# Migraine....not just a headache

Migraine is a real condition, just like asthma, diabetes or epilepsy. Although not life threatening, it has been found to have a greater impact of quality of life than conditions such as heart disease and diabetes. The World Health Organisation classifies migraine as the 12<sup>th</sup> leading cause of disability worldwide among women and the 19<sup>th</sup> overall.

# What is migraine?

Migraine is more than just a headache. It is a complex, attacking neurological condition. With attacks lasting anything from a couple of hours to perhaps three days, it is easy to see why it can have such a debilitating effect on those living with the condition.

Migraine affects 12-15% of people worldwide (around 1billion), with similar % figures reported (up to 500,000) for those living with the condition in Ireland. In as many as 60% of cases the condition is inherited.

Prior to puberty, boys experience migraine as often as girls. Once into adulthood, migraine becomes three times more common in women than in men. This is due in large part to the hormonal changes in women from puberty to menopause. The highest prevalence is in women around age 40, then rates tail off in the post menopausal years.

With such a high numbers affected in Ireland, it stands to reason that there are also economic and work related impacts to be considered. 92% of Irish migraineurs report that attacks affect their performance at work, with 39% of those, being severely affected. As a consequence, the unemployment rate for those with severe migraine is 2 − 4 times higher than the prevailing overall rate. Migraine accounts for the loss of over ½ million working days in Ireland each year, with 37% of working Irish migraineurs missing more than 5 days per annum. The resultant cost to the economy is at least €250 million.

#### Causes

Whilst the precise cause of migraine is unknown, it is generally accepted that it relates to the abnormal functioning of nerve cells that affect the brain's ability to process information such as pain, light, sounds and other sensory stimulants.

As the condition is very individual, how each migraineur arrives at this point is then determined by a varied number of "trigger factors", but generally once here, a pattern emerges and an attack ensues. These factors can be physical, environmental or genetic and in the majority of cases it will be a particular individual combination that will precipitate an attack. Identifying triggers is one of the keys to successful management of the condition.

# **Common symptoms and types**

The word "migraine" derives from a Greek word "hemikrani" (half- skull) which literally means "pain on one side of the head". This accurately describes and differentiates migraine from other types of headache as typically it presents on one side of the head.

An attack may consist of some or all of the following symptoms:-

Migraine without Aura (around 80% of all attacks)

- Moderate to Severe pain, throbbing one sided headache, aggravated by movement
- Nausea and/or vomiting
- Hyper sensitivity to external stimuli (ie noise, smells, light)



- Stiffness in neck and shoulders
- Pale appearance

Migraine with Aura (in addition to above symptoms)

- Aura, around 20% experience visual disturbances prior to the headache lasting up to one hour (most commonly, blind spots, flashing light effect or zig zag patterns; may also include physical sensations such as unilateral pins and needles in fingers, arm and then face)
- Blurred vision
- Confusion
- Slurred speech
- Loss of co-ordination

# Other types:-

#### Basilar Migraine

Usually affecting teenage girls, this is a rare form of migraine that presents additional symptoms such as loss of balance, fainting, difficulty speaking and double vision. There can be loss of consciousness during an attack.

### Hemiplegic Migraine (Sporadic or Familial)

Usually beginning in childhood, this severe form of migraine causes temporary unilateral paralysis (temporarily paralysed on one side of the body). May also feature extended aura period that could last for weeks. Generally related to a strong family history of the condition. It is a rare form of migraine; diagnosis usually requires a full neurological exam as the symptoms may be indicative of other underlying conditions.

## Opthalmoplegic Migraine

In addition to headache, this very rare form of migraine shows additional symptoms such as dilation of the pupils, inability to move the eye in any direction, as well as drooping of the eyelid occurs. It occurs primarily in young people and is caused by weakness in muscles which move the eye.

## Abdominal Migraine

Symptoms usually nausea and stomach related rather than headache. Occurs predominantly in children, usually evolves into typical migraine with age.

## **Triggers**

As described earlier, a myriad of trigger factors, whilst in themselves not the cause of migraine, can build, bringing an individual to the point where a migraine attack is imminent.

Again, these can be different for everyone and indeed, may differ for an individual each time depending on their situation; trying to track down specifics can be difficult.

Let's look at some of the most common:-

## **Environmental factors**

Just moving around doing normal day to day stuff, which wouldn't cost you a second thought can be a potential danger for someone susceptible to migraine

- Bright or Flickering lights (could be cinema, shop displays or sunlight through trees whilst driving)
- Certain types of lighting (fluorescent, strobe)
- Strong smells (especially perfume, paint etc)
- Weather (variety of factors...ie bright sun glare, muggy close days, humidity)



- TV/Computer screens and monitors
- Loud and persistent noise
- Travel areas of pressure change, ie altitude

### **Dietary Triggers**

Research indicates about 20% of migraine attacks are brought on by dietary factors. Whilst people believe this to be the case, actual scientific evidence proving a link is virtually nonexistent. In many cases, there may be other factors that precede consuming a "suspect" food that could contribute more to the onset of an attack, ie lack of sleep, skipping meals.

The most commonly cited link is foods which are high in the amino acids tyramine and/ or phenylethylamine such as:-

- cheese (fermented, aged or hard mouldy types),
- chocolate
- alcohol (beer and red wine particularly)
- nitrites (common in processed meats)
- sulphites (eg. preservative....dried fruit and....red and white wine)
- additives (MSG)
- aspartame (Diet drinks)
- caffeine (coffee, tea, etc; although caffeine can be used to prevent migraine, really down to personal tolerance)

## Hormonal Triggers

As mentioned earlier, once females move into puberty and then adulthood, hormones play an increasing role in migraine prevalence. Oestrogen fluctuations due to menstruation or through the use of oral contraceptive pills or HRT can sometimes trigger migraine Conversely, migraine susceptibility can decrease during pregnancy when oestrogen levels are high.

In the main, migraine attacks lessen after menopause (although can increase in the years preceding it). Identifying triggers can be the single most important step an individual can take in helping themselves to manage their condition. It may not be necessary to avoid situations completely but instead build levels of awareness so that appropriate preventative steps and actions can be taken.

#### **Treatment**

The key to successful treatment is to establish correct diagnosis of migraine and eliminate other potential causes (tension or cluster headache in particular). Some time spent with your pharmacist at an early stage to review current medication regime would also prove hugely beneficial in identifying and / or preventing "medicine overuse headache" (this is where the overuse of painkillers actually brings on headaches). In acute treatments the goal is to stop or at least alleviate the effects of an attack once it has begun

## **Analgesics**

Used to target area specific pain and especially if taken as early as possible once an attack begins, analgesics can be a hugely effective pain killers.

#### **Aspirin**

Traditional first line of defence, has anti inflammatory properties that can help alleviate many of the physical symptoms of migraine



#### **Paracetamol**

As effective as aspirin, but without the anti inflammatory effects

#### **Combinations**

Drugs that contain aspirin or paracetamol along with another agent such as codeine or caffeine (eg.) Solpadeine®

#### NSAID's

Generally used for more severe migraine attacks, evidence shows Ibuprofen to be highly effective. Soluble forms may act quicker than tablet form for those where stomach issues are part of their migraine episode.

## **Triptans**

Triptans are highly effective, reducing the symptoms or aborting the attack within 30 to 90 minutes in 70-80% of patients. Triptans target those neural serotonin receptors specifically involved in migraine attacks and can be used in the treatment of migraine with or without aura. All are available in tablet form with some brands also available as fast melt tabs, nasal spray or SC injection.

The most common triptans that are prescribed in Ireland are Sumatriptan (Imigran®), Zolmitriptan (Zomig®) and Frovatriptan (Frovex®). Studies indicate that in over 60% of cases, triptans give significant pain relief within two hours. Approximately 30% of patients experience complete pain relief within two hours of taking a triptan. In all cases, these are only for treatment where migraine has been diagnosed and not for the treatment of hemiplegic, basilar or ophthalmaplegic migraine.

Currently all triptans are prescription only in Ireland. Sumatriptan (Imigran®) is now available over the counter in pharmacies in the UK without prescription; in the UK the patient requires a pharmacist consultation to see if it is suitable for them before they can purchase. There is call from Irish pharmacists for sumatriptan to move to over the counter in Ireland and the HPRA (Health Product Regulatory Authority) are likely to authorise this change at some point in the future.

For comprehensive and free health advice and information call in to Whelehans, log on to www.whelehans.ie or dial 04493 34591.

