

What is a Migraine?



Migraines can be seen as a form of a severe head pain that is almost three times as common in women than men. If you don't suffer from migraines yourself, then it is almost impossible to know the true extent of how debilitating they can be. Often, many people just think that migraines are just a form of a headache.

However, this is far from the truth – as a migraine sufferer will soon tell you. Migraines are more than headaches because they involve a disturbance in the sensory activity of the brain and are more than just pain.

Headaches are caused when pain receptors become activated in mainly the muscle, mucous membranes, and blood vessels. This is because the brain itself has no pain receptors. However, while still little is known about what migraines actually are and what causes them, it has been shown that migraines appear to be caused by problems with the blood vessels within the skull.

During a migraine, research shows that blood vessels in the brain dilate, which causes the feeling of pain for the sufferer. Dilation is when the walls of the blood vessels expand. It has been widely accepted that the reason that dilation of blood vessels occur is because of an initial constriction of blood vessels. While this at first seems like a paradox, there is actually a simple explanation for this. When blood vessels in the brain spontaneously constrict, they then begin to dilate in order to oppose this effect and maintain blood flow. It is the dilation that causes the actual pain.

Some migraine sufferers get what is called an 'aura'. This is characterized as a light object passing across their vision. This can be a kind of glowing white light or it can be a

series of flashing lights that fall across the sufferer's visual field. This aura has been shown to coincide with the constriction of blood vessels which why it is usually the case that the presence of an aura is likely to mean that a migraine is on its way (when the blood vessels then go on to dilate).

As migraines are very much an undiscovered area of neuroscience and medicine, there are relatively few treatments available. Those treatments that are available are somewhat effective, even though many of them are based on theories than fact, and they don't offer a full solution.

It is for this reason that many people are looking for their own information about migraines and how to treat them effectively. This involved trying to find certain things that trigger their migraines and looking to avoid them.

What is certain, however, is that migraines are not something that should be dismissed as a mere headache. Some migraine sufferers can be in a debilitating condition for a whole day or even longer. It becomes impossible for them to think, concentrate and go about their day-to-day life as the pain and the sickness can be so severe.

Types of Migraines

The term "migraine" is thrown around a lot. Some people use the term when they've just got a bad headache. But those that suffer from migraines know the difference, and to compare it to a simple headache would be absurd.

However, while the differences between headaches and migraines are apparent to both sufferers and the medical community, there is less certainty about the different types of migraines themselves.

It is not surprising that, with a disorder that is shrouded in so much mystery, that there would be some more complex happenings inside the cranium of a migraine sufferer and that the extent of a migraine for one person is different to the extent of a migraine for another.

As migraine research continues to expand, several types of migraines have been categorized. For example, it is known that there is a form of a migraine that is associated with women only and that the migraine occurs at the same time as their menstrual period.

Menstrual migraines – as they have been termed – show a clear indication to the medical community that migraines can be associated with hormonal imbalances. This, coupled with the information that mainly women and prepubescent boys get migraines and that they are less frequent in adult males – means that the female hormone estrogen may play a role in the cause of migraines.

Migraines can be more serious for those that suffer from what is known as "**hemiplegic migraines**". These migraines are actually genetic and are passed on throughout

families. They are a subtype of migraine by which the sufferer can become partially paralyzed on one side of the body during the aura phase of the migraine.

In these sufferers, it is common for the person to experience an aura moment before they become temporarily paralyzed on one side of their body. It is likely that the migraine and the dilation of the blood vessels are somehow affecting the motor nerves that control muscle tone and movement. As nerves cross over in the spinal cord, this means that activity on one side of the brain controls the opposite side of the body.

Other factors such as seizures and ataxia (the inability to coordinate muscle movements) can also develop in these patients. Rarely, these hemiplegic migraines can result in a coma.

Another form of migraines that is much more common is a form of migraine called “**ophthalmic migraines**”. These migraines involved visual disturbances such as lines and flickering lights in the visual field. It is likely that these occur when blood vessels in the visual field or the occipital field dilate.

Ophthalmic migraines are often wrongly referred to as “ocular migraines”. It’s no wonder that some people refer to different types of migraines in different ways.

There are many more forms of migraines being theorized about all the time. Due to the fact that migraines are still a relatively undiscovered area of medicine and neurological and sensory disorders are often difficult to explain or even comprehend, it is likely that the future of migraine treatment, research and understanding will raise more discrepancies.

What Causes Migraines?

While migraines still largely remain a mystery to doctors and scientists, there have been some explanations offered for what causes migraines. Generally, it is understood that the pain associated with migraine is derived from the fact that cerebral blood vessels dilate – become wider. However, it has also been suggested that the neurotransmitter serotonin also plays a part in this dilation process.

Serotonin is usually the neurotransmitter that most people come across in relation to depression, as a lack of serotonin was originally thought to cause depression. However, in relation to migraines, excess serotonin in the region of certain blood vessels within the brain can be the cause of the dilation process that is associated with migraines.

What is not known is why the serotonin levels reach such high levels in these brain regions of migraine patients or exactly how it happens.

While the medical community tries to work out what is going on in the brains of migraine patients, many sufferers are looking into their own symptoms and their own lifestyles and diets to see if they can find anything that triggers their migraines.

While the exact mechanism by which this happens is not known, many factors have been suggested as a possible trigger for migraines in many people. Some people have what is known as “photosensitive” migraines whereby they get a migraine in response to witnessing flashing lights or for spending too long staring at a computer screen, for example.

Many migraine sufferers may find that cutting certain foods out of their diet has helped reduce their migraines somewhat. Foods such as chocolate and dairy – particularly cheese – have come up time and time again as possible triggers of migraines.

Generally, foods that contain large quantities of a substance called Tyramine are thought to play some role in the triggering of migraines. These include things such as canned soups, dates, figs, kiwi, nuts, tofu and tomatoes.

Another school of thought suggests that migraines can generally be triggered as sensitivity to foods that contain lots of food additives and preservatives. The more natural the food, the better it will be for you; is the advice that some are suggesting.

Foods high in nitrates and MSG (monosodium glutamate) are common food additives and are constantly being researched in respect to being triggers of migraines.

Coffee is being touted more and more as one of the cheapest cures for migraines. While the caffeine in coffee may not be considered as a very strong or specific drug, it has been shown to decrease the effect of the dilation of blood vessels in the brain and some people swear by a cup of strong coffee when they get an aura or feel a migraine coming on.

There is no right answer to all of these theories and so a migraine sufferer just needs to look at their own lifestyle, habits and diet and see what works for them. Like with any ailment, it is important to look for patterns and examining your own life to see what may be leading to the problem.

Coping with Migraines

With so much information out there it is difficult to know what direction to take as a migraine sufferer. There are so many products out there and so many different techniques and medications that you can't tell which are the best to try out.

The best thing to do is to stick to a treatment plan and stay with it. When you keep jumping from one idea to the next – not only are you not getting any success with your migraines – but you are also not taking the time to work out which techniques are working for you. This is because, like with most things, treatments take time to work and you need to stick it out long enough to notice any effects.

If you are taking medication given from your doctor, try to avoid self-medicating with more over-the-counter medication, unless your doctor has agreed to this. It is important

to have a good outline and understanding of what is working for you and so it is essential that you remain consistent.

As well as trying to find out if there are any triggers of your migraines, also consider other factors such as the time of day that your migraines occur and after what events. Do you get them when you are tired? Do you get them when you exercise? Do you get them when you are in a certain temperature – for example, in the bath? Do you get them when you are stressed? Make yourself a migraine diary, documenting all of these facts so that you can begin to see the larger picture of what is actually happening and you may begin to notice some patterning.

A top tip is to make sure that you try to reduce any stress. Stress is a common cause of migraines and so you should remove yourself from stressful situations and learn some relaxation techniques such as yoga, meditation or even a form of martial art. There are many different ways that you can relax and you do not necessarily need to learn something like meditation or even leave the house to relax. Spend some time to yourself listening to some calming music or reading a gently book and make sure that you are not thinking of anything too taxing. You need to be able to find time for yourself in order to reduce your migraines.

Get some exercise. Exercise has constantly been shown to have positive effects for migraine sufferers. Make sure that, at minimum and if you are able to, that you get at least twenty minutes exercise at least three times per week. This can be exercise such as brisk walking, jogging or getting yourself on the treadmill if that's your preferred form of exercise. Taking part in team sports is another great way to get the exercise that you need to help your migraines while making it fun. Take your dog for a walk and head into the outdoors.

Make sure that you are eating a good diet and that you reduce or cut out smoking and alcohol – each of these are known triggers of migraines. Aim to keep yourself feeling great.

Migraine Treatments

As you may be aware, there are many different types of treatments from migraine. Each of the treatments that are available depend on the severity of your migraines. For example, those that have extreme migraines are debilitating for the sufferer and last more than 24 hours are likely to need more intensive medication prescribed by a doctor. However, those that have more infrequent migraines, or migraines that are not as severe, can get by on over-the-counter medication.

Those with less severe migraines often find that simple painkillers such as aspirin, acetaminophen ibuprofen can help to relieve the symptoms of the migraines. If you are finding that these are not working for you, try getting this soluble versions of these medications, that you can dissolve in water and drink, as they are likely to be fast acting.

If you find that your migraines are making you cautious and they are inducing vomiting, you can also get over-the-counter medication that targets sickness. These drugs that reduce nausea and vomiting unknown anti-emetics and may help to take the edge off the feeling sickness. An example of these drugs is domperidone.

As migraines can be pretty severe, you may be tempted to take more than the prescribed dose of these medications. However, never do this as it will make the situation worse. Always stick by the advice given on the label.

If your migraines are particularly painful and debilitating, the visit your doctor may result in the prescription of triptans. These drugs work against serotonin in the brain and can prevent the dilation of blood vessels causes migraines. These tend to be taken when you feel migraine coming on and the sooner that you take them when you realize that you are about to get a migraine, the more effective they will be.

Some people have to avoid triptans, however. This is because they can cause problems with people that have previously had a heart condition, high blood pressure and certain types of antidepressants. They are also not usually used in women that are pregnant or breastfeeding.

While many think of drugs as being treatments for their migraines, there are other options to consider. Migraines are commonly caused by stress and so taking action to reduce the stress in your life – through relaxation techniques - can also form part of a treatment.

Relaxation CDs and books, as well as meditation programs can prove useful in helping you to relax. Some people swear by the use of acupuncture to rid them of stress and anxiety but you need to find what is suitable for you. If you go down the route of alternative medicine and acupuncture, speak to a doctor or medical professional first in order to find out it is suitable for you and make sure any treatment that you receive is carried out by a licensed professional.

As migraines remain mostly a mystery to the medical community, the drawing board is pretty much empty in terms of treatments, when compared to other illnesses. It is very much a game of finding what is best for you and looking for relief in as many ways as you can.