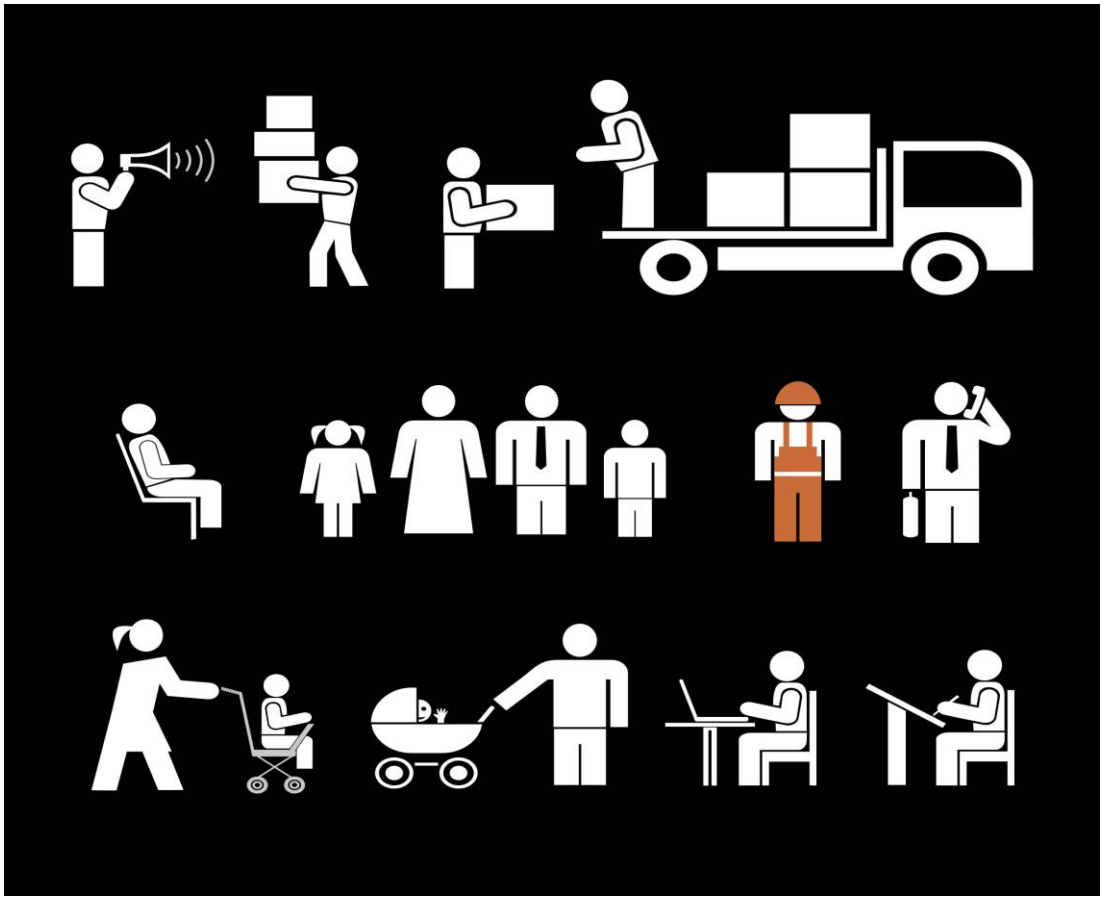
A Programme on behalf of

HEADACHE UK
An alliance working for people with headache

Royal College of General Practitioners

fom
Faculty of Occupational Medicine

# Reducing the Impact of Migraine in the Workplace



## Content

# Outline of Programme

### *Background*

Headache and particularly migraine are the second most common cause of work absence in non-manual workers.[1]
Costs in the UK due to loss of employment have been estimated at £4.8 billion, excluding costs of reduced productivity while at work.[2] The mean number of days of work lost per year is 4.4 days[3] and 14.6% of workdays of migraine sufferrers are affected.[4]
7.6% of males and 18.3% of females have migraine. During the third decade, a time of maximum social and economic demand, over 25% of females are affected.[5] Despite a significant impact upon quality of life and functioning, the needs of many sufferers with remain unmet. Many people do not recognise they have migraine and only half of migraineurs have consulted their general practitioner.[6]
Even when they do consult, a diagnosis is not always made and treatment is less that optimal.[7,8]
Simple workplace interventions have been shown to significantly reduce employment impact.[9]
The aim of this programme is to identify and work with known headache sufferers who lose work because of their problem using a simple intervention.

### *Aim of programme*

1. Identify migraine in those who lose work because of headache using “ID migraine.”

**ID Migraine**

*Two out of three questions positive have a high sensitivity and specicivity for migraine.*

- *Has headache limited your activities for a day or more in the last 3 months?*
- *Are you nauseated or sick to your stomach when you have a headache?*
- *Does light bother you when you have a headache?*

2. Migraineurs are then offered information and an advice booklet. (Hard copy or email). This is based on our clinical experience and feedback from a pilot study and consists of life style and treatment advice. A number of key treatments are now available “over the counter” without the need for a prescription.

3. General Practitioners invariably find migraine difficult to manage within the constraints of a ten-minute consultation. Migraineurs are given the option of using a letter of introduction from the Royal College of General Practitioners together with a headache diary to facilitate a GP consultation.

The programme is led by Dr David Kernick, a general practitioner with a special interest in headache.

He is the Royal College of General Practitioner headache champion and is the secretary of the British Association for the Study of Headache.

The project is part of a Royal College of General Practitioners programme to reduce the burden of headache in the population and is non-funded.

***References***


*1. On the path to recovery. Absence and workplace health survey. CBI . London 2010.*

*2. McCrone P, Seed P, Dowson A et al. Service use and costs for people with headache: a UK primary care studyJ Headache and pain. 2011;12:617-23.*

*3. Lofland J, Frick F. Workplace absenteeism and aspects of health care access for individuals with migraine. Headache 2006;46:563-76.*

*4. Pransky G, Bendt C, Finkelstein S. Improving return to work research. J Occ Env Med. 2005;47:34-40.*

*5. Steiner T, Scher A, Stewart F, et al. The prevalence and disability burden of adult migraine in England and their relationships to age, gender and ethnicity. Cephalalgia 2003;23(7):519-27.*

*6. Dowson A, Jagger S. The UK migraine patient survey: quality of life and treatment. Curr Med Res Opin 1999;15(4):241-253.*

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*9. Burton W, Landy S, Downs K. The Impact of Migraine and the Effect of Migraine Treatment on Workplace Productivity in the United States and Suggestions for Future Research Mayo Clin Proc. 2009 84(5): 436–445.*

# Information and Advice for migraine sufferers

## To be issued to those identified with migraine

## Migraine Background

**You are not alone**

Migraine affects 15% of females and 8% of males. It is in the World Health Organisation's top 20 health problems in terms of impact of disability. On average, migraine sufferers lose 4 working days a year in addition to reduced performance at work. Migraine impacts also impacts upon other family members and friends and has implications for family, social and leisure activities.

**What causes migraine?**

A "migraine engine or generator" has been identified at the base of the brain and this is where the migraine process starts. You have a greater chance of having migraine if a family member also has it.

From a practical perspective there are two important things to note about this migraine generator.

- It is closely situated to the area of the brain that causes nausea and vomiting.
- It is close to the area of the brain where the nerves from the back of the head, neck and shoulder terminate.

The implications of this relationship are considered below.

**What causes the migraine generator to be activated?**

*Triggers and things that change*

- Specific triggers can activate the migraine centre. You may recognise some of these. Red wine, cheese and chocolate are the most common but there are a number of other triggers that may be individual to you. Caffeine is an important trigger of migraine and caffeine containing drinks such as Cola energy drinks, tea and coffee should be kept to a minimum.
- Most people don't recognise the fact that changes in environment both within the body and externally can also trigger migraine. For example, many migraineurs suffer from "weekend migraine" where the stress of the working week suddenly declines. Other important fluctuations include levels of hydration, food intake, sleep patterns and activity levels. It is important to keep all these changes as constant as possible within the constraints of normal everyday life. In particular, ensure regular drinks through the day, regular spaced mealtimes and if possible, regular sleep and rising times. Some females may notice migraines around the time of their menstrual periods when hormone levels are changing.

**What happens during a migraine attack?**

Three phases of the migraine attack are recognised but all three don't occur in everyone.

1. *The prodrome or early warning*

   Some people describe what is known as a " prodrome" up to 24 hours before the attack. This is an abnormal feeling or sensation such as agitation, food craving, yawning, heightened sensitivity, etc. Other people may notice this change in you. If you have a prodrome it is important to recognise it as the sooner you can treat the impending migraine the more effective the treatment will be.

2. *The aura*

   Up to a third of migraine sufferers have an aura. This immediately precedes the headache and lasts between 30-60 minutes. Most commonly the aura is visual - jagged patterns or flashing lights. However, an aura can take a number of forms that include pins and needles, muscle weakness, difficulty in speech. Sometimes an aura can occur without being followed by the headache or more rarely, during the headache phase.

3. *The headache*

   The headache phase usually lasts between 4-72 hours. As the nausea centre in the brain is next to the migraine generator, nausea and vomiting are common and can be problematic. It also means that medication taken by mouth will not be absorbed as effectively once the migraine process has started.

   A number of migraine sufferers experience pain in the neck and shoulders. In many cases this is the migraine generator firing often without causing a migraine attack but triggering the nerves supplying the neck and shoulders. Often this neck and shoulder pain is in fact "low intensity migraine".

## Migraine treatment

**What treatments are available without seeing a doctor?**

Treatments fall into two categories - treating the attack and preventing the attack.

*i) Treating the attack - putting the brakes on the migraine generator once it has started*

The sooner the migraine attack is treated the better it will be. This is for two reasons.

- The more momentum the migraine builds up the more difficult it is to stop.
- Due to activation of the nausea and vomiting centre in the brain, there will be a reduction of absorption of medication into the blood stream. Figure 1 shows a very useful combination that can be bought directly from the pharmacist.

**Figure 1**
**Information Sheet for Patients using**
**Domperidone/Soluble Aspirin/Paracetamol for Headache Attacks**

**How do these tablets work?**

These tablets act in different ways to counter three main problems of migraine.

- *Domperidone.* During a migraine attack the stomach is affected which inhibits the absorption of tablets into the blood stream. There is often associated nausea. Domperidone reduces the nausea and helps to absorb medication into your blood stream.
- *Paracetamol* is a useful pain-killer which alleviates the pain component of migraine.
- *Soluble aspirin* is an anti-inflammatory which reduces the inflammation component of migraine.

**Can I take all these tablets together?**

The tablets are meant to be taken together. They act in different ways and complement each other.

**How should I take them?**

You should take Domperidone 2 x 10mg tablets (20mg), Paracetamol 3 x 500mg tablets (1500mg) and soluble Aspirin 3 x 300mg tablets (900mg).

Although these dosages are slightly higher than normally recommended, it is important to get the blood levels of these tablets up to adequate levels quickly.

**Do these tablets have any side effects?**

All tablets have a number of listed side effects that you will find in the medication packets. However, side effects are rare.

**Do these tablets interfere with any other medication I might take during an attack?**

These tablets don't interfere with other migraine medication which can be taken in addition if needed. If you are on medication prescribed by your doctor check with the pharmacist.

**Can I take this combination again?**

The tablets can be taken again after four hours but in lower doses. The maximum dose of these medications in 24 hours should be Domperidone 3 x 10mg tablets (30mg total), Paracetamol 8 x 500mg tablets (4 grams total) and soluble aspirin 8 X 300mg tablets (2400mg total).

**N.B. This leaflet is intended to provide a brief overview of aspects of this treatment protocol. It is not intended as a substitute for the comprehensive 'product information' leaflet found inside all boxes of medication. The 'product information' leaflet should always be read before taking medication.**

If this combination doesn't work for you or is only partially successful then you should consider a medication known as a Triptan. The family of drugs known as Triptans have revolutionised the treatment of migraine. One of this family known as Sumatriptan is now available to be purchased directly from the pharmacist. The dose is 50mg. The pharmacist will make sure there are no reasons why you shouldn't take this medication - the main one being a history of heart of disease or stroke.

If the Domperidone/Soluble Aspirin/Paracetamol combination in Figure 1 is only partially successful then you can still take the Triptan. In many cases migraine sufferers are unsure whether their headache is going to develop into a migraine and it may be useful to take the combination medication first if you are unsure.

*ii) Preventing the attack*

When attacks are quite frequent then preventative medication aims to stop the migraine centre from firing. A number of medications can be purchased from health food shops that can be effective in the prevention of migraine although the evidence base is poor compared with prescribed medications. You will need to check with your GP or pharmacist if you are on any other medication for potential drug interactions.

- Riboflavin - 400mg a day
- Magnesium – 600 mg a day in divided doses.
- Co-enzyme Q10 - 100mg 3 times a day

All medications should be taken for at least eight weeks before a benefit is judged.
There is also evidence to support the effectiveness of a course of acupuncture in preventing attacks.

**Headache due to taking too much pain killing medication**

All pain killers taken for headache can exacerbate the problem if taken on 3 or more days of the week. This is known as medication overuse headache and is quite a common problem. The difficulties of stopping regular medication are well recognised and you may need the support of your GP to do this. The first important step is to recognise this as a problem.

**Other things to look out for**

It is very rare that migraine has an underlying serious cause particularly if it has been present for some time. However, you should consult your GP if the pattern of your headaches has changed significantly or you have any unusual patterns of weakness or abnormal sensations in between headache attacks. Migraine starting over the age of 50 should also be assessed by your GP.

**Seeing your GP about your migraine**

If the above measures haven't helped you then your GP is the next step.
Often GPs find migraine difficult to diagnose and manage within the constraints of a ten-minute consultation. Some things that are important to tell your GP are:

- That you think you have migraine – evidence suggests that you are usually correct
- The impact of your migraine – evidence suggests that if you can explain to your doctor the impact of the problem your treatment will be more appropriate.
- What medication you have tried.
- A headache diary is also important. It can help your GP to understand the frequency of your headaches and possibly identify any triggers.

**Helping the consultation with your GP**

Attached is a headache diary to complete prior to your consultation that you can show your GP. A two-month record is usually the minimum time to keep a diary.

If you feel it would be helpful, attached is also a letter of introduction to your GP that may help the consultation.

**What can I do at work?**

It is important that your working environment is correct for you and that your employer understands your problem. A comprehensive booklet written by the migraine trust and free to download is available on http://www.migrainetrust.org/information-packs.

**Patient organisation support groups can offer support and advice.**

Migraine Action - www.migraine.org.uk

Migraine Trust - www.migrainetrust.org

# SAMPLE LETTER FOR PATIENT TO GIVE TO GP

**NHS Devon Headache Clinic**
**St Thomas Health Centre**
**Cowick Street, Exeter EX4 1HJ**
**Telephone 01392 676679**
**Website: www.exeterheadacheclinic.org.uk**

Dear Colleague

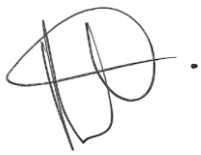
We are undertaking a programme with the Royal College of General Practitioners, Headache UK and the Faculty of Occupational Medicine to reduce the burden of migraine by targeting sufferers in the workplace.
Your patient has a high probability of migraine using a simple questionnaire that has a high sensitivity and specificity. (1)

They have been given some basic information about migraine and the option of keeping a headache diary to facilitate the consultation.

At the reverse of this letter is a simple management protocol that you may find useful. Further information and patient drug information sheets that can be downloaded can be found on our website www.exeterheadacheclinic.org.uk

I hope you find this information useful.

With best wishes



Dr David Kernick
**Headache Champion**
**Royal College of General Practitioners**

1 - *ID Migraine*. Two out of three questions positive have a high sensitivity and specificity for migraine.
- Has headache limited your activities for a day or more in the last 3 months?
- Are you nauseated or sick to your stomach when you have a headache?
- Does light bother you when you have a headache?

*Neurology* 2003;61:375-382.

**Notes to GP to facilitate a Migraine Consultation**

Further information to support these notes and patient drug information sheets that can be downloaded can be found on www.exeterheadacheclinic.org.uk

**Making the diagnosis**

- The ID Migraine screening questionnaire that your patient has used has a high sensitivity and specificity. However, other types of headache can occur with migraine. These are invariably part of a migraine spectrum.
- Exclude co-existent medication overuse headache. This can occur when taking analgesics or Triptans on 3 or more days of the week.
- Exclude red flags. These include a significant change in headache pattern, symptoms of raised intracranial pressure, abnormal neurological symptoms or signs, first migraine attack occurring over 50 years of age.

**Managing the acute attack**

- Domperidone/Paracetamol/Soluble aspirin is a useful combination.
- If severe nausea or vomiting is problematic, use Domperidone 30mg/Diclofenac 100mg suppository at earliest opportunity.
- Triptans are the mainstay of treatment. Lack of response is not a class effect. Rotate Triptans if one is unsuccessful. If side effects are problematic try Naratriptan or Frovatriptan. Zolmitriptan or Sumatriptan nasal spray is useful if severe nausea or vomiting is a problem. Injectable Imigran is the gold standard and useful for severe vomiting or intractable migraine.

  NB - wafer formulations are for convenience and do not get absorbed in the mouth.
- Due to gastric stasis the sooner the migraine is treated the more effective medication will be. Triptans may not work well if taken during an aura phase.

**Preventative medication**

- No specific rules on when to start but go on the impact of migraine on the patient.
- Beta blockers are the drug of first choice. Propranolol has the largest evidence base. Atenolol is effective and convenient. If side effects are problematic, Nebivolol can be useful.
- Topiramate and Gabapentin are next choices.
- Amitriptyline is useful, particularly if there is associated anxiety or sleeping problems.

Titrate preventative drugs to maximum licensed dose that is free of side effects. Use for at least eight weeks before judging an effect.

**Migraine in women**

- Some female migraineurs respond to changes in oestrogen. This is reflected either in pure menstrual migraine or migraine worse at the time of menses.
- Things get worse perimenopausally with rapidly fluctuating oestrogen. See Exeter Headache Clinic website for further details www.exeterheadacheclinic.org.uk
- Avoid combined oral contraception in females with migraine with aura.

**Further resources**

Guidelines can be found at:

- NICE headache guidelines. NICE.org.uk
- British Association for the Study of Headache (BASH) guidelines - www.bash.org.uk
- Scottish Intercollegiate Guideline Network - www.sign.ac.uk >guidelines
- Exeter NHS headache clinic - Exeter headachecheclinic.org.uk

Patient organisation support groups:

Migraine Action - www.migraine.org.uk

Migraine Trust - www.migrainetrust.org

**EXETER HEADACHE CLINIC DIARY**

Please place a mark against the score that best represents the intensity of your headache before and after midday of each day of the week

**Week One**

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**Week Two**

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**Week Three**

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**Week Four**

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