

morningtonpeninsula **HEADACHE** CLINIC



5 myths about migraine

Welcome to your complimentary guide to “The 5 Myths about migraine”.

The aim of this booklet is to provide you with the tools to make an informed decision about your treatment by shining a light on some of the disinformation that surrounds migraine. You will also understand why it is essential that the neck be assessed and excluded as a source of symptoms before you receive a diagnosis of your condition.

NB: what is presented here is not just our opinion, but a summary of the facts informed by the past two decades of research produced by many different experts in the field.

Migraine is the third most prevalent disease (15-20% of the population suffer migraines) and the 8th most disabling disease in the world ⁽¹⁾.

Add tension-type headache to that and we are dealing with up to 50% of the population having episodic headaches, with 5% suffering daily symptoms. It is all the more amazing then that the success rate of the current medical approach in treating headaches is only 20-25% ⁽²⁾, and that the official consensus, despite a large volume of scientific research to enlighten us, is that the cause is unknown.

Unfortunately public commentary does little to present these facts unless it's a 'miracle cure' or a 'medical breakthrough' and sadly the overwhelming majority of the billions of dollars in research money dedicated to headaches every year is in pharmaceuticals. Unfortunately the main form of ongoing education your local doctor will receive in this area will come from a pharmaceutical company sales representative whose job is to sell medications, not provide a broad view of headache research.

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myth # 1 : the cause of migraines is unknown

While it important to acknowledge that migraine is a complex issue, and we don't know everything there is to know about every facet of migraines, much more is known than even a decade ago. We can now talk in an educated and informed way about the anatomical structures and nerve pathways at fault, and causative factors rather than continue to be dismissive not only of you, the sufferers, but of the researchers who have been pioneers in the field and given us so much knowledge.

All primary headaches (migraine, tension type headache, cluster headache and cervicogenic headaches), have a common problem occurring in part of the brain housing all the nerves for the head and face. This area, called the trigeminal nucleus is the 'sorting centre' for information coming in from the head and face before it is relayed up to the brain. The three nerves coming in from the top of the neck are the only other input into this area.

A great body of research looking into reflex activity, PET scans, and the effect of abortive medications shows clearly that this trigeminal nucleus is abnormally over active at rest, even outside of a headache episode. This can cause signals to be sent to the brain that are not being generated from the head or face – this is called referred symptoms.

Picture the activity in the trigeminal nucleus as water in a cup. The top of the cup (red line) is the amount of activity required to get a headache. On a symptom free day rather than being near empty (aqua line), chronic headache sufferers are 'overstimulated' or near full (yellow line) all of the time.

You are then waiting for a 'trigger' to spill it over the top of the red line and you have a headache (just over red line) or a migraine (well past red line).

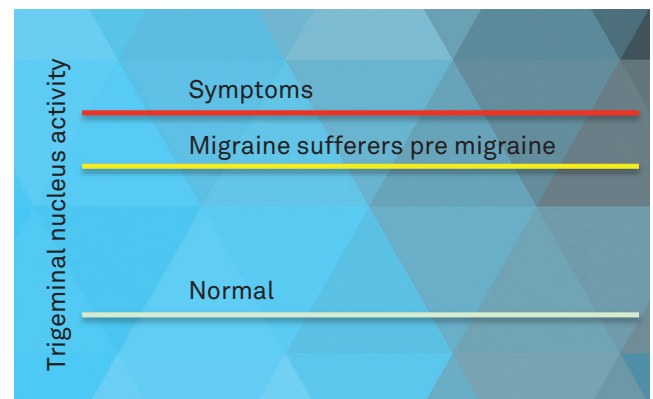
This is a fact that is not in dispute. The ongoing 'mystery' surrounds the reasons why this area becomes over stimulated.

Again, the only other nerve input into this area comes from the three nerves in the top of the neck. Logic dictates it is the most likely cause, and in fact for your specialist to reach a diagnosis of primary headache, it requires that all known sources of these symptoms are excluded. In other words, **your neck must be excluded as the source of this over activity to receive a diagnosis.**

Sadly, the neck is written off as only a symptom and not a cause. A major influence on the underlying problem is either being completely ignored, or treated using techniques designed to restore normal movement rather than desensitise a neurological disorder. The techniques used by this clinic known as the Watson Headache ® Approach are designed solely to treat the neck as it relates to referred head pain. When these techniques are applied, the over activity in the brainstem as measured by reflexes becomes normal again.

They are the only manual or hands on techniques to do this.

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myth # 2 : migraines are caused by blood flow changes in the brain

This was the dominant theory for the best part of a century due to the typical throbbing quality, the responsiveness to medications thought to effect blood flow, and theoretical models stretching the arteries in the brain to induce pain. We had very imaginative theories about sudden vasoconstriction followed by an overcompensating vasodilatation inexplicably flooding only one half of the brain with blood and causing the one sided throbbing pain. It sounded an amazing story, but research has shown it is fiction.

We now know very clearly that:

- a. The throbbing is entirely unrelated to blood flow. Research conducted at the university of Florida showed that the “pulse” does not coincide with heartbeat, but does coincide with brainwaves. In other words it is a “neural” pulse, not a vascular one. ⁽¹⁸⁾
- b. The cerebral arteries do not consistently dilate. In some cases they constrict, other cases they don't change, and even when they do dilate it is often after the onset of pain, and not to the amount required for direct referral of pain. This has been observed in numerous studies including using MRA imaging. ⁽¹⁹⁾
- c. The medications (triptans) abort migraines and headache due to increasing absorption of serotonin into the trigeminal nucleus in the brainstem inhibiting or lowering activity, NOT because of vasoconstriction of arteries around the brain, because there is no vasodilation in the first place.

These findings have been replicated and confirmed and along with MRA studies looking at blood flow in the brain prompted the president of the International Headache Society, Professor Peter Goadsby to publish an editorial in 2009, entitled “*The vascular theory of migraine – A great story wrecked by the facts*”. ⁽²⁰⁾

Despite this seemingly being the death knell,

the theory is still currently provided as explanation to some patients and as recently as 2014 the head of the Australasian General Practitioners association was quoted in the Melbourne Herald Sun citing this vasoconstriction/vasodilation event as the cause of migraines.

If blood vessels dilate under the skull, or muscles contract on the scalp, signals are sent via the trigeminal nerve, to the trigeminal nucleus and up into the brain. The overstimulation of the trigeminal nucleus means signals are sent up to the brain, that are not actually coming from muscles or blood vessels – but your brain think they are so you experience the same feeling.

In the same way that an amputee can ‘feel’ pain in a body part that is no longer there, you can feel sensations that are not actually occurring.

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BRAIN
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Scientific Commentary

**The vascular theory of migraine—a great story
wrecked by the facts**

myth # 3 : migraine or tension-type headache diagnosis is obvious

Sometimes it seems that way. You have severe throbbing pain lasting from 1-3 days, you get sensitive to light and sound and get nausea/vomiting. Maybe you have this band of tightness around the head that feels like your head is in a vice.

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Once you rule out severe pathology (i.e. brain tumor) then its clear this is a migraine or tension-type headache (TTH), right? Wrong.

According to the IHS (International Headache Society) classification for headaches the symptom list just described can also be applied to headache originating from the neck. In fact the only reason why neck based headaches are not allowed to be evenly bilateral in symptoms is because it would be impossible to distinguish from TTH. In other words TTH would cease to exist as a diagnostic category.

This is why for the diagnosis of any primary headache (migraine and TTH), all other known causes for those symptoms must be excluded.

In other words, before you can be properly diagnosed with migraine, tension type headache or cluster headache **YOU MUST HAVE YOUR NECK ASSESSED** to rule it out as the cause. This will usually extend to either a scan (X-ray, MRI or CT), which will rule out any major structural abnormality, or assessment by a therapist (physiotherapist, chiropractor, osteopath etc) who will use the same methods to assess neck pain or stiffness as they will headache. In other words the techniques are not designed to do the job.

To have a diagnosis of any form of primary headache including migraine you must rule out the neck with techniques designed specifically to assess the role of the neck in these conditions. In 80% of cases we will be unable to rule the neck out – in other words in 80% of cases there is a readily treatable neck condition driving the symptoms, and it is missed due to assessment with inadequate techniques, or ignored altogether.

By using techniques specifically designed to test the relationship between the neck and your symptoms we can identify and treat the small faults that cause headache and migraine. We can make a significant change in 80% of cases.

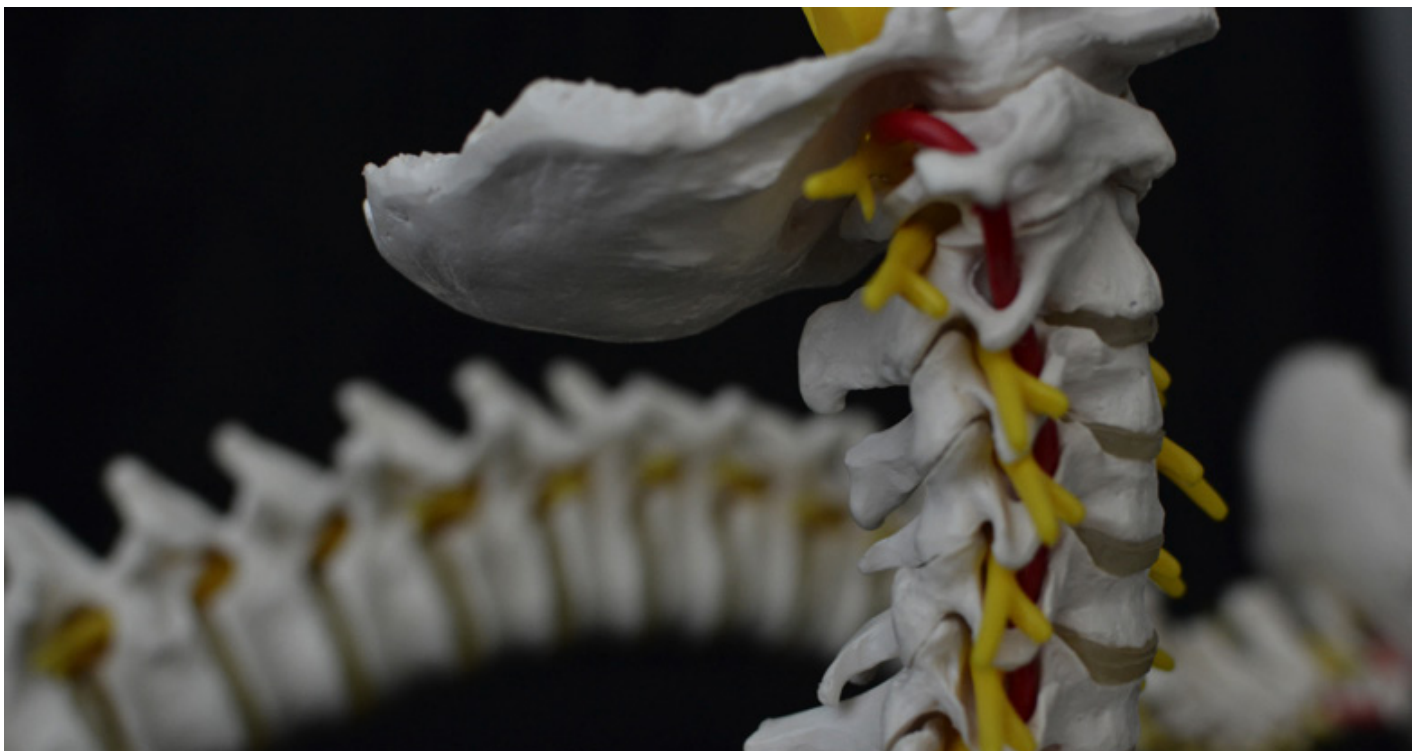
myth # 4 : the neck is irrelevant in migraine

Well this is a fact actually, but its also a myth. Confused? Let me explain. The issue here is more to do with the diagnosis than the relevance of the neck. As described in myth 3, it can be very difficult to tell whether or not it is a migraine, or a neck based headache as the two look identical. If the neck has not been excluded using headache specific techniques then you may end up with a misdiagnosis. Dr Peter Rothbart noted the same issue in his headache clinic in Toronto, with over 800 consecutive cases referred to his clinic with diagnosis of migraine, tension headache and cluster headache, 80% had symptoms abolished with anaesthetic blocks of the top part of the neck.

The same applies in our clinic. In over 1000 people assessed, over 800 have been previously diagnosed with migraine, tension headache or cluster headache have responded to treatment in the upper cervical spine. According to the classification, as these can clearly be attributed to a fault in the upper part of the neck, they are technically NOT migraines or TTH. They fail to meet diagnostic criteria E, which states ALL other sources of symptoms are excluded before the diagnosis of primary headache is reached.

So the truth is that yes, the neck IS irrelevant in primary headache (migraine and TTH), but that approximately 80% of people diagnosed have an incomplete diagnosis - Criteria E (not attributable to another cause) has not adequately been assessed with techniques designed specifically to do the job.

Essentially, they have an irritant in the top of the neck that is assessable, treatable, and self manageable.



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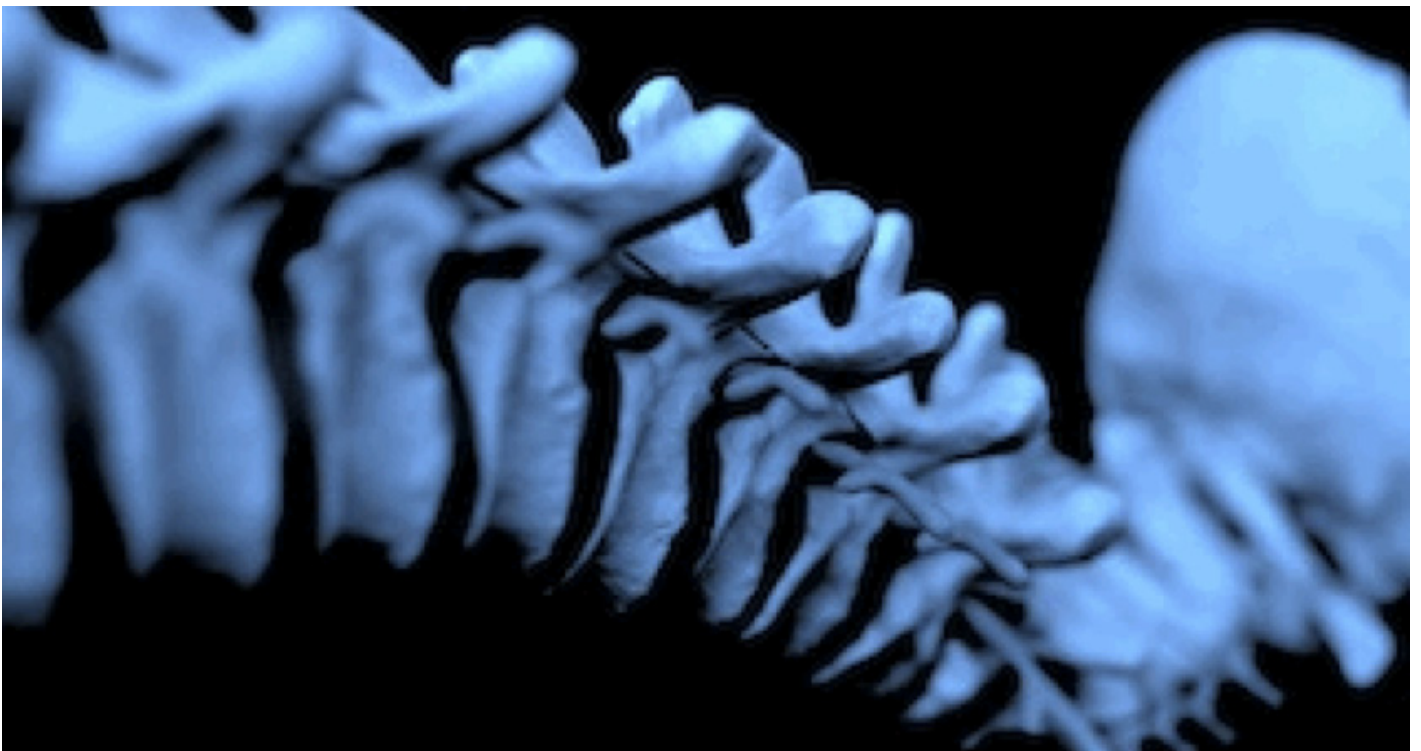
myth # 5 : the neck must be painful for it to be causing symptoms

While 40% of people successfully treated in this clinic have had neck symptoms as a part of, or prior to their migraines, another 30% have only mild tightness under the base of the skull, and 30% have no reportable symptoms. All have the same previously misunderstood small fault in the top of the neck, which has either been overlooked, or treated with techniques not designed to correct the fault.

In the same way that someone with flat feet don't usually get foot or arch pain, but the stresses this creates are felt elsewhere in the ankle, knees, hips and back. To use another example the first symptom people with disc problems in their lower back often feel is pain or numbness in the lower leg and feet.

This small fault in the top of the neck creates stress, pressure and tension locally but if it sits there without changing the body adapts and it becomes 'normal'. However, the inputs from nerves in the area continue to flow back into the brainstem constantly causing the overactivity of the trigeminal nucleus. It builds the 'powder keg' waiting for a 'spark' or trigger set it off.

By treating this fault in a sustainable way we can decrease the constant overstimulation of the trigeminal nucleus. These are the only hands on techniques to establish the ability to treat the underlying sensitivity we know to be present in ALL chronic and recurrent headache types.



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