Medicine for Managers

Dr Paul Lambden BSc MB BS BDS FDSRCS MRCS LRCP DRCOG MHSM

Migraine

For many people migraine brings normal activities to a temporary stop because of the severity of the symptoms. It is a common problem but it is often difficult to find effective treatment. It limits activities and causes considerable distress.

Migraine is an intense, severe headache, usually at the front or on one side affecting half of the head, throbbing in nature and often associated with nausea and vomiting, sensitivity to light (photophobia), sound (phonophobia) or sometimes to smells (osmophobia). Less commonly the patient may experience shivvering, sweating and abdominal pain. The result is that sufferers want to rest in a quiet darkened room because moving about aggravates the throbbing headache as does light and noise.

Essentially migraine can be divided into two types; those with a warning (aura) and those without. The third of migraine sufferers who experience an aura may suffer a variety of warning symptoms including visual symptoms such as seeing flashing lights, zigzag lines or blind spots or feeling strangely disorientated or giddy. They may develop feelings of muscular tightening or tingling in the shoulders or limbs. Some people may have difficulty in finding words when speaking and, rarely, loss of consciousness may occur. The aura may last up to an hour before the onset of the headache. The remaining sufferers have no warning of an impending migraine.

There is lots of information available at the Migraine Trust www.migrainetrust.org The website even has a dimmer switch to reduce glare for the active sufferer!

Migraines affect women three times more commonly than men (one in four women and one in twelve men). They cause the average patient about ten days absence from work a year. A GP normally sees about five new cases of migraine a year and does about 40 consultations for patients with existing migraine. Generally migraines last between four hours and three days although the individual may feel tired and lethargic for up to seven days after an episode. Some have migraines only very occasionally, sometimes with years between attacks, whilst others can have one or more attacks a week. Migraines do tend to run in families.

The cause of migraine is not fully understood. The mechanism by which the headache itself starts is a sudden dilatation of the blood vessels surrounding the brain. In patients who have an aura this is preceded by a narrowing of the vessels. The modern view is that neurotransmitters (the chemicals transmitting impulses between nerves) are involved and, in particular, the blood levels of the chemical serotonin are known to fall with migraine.

Patients have identified a range of trigger factors of which cheese, coffee, tea, wine, tiredness and stress are the most common. Other factors include missed or delayed meals, poor sleep and the disruption of shift work. About one in seven women with migraine suffer an attack only at around the time of the period although they may occur at any time in the cycle. The use of the contraceptive pill may trigger migraine in some women. These hormonally-affected episodes are described as 'menstrual migraine'.

The diagnosis of migraine is made from the history and presenting features. It is important, with a first attack, to distinguish it from other disorders which might display similar symptoms of pain, weakness, visual changes and photophobia, such as meningitis or a stroke. With repeated attacks, the pattern and the symptoms usually make the recognition of migraine relatively straightforward. Sometimes, however, the presentation may be in some way atypical or there may be other doubts over the diagnosis. Such patients are referred to a neurologist for specialist review and a brain scan may be the investigation of choice to eliminate any more sinister cause.

There is no cure for migraine but there are now some effective treatments. For some people simply retreating to a dark room and lying down eases the symptoms but for most, analgesia of some sort is needed. Simple painkillers may be effective and paracetamol (e.g. *Panadol*), aspirin (e.g. *Aspro*) or non-steroidal anti-inflammatory drugs such as ibuprofen (e.g. *Nurofen*) may give a good response. For those who suffer from nausea or vomiting an anti-emetic is also helpful and drugs such as metoclopramide (*Maxolon*),domperidone (*Motilium*) or prochlorperazine (Stemetil) may relieve the symptom. Some medication combines analgesic drugs such as paracetamol, codeine and metoclopramide (e.g. *Migraleve yellow*). As with all treatments, taking the medication during the aura stage (which can be taken as a warning of impending headache) often reduces or even eliminates the headache if the drug has had time to work before the migraine comes on.

If the simpler medicines do not work, there are a group of drugs called the triptans, known as the 5HT agonists which act on 5HT (serotonin) receptors. The group includes almotriptan (*Almogran*), eletriptan (*Relpax*), frovatriptan (*Migard*), naratriptan (*Naramig*), rizatriptan (*Maxalt*), sumatriptan (*Imigran*) and zolmitriptan (*Zomig*). All are effective against migraine in most people and there are a variety of formulations to assist with absorbtion of the drug such oral lyophilisate (a soluble wafer), e.g. *Maxalt Melt Wafers*, or by subcutaneous injection, using an auto-injector, or intranasally, e.g. *Imigran*. Suppositories are also available if nausea prevents oral administration but they have not been popular in the UK and, of course, their use is limited by the sufferer's surroundings!

The drug ergotamine was formerly popular but is limited by its side effects and is probably best avoided. For some patients, who have usually

had it for many years, it remains the most effective treatment. It is available combined with caffeine in *Cafergot*, or with caffeine and the anti-emetic cyclizine in *Migril*.

Medication may also be used to prevent attacks and is helpful for patients who suffer two or more attacks a month, suffer associated significant disability or cannot take medication during attacks. Such drugs include the beta-blockers such as propranolol (e.g. *Inderal*), pizotifen (*Sanomigran*) which antagonises serotonin, topiramate (*Topamax*), cyproheptadine, amitriptyline and sodium valproate (*Epilim*) although the latter is not licensed for the treatment of migraine.

It is important to remember the analgesics for headaches and migraine can make the headache worse if overused (chronic overuse headache) and so usage should be monitored and a suitable warning should be given.

Other treatments include relaxation therapy and acupuncture, although the benefits are doubtful and some patients favour the homeopathic remedy feverfew which has been shown to have some efficacy in migraine.

Despite the range of treatments available some patients do not respond well or their symptoms may get progressively worse. GPs may then refer to their local migraine clinic for further investigation and treatment and patients may obtain advice over diet and lifestyle as well as the most appropriate medication.

Someone once said: “The World is running out of geniuses: Einstein died, Beethoven went deaf and I'm starting to have a migraine. Anyone who suffers from them will sympathise!

paullambden@compuserve.com