

# The Possible Connection Between Migraines and Wrist Pain

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# Could Migraine and Carpal Tunnel Be Connected?

A recent study has broken important ground on the relationship between two common pain disorders, which could lead to significant advances in pain management for millions of people.

Researchers at UT Southwestern Medical Center have published their optimistic findings on the link between migraine headache and carpal tunnel syndrome – a connection the medical community had long suspected, and can now confirm.

While migraine is centered firmly in the head, and carpal tunnel affects only the wrists and hands, both are debilitating disorders that cause sufferers an incredible amount of pain and stress. In fact, each condition results in millions of bedridden days and billions of healthcare dollars (close to 20 billion combined), and they can call for complex and invasive treatments.

The new findings promise a big step forward in how these pain disorders are diagnosed, treated, and perhaps even prevented.

# What the Study Reveals

Based on a review of 25,880 cases, the study out of UT Southwestern found that 34% of patients with carpal tunnel syndrome also suffered from migraine, and 8% of migraine sufferers also lived with carpal tunnel. Those statistics may not seem remarkably high, but relatively speaking, many more patients suffered from both conditions together than one without the other.

Ultimately, researchers concluded that migraine sufferers were 2.7 times more likely to suffer from carpal tunnel syndrome than the rest of the population, and carpal tunnel patients were 2.6 times more likely to experience migraines than those without the nerve disorder.

Although there seems to be a clear connection, many uncertainties still surround the migraine-carpal tunnel link. One of the lead researchers, Dr. Douglas Sammer, insists that they simply don't know why those with carpal tunnel tend to experience migraines (and vice versa), but the study results do offer a bit of clarity and hope in the form of:

# **Common Risk Factors**

The study highlighted a few risk factors for both migraine and carpal tunnel syndrome, including smoking, obesity, and diabetes. It also appears that women are more likely to develop either disorder than men, and there could be a common systemic or neurologic risk factor that is yet to be discovered.

As with many diseases, knowing the risk factors is vital for prevention, detection, and earlier treatment.

## Next page: things to keep in mind.

## What the Study Reveals

#### More Markers to Look For

Carpal tunnel syndrome is the most well-known nerve compression disorder; in contrast, migraine headaches have not been considered nerve compression issues in the past. However, the study results suggest that there may be good reason to run nerve compression exams in the head and neck for migraine sufferers – these tests could hold clues to how migraines affect the central nervous system now, and how that nerve compression could spread in the years to come.

## **Better Targeted Treatments in Future**

Some doctors have successfully used botulinum toxin or nerve compression surgery – methods for treating nerve disorders like carpal tunnel – on stubborn cases of migraine pain, when more traditional treatment has fallen short.

Given that there's now hard evidence to support a biological connection between carpal tunnel and migraine, the medical community can explore more specific nerve compression relationships, and whether or not there may be a hereditary component, too.

# Study Limitations and Points to Keep in Mind

While the study was widespread and thorough, some experts point out a few areas where the statistics don't explain as much as they seem to. It's tough to argue that there isn't a connection between the two disorders, but the strength of the connection – and the conclusions you can draw from it – isn't quite so clear.

#### Lack of Specifics in the Survey

Unfortunately, the survey wasn't very precise in its headache terminology, and that could muddy the results when it comes to migraine statistics. For instance, the survey question listed "migraine or severe headache," which as many patients and doctors know, can be two distinct conditions.

The worry is that some people may have stated they were migraine sufferers when they suffered from another sort of headache (that could very well stem from a different source or condition). Moreover, the patients were responsible for defining their condition – a medical diagnosis of carpal tunnel syndrome or migraine was not required for them to participate in the study.

#### Nerve Compression Is Probably Not the Only Answer

Some experts suspect that the signs of nerve compression in the head and neck of migraine sufferers could predict the development of carpal tunnel syndrome down the road, since migraine tends to affect younger people more often, while carpal tunnel syndrome typically hit later in life (between the ages of 45 and 60).

However, some headache doctors are reluctant to put all the emphasis on nerve compression as the cause of migraines – and eventually, carpal tunnel – since years of research and many migraine cases suggest that the root of the problem is with the signals in the brain.

There were other objections to the research methods, including that the lifetime prevalence of migraine wasn't considered, nor were the other full-body symptoms of migraines. However, the study still remains as the largest of its kind, and is certainly useful for the medical community.

Perhaps the best point to come from the work is the drive to follow new possible explanations for migraine pain,

and how it connects to other pain disorders, which could lead to preventative measures and a lot less suffering.