headache, stomach pain etc.). Aura symptoms can include flashing lights or zigzag patterns in front of the eyes, pins and needles or numbness in the arms and legs, being clumsy or not being able to speak properly.

- **Blood vessels**: the tubes which carry the blood all around the body. There are three types, arteries, capillaries and veins.

- **Complementary therapies**: (also called alternative treatments) treatments that are not usually provided by your doctor but by other specially qualified people. These treatments aim to relax you or help your body to heal itself.

- **Dehydration**: is when you lose too much water from your body through sickness, sweat, or diarrhoea. It can also be caused by not drinking enough water / soft drinks.

- **Diagnosis**: when doctors confirm a condition / illness.

- **Digestive system**: the parts of your body that break down the food you eat.

- **Drugs**: are chemicals used to treat illnesses / conditions.
• **Gastric stasis:** when your digestive system is slow in emptying so that the things you eat and drink stay in your stomach (this happens during a migraine attack)

• **Hypersensitivity:** when light, sounds or smells bother people much more than normal, for example they might need sunglasses even on a dull day. They might not like to be touched or the things they touch feel different, for example warm water might feel very hot

• **Migraine clinic:** a specialist centre where the medics are experts in the field. Your GP may refer you to a clinic which may be found at your local hospital

• **Neurological:** concerning the nervous system of the body, especially the brain

• **Neurotransmitters:** chemicals that help to send messages through the nerves in your body

• **Postdrome:** the time just after a migraine when people still don’t feel quite back to normal. It is sometimes also called the recovery phase

• **Preventative medication:** medicine which you take every day to try to stop migraines happening. This is sometimes called prophylactic treatment

• **Prodrome:** symptoms can begin up to two days before a migraine and are a sign that a migraine may be about to happen. During this time you may want to eat certain foods, feel tired or feel excited

• **Threshold:** a point after which a migraine will occur

• **Treatment:** the care or medicine to try to make an illness better

• **Triggers:** things that cause a migraine to start

• **Triptans:** a group of medications specially developed to treat migraine attacks

[info@migraine.org.uk](mailto:info@migraine.org.uk)
Useful contacts

- The Cyclical Vomiting Syndrome Association - www.cvsa.org.uk
- For information on bullying - www.beatbullying.org
- For information about illegal drugs - www.talktofrank.com
- For information about medications at school - www.medicalconditionsatschool.org.uk
- For general parenting advice - www.parentlineplus.org.uk
- The Department for Children, Schools and Families - www.dcsf.gov.uk

Migraine Action is a national registered membership charity which offers support, advice and information to migraineurs, their families, friends, colleagues and the wider public. It exists to bridge the gap between migraineurs and the medical world by providing unbiased information on all aspects of migraine.

How we can help

Support line: Telephone 0116 275 8317 during normal office hours for information and advice or simply to speak to someone who understands. Outside office hours you can leave a message and we will get back to you as soon as possible.

Websites:

- Migraine Adventure for 8 - 10 year olds www.migraineadventure.org.uk
- Migraine Explorers for 11 - 13 year olds www.migrainexplorers.org.uk
- Migraine Network for 14 - 17 year olds www.migrainenetwork.org.uk
- MiGain web based App for 8 - 17 year olds www.migain.org.uk

Young migraineurs can sign up to a special e-newsletter via each of these websites.

Migraine Action’s main website www.migraine.org.uk also provides a wealth of information on migraine and the charity’s services.

Information resources: Migraine Action has numerous booklets and resources on all aspects of migraine.

Education days: Migraine Action runs friendly and informative education days around the UK each year. These offer migraineurs of all ages and their families the opportunity to meet others affected and hear updates from experts in the field.

Member benefits: Migraine Action’s magazine, ‘Challenging Migraine’ is distributed to members each quarter. This gives updates on treatments, research, Migraine Action’s work and also shares members’ experiences and tips. Members also have access to special areas of the main Migraine Action website, including ‘Ask the Expert’ forum.
Help us to help you
Migraine Action is a totally independent membership charity and its core work is funded solely by donations and membership subscriptions. This booklet, and the wider work of the Young Migraineurs Project, is only possible due to the kind support of individuals, groups and organisations. Some of the ways you can help Migraine Action to continue its vital work, including the Young Migraineurs Project, include:

• **Become a member** - this costs just £25.00 a year
• **Make a donation** - this can be for a specific project, such as the Young Migraineurs project or to aid Migraine Action’s work in general
• **Fundraise on Migraine Action’s behalf** - from running a marathon, to hosting a coffee morning or organising a charity event at your place of work
• **Spread the word** - a key part of Migraine Action’s work is to increase awareness of migraine which in turn will help those affected. Could you help by giving a talk at your child’s school or at your place of work (we can provide a template talk) or ask for a poster to be displayed at your local library?
• **Become a media volunteer** - we are always in need of families who are willing to share their experiences to take part in press and broadcast features to help raise awareness

With thanks to:
This booklet was written by Migraine Action, with the help of:

• Ishaq Abu-Arafeh, Consultant Paediatrician, Royal Hospital for Sick Children, Glasgow, and Stirling Royal Infirmary, Stirling
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• The Bowen Association (UK) - [www.bowen-technique.co.uk](http://www.bowen-technique.co.uk)

Helpline: 0845 6011 033
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