

## **Summer Newsletter**

## Barometric Pressure Change & Migraine

Many of my migraine patients tell me they don't even need to listen to the weather report. They can tell when rainy or cloudy weather is coming due to an increase in their migraines.

## Why is that?

We don't know exactly why changes, especially drops, in barometric pressure can lead to migraines but here is what we do know: an approaching storm causes a drop in barometric pressure. This affects the pressure in the external environment including the external ear canal. This can lead to an imbalance between the pressure behind the tympanic membrane (middle ear) and the external barometric pressure. There is a certain air pressure in the sinuses, Eustachian tubes, and inner ear at any given time and if the external pressure drops, that imbalance is thought to trigger a migraine in some migraine sufferers. A change in barometric pressure of as little as .20 millibars impacts the pressure in the ear canal and can lead to migraines.

## How can this be treated?

In addition to taking the usual migraine medication, inserting a pressure regulating device (MigraineX) may be helpful. MigraineX looks like a small set of ear plugs (drug & latex free) and is designed to control the rate of barometric pressure changes in the ear canal adjacent to the ear drum (tympanic membrane). The device can be inserted preventively or at first sign of headache if a drop in barometric pressure suspected as the trigger. This product is best used in conjunction with a free App called MigraineX that can predict changes in weather and barometric pressure.

When I first learned about this device, I requested that a limited number of free samples be sent to my office for use in my patients who report that changes in barometric pressure cause migraine attacks. I have given out the first 8 devices this past week and have asked these patients to give my office feedback in coming weeks.

I am skeptical of new products that come into the marketplace promising too much especially if they are expensive. I was very pleased to see that MigraineX can be ordered

online through Amazon for only \$11.99. In addition, it retails for about \$9.99 at CVS and does not require a prescription.

Grant O'Connell, Digital Marketing Manager, Cirrus Healthcare/MigraineX states "What separates MigraineX from other migraine relief medications is, medication-only focuses on relieving symptoms *after* a headache starts. The best defense against weather-related migraines is to prevent the pressure before it starts. Utilizing our app for weather event alerts will give you a step ahead to minimize the pressure using the MigraineX plugs. We are confident new customers will find MigraineX to be a great reliever from headaches."

As I am writing this newsletter, I am wearing them and they are comfortable. They were easy to insert. Also, I easily downloaded the MigraineX app.

In a study of 36 patients who used this device in addition to their usual migraine medications, the majority felt their migraine was better treated and less likely to return. For more information, go to <a href="https://www.migrainex.net">www.migrainex.net</a>

For any of you who feel that changes in barometric pressure and weather are a common trigger for your migraines, I suggest you set up an appointment to review our current treatment plan and see if this new MigraineX device makes sense for you.

In summary, MigraineX may be a welcome addition to your Migraine Toolbox if changes in weather and barometric pressure are triggers for you. I welcome your feedback once you have tried this device.

Susan Hutchinson, MD Director-Orange County Migraine & Headache Center June 18, 2017