Helping You Successfully Manage Your Headache and Migraine

Helping You Successfully Manage Your Headache and Migraine:

A Patient's Guide

By

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Preface

I have been a Consultant Neurologist working in the NHS since October 2005. My interest is mainly in the clinical and research field of headache, migraine, and pain management. I find what I do very rewarding. This is my way of reaching out to you, trying to provide you with help and support.

I see about a thousand patients a year with chronic, debilitating headaches and most of them have learned how to manage or cope. As a doctor, most conversations with my patients start off with "Doctor, I have a headache", which for a headache specialist is like someone telling the garage mechanic that "my car is broken" – the mechanic has a much clearer idea of how to fix it once he knows the make and model. It's very similar for me; there are more than 150 types of headache so once I know what type of headache the patient has I am a long way towards knowing how to help them. Harnessing 20 years of diagnostic experience, this book is designed to help chronic headache sufferers understand what type of headache they suffer from and what they can do to alleviate the symptoms or even prevent them.

We all live in a very busy environment and expect a "quick fix" for our problems. When we get a headache or migraine we take painkillers and expect them to always miraculously stop the pain. This may work in some cases. Unfortunately, in patients with a chronic headache or migraine, analgesia as a quick-fix solution does not work and can actually make the problem worse by putting them into a 'vicious circle' of treating the headache they have today but getting a rebound headache tomorrow from the painkillers. Without realising it, they might end up taking painkillers increasingly frequently and making the situation worse.

Headache and migraine sufferers often feel dismissed when looking for help, just being told, "It is probably just stress-related". The impact of stress on such a complex neurological disorder might be frustrating, but it is partly true. However, when pain or headache starts to interfere with your everyday life it is time to seek expert advice and get your problem diagnosed. Some patients might need to be referred to a specialist headache clinic to consider injectable or more complex treatments, or to rule out any underlying problem. An accurate diagnosis is of the utmost importance since that can significantly improve our success when managing your condition.

I have been spearheading the Cumbria Headache Forum, our educational platform, which I established in Cumbria in 2014. We have regular meetings with patients suffering from headaches and migraines. We try to support them on their thorny journey, help them to gain a better understanding of their condition, and take an active role in the management of their symptoms. Unfortunately, in between the Headache Forum meetings, some of the patients still feel abandoned and left alone in their suffering. Therefore, I have been thinking about what else I can do to provide another tool and more support.

As a medical professional, I was always very ambitious, aiming for pain freedom when treating my patients. Though recently, after struggling with my own battle managing pain after major surgery, I realised that even with all the up-to-date advancements in medicine this might not

be achievable. Despite all the logical and correct interventions, I experienced excruciating pain and simply needed to learn to manage life with pain. Luckily for me, this only lasted for a few weeks and the natural healing process helped to resolve it.

Unfortunately, this is not the case for headache and migraine sufferers.

This very personal experience strengthened my decision to help patients who had reached a dead-end street and were told "there is nothing else that can be done to help you", or "you have tried all possible medications", or "this is just stress-related". This reinforced my decision to write this book, a pocket guide for all my patients and all the headache and migraine sufferers that I will never see in person, to help you all to understand and better self-manage your symptoms and feel that there is someone with you, accompanying you on your journey.

Acknowledgements

Writing this book was much more difficult than I had ever imagined but it has been extremely rewarding. It would not have been possible without the unbelievable support and encouragement received from friends and family.

I have to start by thanking my wonderful husband, Theo, for encouraging me to write this book, reading early drafts, and providing his advice. His support was an important motivation to push on and get this book to print.

Thank you to my fabulous and incredibly talented daughter, Adele, who is responsible for most of the pictures and wonderful illustrations you can see in this book.

A special thank you to my dear friends and colleagues, Gina and Adrienn, for their amazing support and inspiring comments on the early drafts of this book. Their feedback was a great help when creating this book.

My sincere thanks and appreciation go to Pippa, my medical secretary, who was typing the early chapters on weekends for me when I was not well enough to be able to sit down and type it myself.

I would like to thank my dear friend Maddy who helped to perfect my not so perfect English and also provided me with very valuable first-hand migraine patient feedback. She is a STAR!

Finally, to all those who have supported and encouraged me on this journey, thank you for your help and assistance, it was very much appreciated.

Note to the Reader from the Author

This pocket guide is not intended to replace medical advice from your GP or Consultant Neurologist. I would like all of you to feel supported, even at the difficult times when you feel alone and have limited access to expert advice. We are going through some difficult and unprecedented times, especially during the COVID-19 pandemic, and the access we are able to provide as medical professionals is limited.

This book is a helpful tool but I would advise you to err on the side of caution, especially if you are experiencing worsening symptoms. It is important to consult your GP to find out if you require investigations to rule out an underlying problem, or if you need to be prescribed treatment.

Furthermore, with a full research pipeline of exciting advancements, the information included in this guide might be soon out of date.

I have tried to write this book in an easy to understand way but if you struggle with some of the medical expressions used please refer to the glossary at the end of this book.

Introduction

Primary headache disorders, and migraine in particular, are the most common nervous system disorders and among the most prevalent health problems in humans. More than 50% of the adult population has experienced a headache within the last twelve months. More than 17% of the adult population report suffering from a migraine. Migraine is more prevalent than diabetes, epilepsy, and asthma combined. 25-30% of all new neurology referrals are headache and migraine related. Migraine is recognised by The World Health Organisation (WHO) to be the 6th highest cause of disability worldwide, comparable to diagnoses such as dementia or quadriplegia.

Despite that, headaches have been underestimated, under-diagnosed, and under-treated. Most patients still do not get appropriate medical advice. This is partially due to a lack of knowledge among the healthcare professionals, partially due to a lack of awareness of the wider public. Since a headache is an episodic disorder, it is not perceived by the public as serious. Many affected people are unaware that effective treatments might be available. More than half the patients in the Western World are self-medicating with over-the-counter medications which contributes to the problem even further. It is my experience that 20-30% of patients develop a medication-overuse headache. Less than half of patients are not satisfied with their current treatment but do not seek help.

Many governments, seeking to reduce healthcare costs, do not recognise that the direct cost of treating headaches is very small compared to the indirect cost savings that might be achieved by reducing A & E visits, inpatient stays, and lost working days if resources to treat headache disorders were allocated appropriately. Absenteeism due to migraine alone costs the UK economy £2.25 billion annually. Migraine is estimated to cost the NHS £150 million annually, solely from prescription drugs.

However, there are effective treatments available to improve symptoms and reduce the toll of the burden on one's life. There are headache support groups linked with headache services across the UK. There is an exciting research pipeline of emerging and new treatments.

This book is designed to help you to understand what type of headache you suffer from and learn about the triggers, protectors and environmental influences. It will support you through the difficult times, help you better understand your condition without too many laborious details, and provide the main principles of successful management.

During the times of a pandemic, or even whilst at home alone and unwell, this guide can provide personal support to the lonely sufferer who has limited access to a medical professional and support. It provides a combined approach offering conventional medicine and pharmacological options, which include new medicines emerging from the research pipeline, but also a non-pharmacological approach seeing patients in a holistic way and providing self-management tools.

There are ways you can self-manage your symptoms with success. This publication might be the helpful tool which could improve the quality of your life, educating you, and helping you to take control.

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History of Headache and Migraine

There has been an extraordinary amount of written material and art with regard to the existence of headache and migraine and their treatment, showing the curiosity and fascination of humans as well as their frustration with these illnesses.

It is said that the earliest description of a headache or migraine as a recurring syndrome appeared in 3000 BC in poems from Mesopotamia, a region between the Euphrates and the Tigris in Western Asia.

Hippocrates (c.460-c.370 BC) provides an account of a severe unilateral headache associated with visual symptoms, featuring a visual aura, as well as acknowledging vomiting as a pain relief mechanism. Hippocrates was also one of the first reported advocates of using herbal remedies for the treatment of vomiting as well as pain.

A somewhat more poetic reference to the headache is contained in Babylonian literature from about the same period, describing the level of suffering and symptoms.

The Roman book of medicine, *De Re Medicina*, a 1st-century AD medical treatise written by Aulus Cornelius Celsus, a friend of Emperor Tiberius, is sometimes considered to be the only great Roman book of medicine. In it, he described how a headache could be triggered by wine or the heat of the sun. He also seems to be the first man who recognised and reported migraine triggers. His account of migraine seems to be of a rather mild to moderate type of illness which is not considered dangerous or fatal and is self-terminating but recurrent.

Aretaeus of Cappadocia, born in about AD 81, referred to a headache as *cephalalgia* or *cephalea*, describing a headache lasting a few days in half of the head clearly referring to migraine.

Claudius Galen, (AD 131-201), introduced the term *'hemicrania'* for the unilateral type of headache. This was later translated into old English as 'megrim' and into French as 'migraine'. Galen had a fascinating view of human physiology, recognising four 'humours'; blood, phlegm, yellow bile (colour), and black bile (melancholy) that governed health and disease. Fascinatingly, this medical concept sustained within medical thinking for about 1,400 years. He used bloodletting and herbal treatments containing vinegar, nutmeg, and rosemary leaves; treatment methods which persisted in medical history for many centuries.

Caelius Aurelianus, (born AD 400), in his work, *De Capitis Passione*, was one of the first to describe hemicrania and "crotophon" as terms which meant a hammering or throbbing type of pain and were associated with blurring of eyes, nausea, vomiting and vertigo. This description fits nicely with migraine.

Thomas Willis, one of the greatest figures of modern neurology, wrote quite a considerable number of titles about headaches and neurological problems in the 17th century. His clinical observation included advice about avoiding wine, spiced meats, hot baths, or sexual

intercourse, before advocating treatment with enemas, application of leeches, and bizarre pharmacotherapies which could also include hypnotics and “allodynes” (painkillers), possibly administered until fairly recently. He distinguished different types of headache. Furthermore, Willis was one of the first physicians who considered hereditary factors and the impact of injury and emotional distress. He also recognised some of the signs of the premonitory phase, such as hunger or polyuria.

During the times of both Thomas Willis and William Harvey, the opening of the skull, or trepanation, was considered to be one of the valid treatments for a severe type of headache or migraine.

The 18th and 19th centuries provided comprehensive works from a variety of physicians, describing migraine and developing treatments. It is believed that the first specific treatment for migraine was developed by the Swiss chemist, Ernst Rothlin, who isolated ergotamine in 1925. This was introduced into practice and subsequent studies of Harold Wolff and his team in 1963 established ergotamine tartrate as a preferred treatment for migraine headache. This was the single specific treatment until the development of triptans in the 1980s.

In 1983, the International Headache Society was established to provide a systemic approach to the classification of headache disorders and treatment guidelines for headache treatment and research. This started a new era, with headache and migraine receiving increasing interest in the research community and among clinicians.

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Headache Assessment

Headache assessment is a crucial part of the diagnostic process and starts with a careful analysis of the patient's history.

Some clinicians let the patients tell their story without interruption, some prefer to gently guide them through and unfold the history without side issues coming into play to speed up the process and utilise the time available during the consultation wisely. This can help, especially in the environment of a busy GP practice where the GP has only ten minutes or so to assess the headache, give a diagnosis, and make a decision, together with the patient, about further management.

Headache, when compared with other diagnostic conditions, tends to be diagnosed by just reviewing the history of the symptoms which makes it very satisfying to deal with. When a clear pattern is recognisable, such as tension headache, migraine, or cluster headache, recognising it may prevent us from inappropriate or unnecessary investigations. Successful treatment is always based on a successful diagnosis. The likelihood of successfully treating your headache increases significantly once we know the correct diagnosis.

However, there are some diagnostic difficulties when a patient's headache does not fit within the International Classification of Headache Disorders as this makes the clinician suspect that the patient might have two different types of headache. As I always say, patients do not read neurology textbooks or our classifications, and therefore, the way they suffer does not necessarily follow the exact pattern of the specific headache disorder from the classification! My approach to reviewing the patient's symptom history is a little different. I begin by giving the patient a quick but comprehensive checklist to fill in. This comprises twenty questions to narrow down the diagnosis as quickly as possible. The patient fills this in whilst in the waiting room prior to their appointment in the headache clinic. Since every checklist does have its shortcomings, and whilst it works well as a diagnostic tool if the patient suffers from one type of headache, it might not work for the patients who have two or even three different types of headache.

When teaching junior doctors, I always provide them with some tools so that they can remember to ask the right questions when assessing a patient with headache, especially in the acute setting when a clinician is under a considerable amount of stress and pressure to make a diagnosis swiftly. One such tool is a mnemonic called '**Socrates**', which can help the clinician to guide the patient through their history to neatly unfold their symptoms and enable recognition of the pattern as well as any underlying pathology.
SOCRATES stands for:

Site
Onset
Character
Radiation
Associated symptoms
Timing
Exacerbation
Severity

Questions related to this will help to establish your headache subtype based on the pattern of recognition.

Figure 1. Jacques-Louis David, *The Death of Socrates,* 1787, Metropolitan Museum of Art, New York. Accessed March 24, 2020. https://en.wikipedia.org/wiki/Trial_of_Socrates

When assessing the patient, we are taking into consideration not just the symptom presentation but also the nature of the onset which can determine the likelihood of certain underlying conditions. For instance, it is more concerning if the patient develops a headache for the first

time ever at the age of fifty or older. A short history of symptom duration is also more concerning than decades of similar symptoms. We divide the headaches into acute, subacute, and chronic groups, and eliminate some of the diagnostic conditions to narrow down the options. Episodic symptoms are less concerning than continuous, progressively worsening symptoms. Waking up with a headache at night or first thing in the morning raises a red flag. Red flags are concerning symptoms pointing towards the possibility of an underlying condition and the necessity of further investigations.

PAST MEDICAL HISTORY IN RELATION TO HEADACHE

In our headache clinic, it is usual practice to take details of the patient's past medical history at the first appointment. Some symptoms, such as vomiting attacks and motion sickness in childhood, are predictors of future migraine in later life. Episodes of anxiety and depression and some other mental health problems may be linked with tension headache. A past medical history of cervical spondylosis with wear and tear might also direct us to the possibility of a cervicogenic headache or pain radiating from the cervical area to the occiput and causing headache, sometimes with occipital neuralgia. A history of a past whiplash injury may also give us an indication to look at a cervicogenic headache as a likely problem. These are the most frequently occurring problems; however, there might be rarer links with past medical health.

Family History

Details of family history are always asked, especially in a patient who does seem to suffer from migraine. There seems to be a link with both migraine and tension headache running in families, but this tendency is not observed if the concern is about cluster headache. There is also a genetic tendency to malignancies, hypertension, and other disorders related to the problem of headache.

Social History

The patient's background and occupation might also be relevant to the type of headache they suffer. A typical example would be an office-based occupation using a computer and having a cervicogenic headache or migraine triggered by neck "wear and tear" or muscle stiffness. This is usually from incorrect positioning of the computer screen, incorrect sitting posture, or lighting. This may lead us to the initiation of an assessment of, and change to, the patient's workspace to improve the symptoms.

Stress-related headaches such as tension headache might be linked with a patient's stressful occupation and the advice of changing the work pattern or duties to reduce the stress or instigating a stress management programme can be beneficial.

Another typical group of patients in this category are drivers who spend many hours behind the wheel, especially HGV drivers where long driving hours and some off-road driving might cause significant pressure on the cervical spine together with micro-traumatisation and headache resulting from this.

There can be a rarer link, such as a patient whose very frequent migraine was being triggered by the strong smells in a perfume factory he owned. This would be an unfavourable working environment condition for someone predisposed to migraine with this trigger. Interestingly, when the production changed from perfumes to hand sanitisers during the COVID-19 pandemic, the patient's migraine miraculously disappeared.

When approaching a patient holistically, it is important to take their occupation into consideration. This may often help us to remove the trigger factors and improve matters.

Personal Habits

Personal habits include fluid intake, alcohol intake, recreational drugs, and smoking. Furthermore, the consumption of analgesia or triptans and can provide us with important information. Drinking more than six cups of coffee or tea, or the excessive intake of energy drinks or other caffeinated drinks, can lead to headache, but headache can also occur due to caffeine withdrawal. Monosodium glutamate (MSG), alcohol, and vasodilating drugs can also induce headache in people who are susceptible. These details can help us when taking the history and identifying triggers.

Physical Examination of a Patient with Headache

Whilst taking the history of symptoms might point us in a clear direction to the type of headache, we still should not abandon a physical examination of the patient as this could direct us in a certain way when looking for a possible underlying problem of concern. Whilst history taking might also give us some indication about associated anxiety, depression, or hypochondriac behaviours, physical examination is a useful objective exercise.

Constituents of the usual examination should include a neurological assessment of the reflexes and muscle tension in the cervical, trapezius, and paraspinal muscles, assessment of the optic discs and cranial nerves and, in cases of acute exacerbation, taking the patient's temperature, blood pressure, and pulse rate.

Neurological assessment includes an assessment of the sensory system, motor functions, coordination, reflexes, and cranial nerves, looking for signs of double vision, impaired eye movements, enlargement of the pupil on one side, reaction to light, or Horner's syndrome, which is a typical sign in patients with cluster headache during a cluster attack and can also be a sign of a basilar type of migraine. When assessing a patient, it might also be possible to spot rare signs of an underlying condition such as café au lait patches seen in neurofibromatosis or an association with a Marfan like appearance (thin, tall build, long fingers and toes) and liability to aneurism. With increasing experience of the physician, the extent of the findings increases. Also, an experienced physician has a streamlined approach and can usually reach the diagnosis early on, having investigations just to confirm it.

The assessment should also include general observations, blood pressure readings, and a measurement of the pulse rate. In some cases of very high blood pressure, this can cause headache, typically on the temples. In an acute setting when there is a concern about an underlying problem, temperature should be checked, and there should be further investigations

with blood tests and checking. In cases of suspected meningitis, there should also be checks for meningeal signs and analysis of cerebrospinal fluid.

However, in a busy GP practice when the GP has only ten minutes for all aspects of the assessment, some parts of the assessment could be delegated. If the patient is well known to the GP and there is a long history of symptoms of migraine (e.g., twenty-plus years) where the headache behaves in the exact same fashion as it always did, having just an increased frequency or severity of symptoms, then there is no point in conducting a detailed physical examination every time you see the patient. Different aspects of the assessment can be delegated, such as an assessment of the optic discs by an optician who can provide us with further information and a detailed assessment, including information about intraocular pressure and visual fields, which could give us some indication of an underlying problem if this is abnormal. Blood tests could be done by a practice nurse to support the busy GP.

It is an important process to also assess general health to determine if the headache is linked with a systemic disease, which could happen as well. For example, with increased weight, especially in females, this could be linked with idiopathic intracranial hypertension, which is a type of headache where increased pressure of the cerebrospinal fluid might cause headache, visual problems, and other symptoms. High blood pressure if not controlled can cause headache. The association of headache with general malaise, joint and muscle pain, night sweats, or a diagnosis of polymyalgia rheumatica could suggest temporal arteritis. However, going into more detail here would be well beyond the scope of this publication.

Most Common Headache Conditions

Most of the patients (more than 90%) I see in clinics suffer from the most common headache conditions, such as tension-type headache, migraine, or chronic daily headache. Whilst chronic daily headache is not a recognised entity or included in any classification, it comprises of chronic transformed migraine, chronic tension-type headache, medication-overuse headache, or a new daily persistent headache. About 30% of my patients have had symptoms worsened by medication overuse. Cluster headache is a less common primary headache but definitely worth mentioning in this chapter, mainly because of its severity and difficulty to treat.

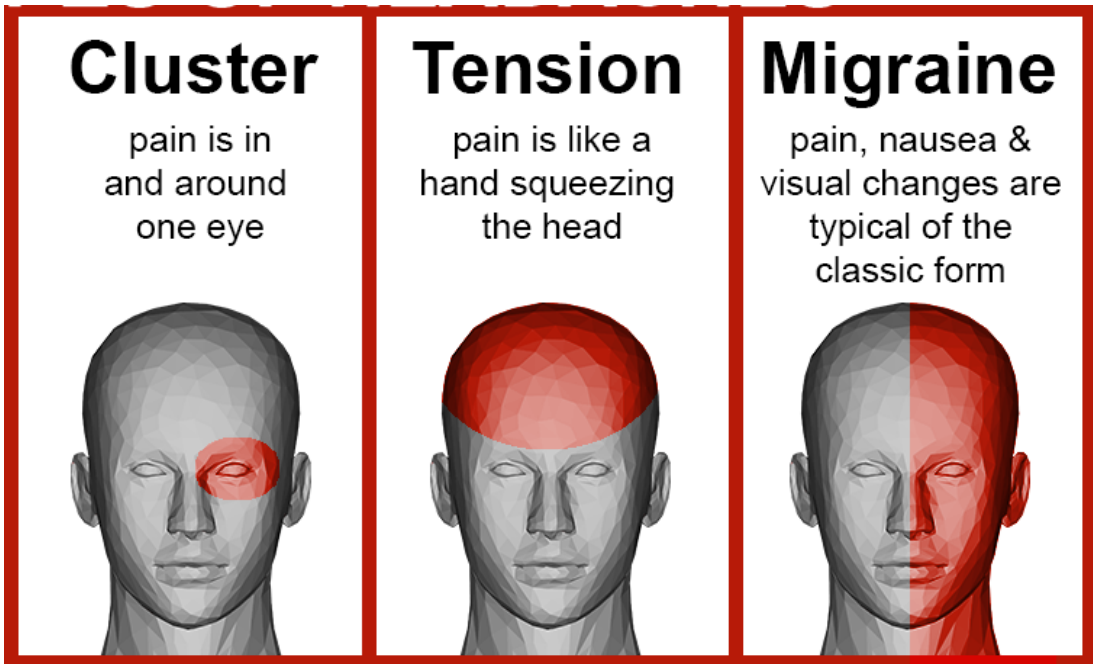
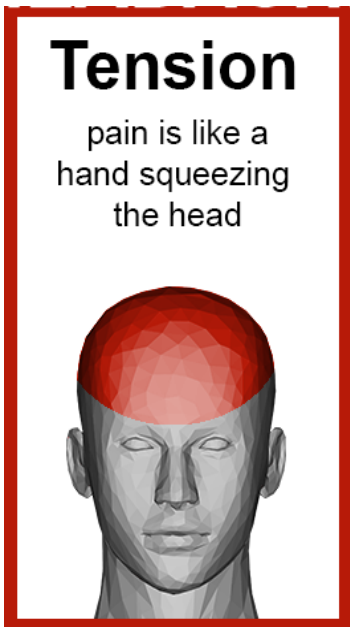


Figure 2. Differentiation between Cluster, Tension, and Migraine headache pain distribution.

Tension-Type Headache

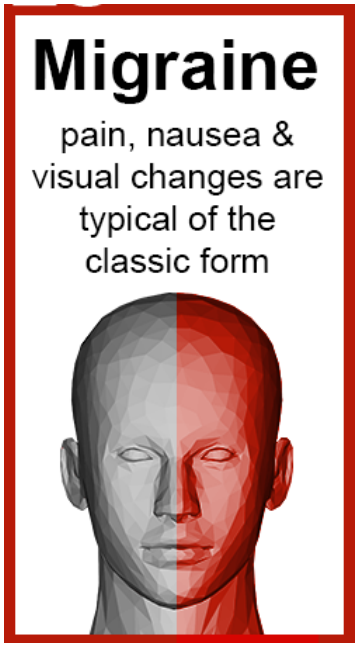


A tension headache is mild to moderate pain in your head that is often described as feeling like a diffuse pain or a tight band around your head.

Figure 3. Tension headache.

Tension-type headache is the most common headache and, despite that, is not very well understood. Most adults at some point in their life have experienced tension headache, although some people might have it more often than others. Whilst it is a mild to moderate pain, usually, it does not impact significantly on a patient's quality of life. It is typically short-lived and triggered by a busy day or a stressful experience. Usually, a tension-type headache does not stop someone from doing their day-to-day activities. In the case of increasingly frequent "headache days", there is the possibility of getting into a vicious circle of taking an increasing number of painkillers which could be a precursor to developing a chronic headache disorder due to medication overuse. Therefore, it definitely deserves our attention. It is important to advise that you need to be considered for preventative medication if the number of headache days increases towards eight to ten days per month. It is also quite important to establish triggers for the headache since trigger avoidance is the most effective method of headache management. Management is typically a balance between encouraging healthy habits, using medications appropriately, and finding effective non-pharmacological treatments (e.g., acupuncture, targeted physiotherapy, or exercise).

Migraine



Migraine is a recurrent headache that can come with or without accompanying symptoms, such as sensory disturbances called aura. These can include flashing light, zigzag lines, other visual changes, or transient neurological symptoms.

Figure 4. Migraine.

Migraine is the most frequently seen headache in a neurology clinic. This can be chronic or episodic migraine, with or without aura. An attack of a typical unilateral throbbing pain usually lasts a few hours, although if untreated it can last up to two or three days. The headache severity is moderate to severe and it typically stops the patient from being able to enjoy their usual day-to-day activities. This condition naturally runs in families and affects females more than males. Sadly, over-the-counter painkillers and remedies may not be effective.

Migraine has its own very typical pattern (see figure 5) and starts with premonitory symptoms prior to experiencing headache. This might involve cravings, yawning, fluid retention, or tiredness. Following this, the patient can develop aura. The most typical aura would be a visual one with zigzag lines and flashing lights, although patients can experience sensory symptoms, tingling or numbness in the hand which gradually spreads to the arm and face, difficulty speaking or slurring of speech, dizziness, vertigo, or developing a weakness on one side of the body. Some patients can even have bizarre hallucinations or illusions of vision and a distorted body image. This has been described as “Alice in Wonderland syndrome”. Some patients even reported a déjà vu like experience or dreamlike state. Every patient has his or her own typical migraine pattern, which comes on every time.

In the next stage, a typical pain begins. Migraine pain is characteristically unilateral. Patients describe the pain as throbbing or pulsating; this can be deeply behind the eye or at the inner angle of the eye, but most commonly in both the frontal and temporal regions on one side, although it can spread to the other side as well. During this phase, the patient can be nauseous (feel sick) or vomiting, and can be sleepy. They can also have photophobia (sensitivity to light) or phonophobia (sensitivity to sounds and noise). Characteristically, for migraine, patients prefer to lie down, relax, or sleep through the attack in a dark room. Sleep can actually terminate the attack without any other treatments, though with severe pain this might not be achievable.

Following the resolution of symptoms, patients can feel tired and very low, and have diuresis (increased urination). Some patients also have a limited food tolerance during the recovery period.

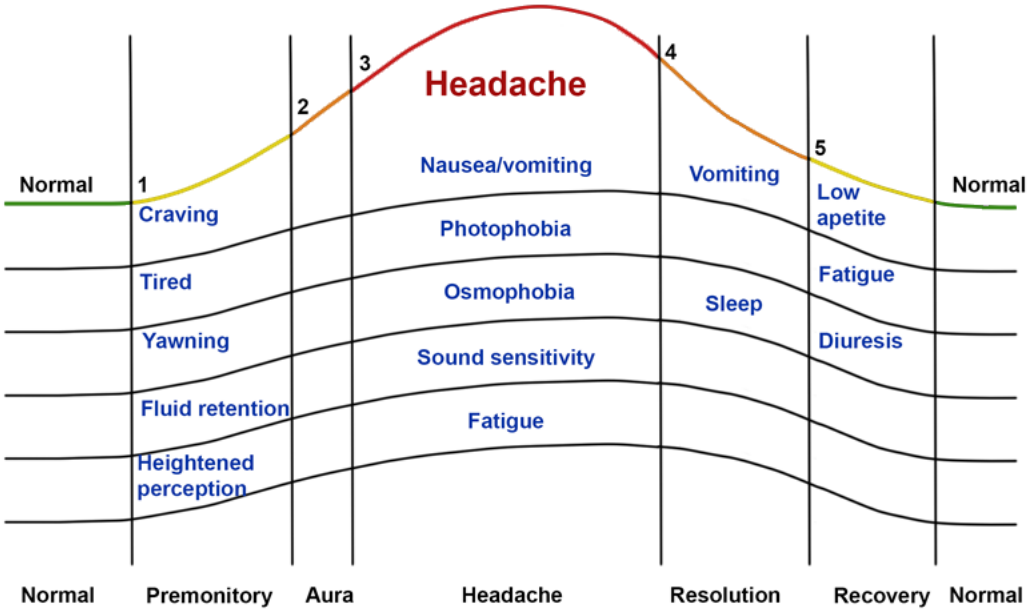


Figure 5. Migraine stages.

Stereotypically, a patient's migraine attacks are very similar from one attack to another. I always say that if you tell me, *"I have a migraine",* it's similar to me saying to you, "*I have a car"*. You probably would not know which make and model! Therefore, it is really important for your doctor to ask you many questions in order to exactly specify a migraine's symptoms and phenotype. If we are more specific in diagnosing a migraine type, this can significantly increase our success rate with regard to successfully treating the specific condition.

The most frightening type of migraine for a patient is a hemiplegic migraine, especially when it presents for the first time because it can mimic a stroke. Whilst it is usually transient, it resolves with no signs of an abnormality on a CT or MRI scan and it has no clinical sequelae. A small proportion of patients suffer from a basilar type of migraine where the symptoms arise from the brain stem. They complain of diplopia, vertigo, problems with coordination, dizziness, and dysarthria (difficulty with speaking - slurred speech). Some patients may have symptoms of feeling faint or may even faint during a migraine attack. This is often due to a strong vasovagal reflex reaction to pain. There are other rare types of migraine, or complications of migraine, which I will discuss in more detail in a separate chapter.

Due to the complexity of migraine treatment, a separate chapter is dedicated to this.

Medication-Overuse Headache

Medication-overuse headache is a rebound headache caused by regular, long term use of certain medications, typically painkillers, triptans, or caffeine to treat headaches or pain. Whilst painkillers provide pain relief for infrequent headaches, if taken more than ten days out of the month you are getting into dangerous territory as it might activate medication-overuse headaches.

I see patients with medication-overuse headache (MOH) increasingly frequently. According to a recent audit we conducted in our department, this comprises about 30% of headache patients referred to us by their GP. MOH tends to occur on a daily basis or on most days, and the patient would rarely have a crystal-clear head day. The headache severity varies between a mild and severe headache. Whilst this type of headache usually does not stop patients from performing their day-to-day activities, it can significantly impact on the quality of life.

The Vicious Circle of Medication Overuse

This is a chronic headache resulting from chronic analgesia overuse, usually if taken for three consecutive months or longer. The most frequent culprits are over-the-counter medications, such as non-steroidal anti-inflammatory drugs (e.g., ibuprofen), codeine, paracetamol, with or without added caffeine, and also prescription drugs such as triptans or opioids. Medication overuse has become increasingly common in the Western world since analgesia has been increasingly readily available over the counter and in supermarkets. In the UK, this even includes medications containing codeine, such as co-codamol. Other painkilling medications frequently used include a variety of preparations of a combined nature. Typically used medications containing codeine as a "hidden" extra are Nurofen Plus, Panadol Ultra, Solpadeine Max, Solpadeine Migraine, Syndol, and other less frequently used medications. Furthermore, medications containing hidden caffeine are significant culprits in analgesia overuse. It is commonly used in medications we can get over the counter, such as Anadin Extra, Anadin Maximum Strength, Panadol Extra, and Solpadeine Headache. Another group of medications which are to blame are triptans (the only migraine-specific acute medication), opioids, and ergotamine. According to expert experience, if triptans and opioids are taken more than eight days per month this can increase your risk of developing MOH. This is problematic not only if treating headache but can happen even if a different pain condition is treated, especially for migraine sufferers. The patients who are most prone to developing analgesia-overuse headache are patients with migraine. This happens less commonly in patients with tension-type or cluster headache.

Evidence shows that if headache is treated with commonly used painkillers between ten and fifteen days per month, this could lead to MOH if taken over a period of two to three consecutive months. Unfortunately, you can get into a vicious circle where the headache is increasingly frequent meaning that the analgesia is increasingly needed and therefore increasingly taken. The episodic headache then transforms into a daily headache with spikes of more severe pain.

Figure 6. Vicious circle of medication-overuse headache.

Most patients should be advised by their doctor to stop taking painkillers (analgesia). This is, in my experience, very difficult to say and even more difficult and upsetting for the patient to hear, as this prompts the question, "But what should I do?" It is very hard for a patient to accept the fact that the medication that has initially been helpful can actually be the culprit in the whole picture and can be causing most of the symptoms. However, experience and clinical studies show that the most effective treatment is to stop the analgesia. For some patients this is possible and not that difficult, but for others it can be very arduous, and for a small proportion of patients it can be impossible without further support. I always tell my patients that the headache usually gets worse before it gets better following the medication cessation. It is generally accepted that it can take two weeks (eleven days on average according to recent studies) before the patient can see any improvement. The very important step is to stop taking painkillers and triptans for at least six to eight weeks, (a painkiller "holiday" as we call it). It is known that there is a group of patients who require input from their GP, pain clinic or a headache clinic to actually manage this process. A patient can develop withdrawal symptoms. Therefore, the process of stopping the medication should be planned beforehand and the patient's family needs to be supporting them through this. For the majority of patients in our headache clinic, it has been very helpful to have a greater occipital nerve block at the onset of the period of stopping painkillers. In most patients, the nerve block itself was able to stop the migraines and headaches, or significantly reduce the severity of the symptoms for a few weeks or months, thereby making it possible to reduce or stop using painkillers without difficulty, especially if there is no headache or pain to treat. This option is not available in every region of the UK and is mainly provided by a pain clinic or headache clinic. Nevertheless, I would recommend seeking that route.

Top Tips for Your GP:

1. **Start preventative medication at the time of withdrawal of the analgesia**
2. **Plan medication withdrawal in advance of the most suitable time**
3. **Provide support of a headache specialist nurse where available**
4. **Educate the patient to understand why this helps**
5. **Consider greater occipital nerve block (GON) injection just prior to analgesia withdrawal**

There is an ongoing debate between experts as to whether offering preventative medication is actually beneficial. Unfortunately, preventative medication does not bring instant benefit and it may take a few weeks before the patient feels better. Some struggling patients might even require hospital admission and intravenous treatments to help with detoxication in the medication withdrawal phase.

How to Avoid Medication-Overuse Headache

It is important to treat a headache or migraine only when really needed and to treat it aggressively as well as effectively. Some would say the safest way is to use abortive medication to treat your condition for no more than eight days per month. If you treat headaches and migraines with multiple different medications it all adds up, for example, analgesia together with triptans. However, it is important to point out that it is about the number of treatment days per month, rather than the number of tablets you have taken.

I always ask my patients what medication they take, and often the response is “none”. But then I ask, “Do you take paracetamol or ibuprofen?” and then the answer is almost always “yes”. Some patients also add that on a bad day they even take codeine or other similar medications. It appears that, due to a common misconception, over-the-counter painkillers are not considered by many to be a medication.

If migraine, tension, or chronic headaches are increasing in frequency it is recommended to get prescribed preventative medication. Preventative medication is taken every day to reduce the frequency and severity of headaches and, by reducing the frequency, thereby reducing the analgesia usage. There is another common misconception that medication used as a preventative treatment is a painkiller so, when advised to stop all painkillers, patients mistakenly stop the preventative treatment as well as the painkillers. Preventative medication is not a painkiller and it is taken daily but does not cause headache; therefore, it does not need to be stopped when all painkillers are stopped. In some cases, a particular preventative medication does not work and may need to be changed. However, there are a variety of preventative medications available although each patient is unique and there is not one tablet for all. This will be addressed in more detail in the chapter entitled *Treatments Currently Available in the UK*.

Due to the high incidence and major impact medication-overuse headache has on people’s lives, if this chapter could convey the single most important message you could take away with you, it would significantly improve the landscape of the headache field…

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