Headband for Migraine Treatment Proves Effective

by BARBARA LEECH

Cefaly Migraine Headband Shows Promising Results

I am always on the lookout for new things to add to my migraine survival kit. Medications often do not help and I worry about what I am putting into my body, so I am forever on the lookout for other things I can try that have limited side effects and are not traditional medication.

Among the impressive and new treatments for migraine relief out there is something that seems straight out of *Back to the Future*. It is called Cefaly, which is a battery operated device that first hit the market in trials back in 2009. This new technology in migraine relief is actually worn on the head to deliver “treatments” that focus on the true cause of your headache.

The device was written up in several medical journals in 2013 as a highly effective treatment and prevention method for migraine headaches, and claims to work by targeting the true cause of migraine — select nerves within your head.

Essentially, it looks like a metal headband and is placed over the forehead with adhesive electrodes. They go to work on the trigeminal nerve, which is believed by doctors to be the root cause of migraine headaches. The device claims to be the perfect solution for more than half of migraine sufferers, allowing medication to be significantly reduced and remarkably improving quality of life for those who have not found adequate migraine relief through other, traditional methods of treatment.

There are several published clinical studies that back up these claims of effectiveness and Cefaly has been approved by the FDA for use under prescription and is considered safe.

How Does It Work?

Most headaches and migraines involve the trigeminal nerve. Through the electrode, Cefaly generates precise micro-impulses in order to stimulate the nerve endings of the trigeminal nerve. Neuro stimulation of the trigeminal nerve with Cefaly produces a sedative effect. Regular repetition of this sedative effect helps reduce the number of attacks of migraine.

- Cefaly is positioned on the forehead using an adhesive electrode and the Cefaly device is then connected to it. Precise impulses are produced, which act on the trigeminal nerve in order to prevent and treat migraine attacks.
- After you hook up and press the start button for your 20 minute treatment session, the impulse intensity and associated tingling sensation increases. If it becomes a little too much, you can press the button again to stabilize the intensity. It will not increase again over the 20 minutes of treatment.

- As you repeat your Cefaly sessions, your tolerance of the intensity should increase. You should be able to constantly increase the intensity and the sessions will become more and more effective.

- Each treatment when you have a migraine underway delivers a high frequency neuro stimulation that limits the pain signal from the nerve center.
- For prevention of potential migraines, it is designed for those patients that experience frequent episodes. Essentially, when used over time, it changes the trigger threshold of the migraines, by sending out low frequency neuro stimulation. The result is that the migraine threshold becomes harder to reach and headaches become less frequent, less painful and may completely disappear for many sufferers.
- During the 20-minute Cefaly session, patients may relax or carry out their normal activities.

According to studies treatment can reduce the need for migraine medications by up to 75% in most patients. More than 70 percent of migraine sufferers who have tired it have experienced notable relief and feel it prevented migraine attacks from coming on or eliminated migraines completely.

Next page: a look at the electrodes, and some safety points.

Is It Worth a Try?

If you suffer from frequent migraines and despite medications, they still are impacting your work and relationships and life, it may be worth talking to your doctor about this treatment option. Cefaly has been approved for use in adults 18 years of age and older and is only available by prescription from a doctor.

Details on the Electrodes

- The electrodes can be used for about 20 “treatments sessions.” As long as they continue to adhere well to the skin on the forehead, they may be re-used. Before applying the electrode, the skin on the forehead should always be cleaned and degreased thoroughly with soap and water. Once the session ends, the electrode should be stuck back onto its clear plastic backing sheet and stored in its pouch.
- The device runs on batteries. Two good-quality alkaline AAA batteries last around one month based on a one-session-per-day use.
- The treatments may feel strange and perhaps a bit painful. The sensation produced by Cefaly is unusual, but according to the company, most people get used to it quickly — after a few sessions. Some people who are more sensitive may find the treatments slightly painful, but not compared to a migraine. (There is an option to press a button during the session when the sensation becomes slightly uncomfortable to limit the signal intensity.) Only about 1 % of patients have found the sensation too uncomfortable to continue with treatment.

Is This Treatment Safe for Everyone?

There are certain conditions that limit this device as an option for treatment. You cannot use Cefaly:

- If you have a metal or electronic device within your head
- If you have not been diagnosed with migraine, but have pain of unknown origin
- If you have a cardiac pacemaker or implanted or wearable defibrillator. This may cause interference with pacing, electric shock or death.

Considerations

Cefaly is not covered yet by insurance plans and is not expected to be for at least a year or more. It is also not cheap — the device costs $349 and a basic kit of electrodes cost $25.

The most common side effects include:

- Intolerance to the feeling of Cefaly on the forehead: 1.25%
- Sensation of fatigue during and after the session: 0.65%

- Irritation of the skin on the forehead from the electrodes: 0.22%

Cefaly Technology is a Belgium-based company specializing in electronics for medical applications. To learn more, ask your doctor if this might be a treatment option to consider.