

Pharmaceutical Drugs and Migraines

A Review of Statin Drugs

Research Article by Lyle Henry

"My migraines came back and the only thing I've changed in my daily routine is I started a new cholesterol-lowering drug. Can statin drugs be a problem for migraineurs?" We recently received this question from one of our clients who takes Tuliv Migraine Defense daily and has been migraine-free for quite some time.

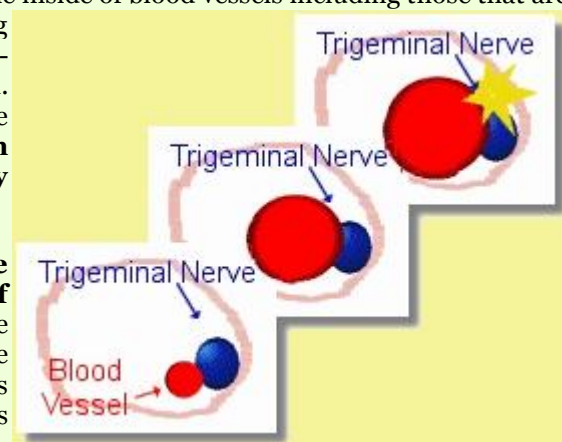
There are times when a person starts taking a new prescription drug for various ailments and **within a few days or weeks begins to see an increase in the frequency or severity of headaches.** Even though many pharmaceuticals have headache listed as a side effect, they are often overlooked as the cause for changes in headache patterns. One of the reasons may be that for the general population the problem may not be as severe or common as it is for one prone to migraines and the reason for the increase is more subtle - such as the case of taking a statin drug.

Anytime there is a change in the headache pattern of a migraine, one should start looking for the reason by reviewing what has changed in terms of routines, diets, supplements and pharmaceuticals. In the case of changes in pharmaceuticals (and by this we mean starting on a drug, stopping one, or changing dosage), it is necessary to not only review the known side effects but to also **investigate how the drug acts on the body.** Specifically, we look at what effect this drug has on the components of a migraine including something that may increase the level of nitric oxide* in the body.

Statin drugs, including well-known medications such as Lipitor, Zocor, Mevacor, Pravachol, and Crestor, are prescribed for their lipid lowering effects. Unfortunately, statin drugs can and generally do increase the nitric oxide levels in the body through what is called nitric oxide synthase in isolated endothelial cells.

Endothelial cells make up the layer of flat cells lining the inside of blood vessels including those that are intertwined with the bilateral trigeminal nerve running forward along the temporal lobe area in the head - referred to as the trigeminal-vascular system. Expansion of these blood vessels leads to a migraine headache. In other words, these **statin drugs can increase the level of nitric oxide in the very region where migraines occur.**

The **pain felt during a migraine headache is the result of the expansion of the blood vessels of the trigeminal-vascular system** to the point where they are putting undue pressure on the hair-like nerve endings. This pressure and pinching is what is felt as sustained pain lasting for as long as the blood vessels



are in this expanded state.

Since increasing the level of nitric oxide can initiate a migraine occurrence, taking a statin drug can result in an increased level of migraines. For the general population taking a statin drug (or for that matter increasing the level of nitric oxide) may not be a problem; however, for the person prone to migraines, the higher level of nitric oxide can be very painful.

You should always visit with your primary care professional before making any changes to your pharmaceutical scheme.

*Tuliv migraine research revealed that nitric oxide and L-tyrosine (in the form of tyramine) combine to generate the neurochemical that triggers the onset of a migraine. Elevating one or both of these substances increases your chance for a severe migraine headache.

We welcome your questions and comments. You can contact Lyle Henry directly by email at Lyle@Tuliv.com or by calling 1-866-367-5953. There is no cost or obligation for his services.



Learn To Avoid Migraine Triggers - Nitric Oxide

Since Nitric Oxide (NO) is not listed as an ingredient on product labels, it can be difficult to identify those items that increase the level of nitric oxide unless the product specifically indicates that as its purpose.

Take for example the drug Viagra or any of its alternatives including natural products; they are designed to increase the level of nitric oxide in the body and that is the reason they can and often do trigger migraines headaches. In fact, many of these cause headaches even for those not prone to migraines.

Although exercise is the most common way the body increases the level of nitric oxide (and the reason some people get migraine headaches after exercise), nitric oxide is generally increased through diet, most notably by consuming the amino acids L-arginine and L-citrulline which in turn create nitric oxide in the body. By knowing this, one can avoid the foods and supplements that contain L-arginine, which can be found in nuts, fruits, meats and dairy.

Another source for the production of nitric oxide is acidophilus, which is found in abundance in yogurt, which is why yogurt is on our list of foods to avoid for migraine prevention.

Increasing nitric oxide has become popular for athletes and bodybuilders through the use of protein drinks, supplements, and powders which are loaded with L-arginine and L-citrulline, not to mention most contain L-tyrosine, another component in the recipe for migraines. These should be avoided or used with extreme caution by those who are prone to migraines.

To learn more about what to avoid and why, please visit www.tuliv.com or [click here](#) to print our list.

If you are in doubt about a supplement or something in your diet, please feel free to email us at MD@Tuliv.com for assistance.



Migraine Defense Works!

"Migraine Defense has become an essential component of my daily migraine preventive regime. Without it, I would experience chronic daily head pain and more frequent and severe migraines. I know this because I stopped using it for a several weeks to see what would happen and my debilitating daily head pain returned along with more severe migraines.

"With Migraine Defense I am able to participate in my life fully again. I'm able to work part-time in a job that I love. I can meet social and family obligations without fear of having to cancel at the last minute. I can be there for my daughter when she needs me, rather than my depending on her while I lie in the dark in the grip of pain." Melanie Symonds

A migraine-free life is within reach - let us help you get there!

Email your questions to Lyle: Lyle@Tuliv.com or call Lyle or Eileen at 1-866-367-5953. Order on-line at www.Tuliv.com or by phone 1-866-367-5953.



Get Answers to Your Migraine Questions

Call us at **1-866-367-5953** or send an email to MD@Tuliv.com

It's time for you To Live migraine-free.