Health magazine offers ways to cut down on migraines, including Botox

By Nancy Szokan
The Washington Post

People who suffer migraines know that not even the best medicines may get rid of all the pain all the time. "Preventive medications help 50 percent of patients by about 50 percent," Sheena Aurora, an associate professor of neurology at Stanford, tells writer Aviva Patz. In September's edition of Health magazine, Patz suggests three of the "more promising, less traditional" alternative therapies that can be used along with drugs or by themselves as part of a migraine-relief strategy. And she includes comments from both clinical specialists and migraine sufferers.

They are:
Cefaly: This is an FDA-approved band, worn across the forehead, that electrically stimulates the supraorbital nerve, said to be where migraine pain begins. Worn for 20 minutes a day (whether the user has a headache or not), Cefaly reduced monthly migraine days by 30 percent among participants in a study published in the journal Neurology last year. A tester for the magazine reported she used it to get three to five migraines a week; in the four months after she started using Cefaly, she had only two. The headband costs around $325, and users need a doctor's prescription.

Elimination diet: Some foods are known to activate an inflammation response that triggers migraines. The most common of these triggers are red wine, aged cheese, cured meats, MSG, dairy, artificial sweeteners, chocolate and gluten. Clinics typically recommend cutting out all these foods for six weeks, see if you feel better, then add them back into your diet one at a time to see which ones may cause pain. "Not all migraine sufferers have food sensitivities, but for those who do, eliminating a problem food can cut headaches by 50 to 60 percent," says Dr. Meria Diamond of the Diamond Headache Clinic in Chicago. Consult a doctor before beginning this.

Botox: If it can relax facial muscles to smooth wrinkles, scientists wondered, could Botox also dull migraine pain? Studies published in early 2010 reported that migraine sufferers who received Botox injections experienced a major decrease in the number of headache days; later that year, the FDA approved the drug as a treatment for chronic migraine. A tester for the magazine reported that not only did Botox help her headaches, but the effect lasted longer after successive treatments. Insurance should cover the costs, Patz says. Warning: Potential side effects include bruising and neck pain.

EARTH'S OZONE LAYER IS RECOVERING

By Gail Sullivan
The Washington Post

Finally, some good news about the environment: The giant hole in Earth's ozone layer is shrinking.

The atmospheric layer that protects Earth's inhabitants from the sun's harmful ultraviolet rays is slowly rebuilding itself, according to a United Nations report published on Wednesday.

Scientists credit the recovery to the phasing out of chemicals used in refrigerators, air conditioners and aerosol cans in the 1980s.

"It's a victory for diplomacy and for science and for the fact that we were able to work together," said chemist Mario Molina, who won a Nobel Prize for his research into the ozone layer. It was in the 1970s that scientists first realised chlorofluorocarbons (CFCs) had worn the ozone layer thin above Antarctica. Studies have shown that left unchecked, ozone destruction could cause higher rates of skin cancer, disrupt plant growth and destabilise the aquatic food chain thanks to an increase in harmful ultraviolet rays.

Fortunately, the world's policymakers were proactive about environmental problems back then. Leaders agreed in 1987 to the Montreal Protocol, which phased out CFCs. At the time, industry objected, saying the science was speculative and that regulation would be costly and lead to lost jobs.

Sound familiar? Once chemical companies figured out how to make safe substitutes for CFCs, industry was less resistant to the proposed precautionary measures. DuPont and other producers eventually moved to phase out production and supported international controls.

Nearly 30 years after the Montreal Protocol was signed, the ozone layer is just starting to heal, according to a panel of 300 scientists that reports every four years to the United Nations on the subject.

It will take until 2050 for the ozone layer in the mid-latitudes to return to relatively healthy 1980s conditions, the U.N. report said. Around the Antarctic, where the ozone layer is the most damaged, it will take until 2075.

This is the first time scientists have detected a measurable increase in ozone, said senior scientific officer Geir Braathen of the World Meteorological Organisation. "The ozone layer remains about 6 percent thinner than in the 1980s. Damaging chemicals still linger in the atmosphere. While it has stopped growing, the hole over the Antarctic still appears each year."

The hole was largest in 2006 at about 30 million square kilometres. It's now about 20 million square kilometres, Reuters said — big enough for the moon to pass through, though its size varies from year to year because of atmospheric temperature changes.

Achim Steiner, executive director of the U.N. Environment Programme, called the effort to get rid of ozone-destroying substances "one of the great success stories of international collective action in addressing a global environmental change phenomenon."

The report, however, did have some bad news. Carbon tetrafluoride, one of the ozone-depleting chemicals that should have been phased out, was found in increased amounts in the past decade, which could mean it was still being used illegally, according to the Massachusetts Institute of Technology atmospheric scientist Susan Solomon. The Associated Press said the chemicals that replaced CFCs — the stuff blamed for damaging the ozone layer in the first place — are contributing to another environmental problem: global warming.

Paradoxically, the heat-trapping greenhouse gases believed to contribute to global warming are actually helping rebuild the ozone layer.

Paul A. Newman, who co-chairs the U.N. panel, told the AP higher levels of carbon dioxide and other gases help cool the upper stratosphere, which increases the amount of ozone. "The challenges that we face are still huge," he said.

"The success of the Montreal Protocol should encourage further action not only on the protection and recovery of the ozone layer but also on climate."