

# THE LATEST ON

CHRONIC MIGRAINE

# IT'S IN THE GENES

A new study finds a genetic link between blood sugar problems and migraine. Researchers analyzed the DNA of 873,341 people, 102,084 of whom had migraines. They found genes that seemed to simultaneously play a role in both migraine and blood sugar levels and others that appeared to affect both migraine and levels of insulin, a hormone that helps the body process sugar. The strongest link they found was between migraine and a genetic tendency toward low fasting proinsulin levels. The finding suggests that medications to raise proinsulin levels could one day help prevent migraines, too.

SOURCE: Human Genetics

nimum number of days per month a person with chronic migraines has headaches of any type.

SOURCE: Therapeutic Advances in Chronic Disease

Number of women living with migraine compared

SOURCE: Journal of the American Medical Association

# **MIGRAINES HIT WOMEN HARDER**

Women are three times more likely to have migraines than men. According to a large survey, their attacks may last longer than men's and come with a lot more symptoms, too. The results found that men's attacks typically lasted about 32 hours. Women's lasted 44-and-a-half hours when they had their period and close to 37 hours when they didn't. They more often had nausea, vomiting, aura, and light and sound sensitivity with their attacks, too. Women were also more likely to see a return of their headache within 24 hours of taking migraine medicine. The findings suggest hormones play a role in migraine and sex-specific treatment could be effective.

SOURCE: Headache

# STATS & FACTS

By Sonya Collins

Reviewed by Melinda Ratini, DO, WebMD Medical Reviewer

ages at which adult migraine is diagnosed.



**Number of people** 

whose episodic migraine becomes chronic every year.

**Number of** 

people with

migraine who

report having

triggers, such

bright lights,

and hunger.

as stress,

Number of people whose migraines are without aura.



Minimum number of days per month a person with chronic migraine has headaches with migraine features, such as light sensitivity, nausea, and vomiting.

People who say too much or too little sleep triggers their migraines.





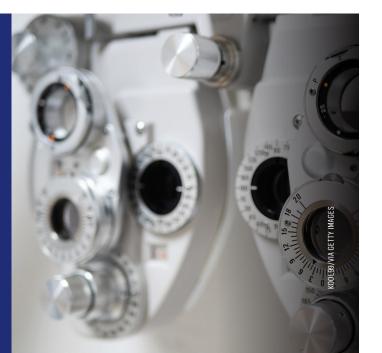
People who say stress triggers their migraines.



# **GREATER RISK FOR GLAUCOMA?**

When was the last time you had your eyes checked? In a study that tracked 2,716,562 adults for 9 years, researchers found that those with migraine were more likely than those without to develop glaucoma. Those at greatest risk were people living with chronic or severe migraines. Doctors can lower your risk for developing glaucoma by monitoring and regulating the pressure in your eyes with medicine, laser therapy, or surgery. Talk to your doctor about your risk for glaucoma and whether it's time for an eye exam.

SOURCE: PLOS One



SOURCES: Journal of the National Medical Association, Cleveland Clinic, National Library of Medicine



#### **CHRONIC MIGRAINE**

BOTOX® prevents headaches in adults with Chronic Migraine: 15 or more headache days a month, each lasting 4 hours or more. BOTOX® is not approved for 14 or fewer headache days a month.

BOTOX® prevents, on average, 8 to 9 headache days and migraine/probable migraine days a month (vs 6 to 7 for placebo).



# **BOTOX®** for Chronic Migraine?



what about cost?



does it work?

Questions about BOTOX®? It's time to ask your doctor.

in a survey, 97% of current BOTOX® users say they plan to keep using it!\*(n=71)



and of current BOTOX® users said they wish they'd talked to a doctor and started sooner!\*(n=71)



BOTOX® prevents headaches in adults with Chronic Migraine before they even start.

It's about 10 minutes of treatment once every 3 months.<sup>†</sup>

It's time to talk to your doctor about BOTOX® and ask if samples are available.

By participating in the BOTOX® Savings Program, you acknowledge and agree to the full Terms & Conditions set out at BOTOXSavingsProgram.com/ TermsandConditions. Patients enrolled in Medicare, Medicaid, TRICARE, or any other government-reimbursed healthcare program are not eligible. Other restrictions and maximum limits apply.

you may pay text SAVE to 27747\*



BOTOXChronicMigraine.com

\*2020 BOTOX\* Chronic Migraine Patient Market Research BOTOX\* Current Users. \*18DTOX\* injections are given by your doctor. \*1see Privacy & Terms: http://bit.ly/2RxxiVr. Message & data rates may apply. Message frequency may vary. Text HELP for help or STOP to end.

# INDICATION

BOTOX® (onabotulinumtoxinA) is a prescription medicine that is injected into muscles and used to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older. It is not known whether BOTOX is safe and effective to prevent headaches in patients with migraine who have 14 or fewer headache days each month (episodic migraine).

#### **IMPORTANT SAFETY INFORMATION**

BOTOX may cause serious side effects that can be life threatening. Get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX:

- Problems swallowing, speaking, or breathing, due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are preexisting before injection. Swallowing problems may last for several months.
- Spread of toxin effects. The effect of botulinum toxin may affect areas away from the injection site and cause serious symptoms, including loss of strength and all-over muscle weakness; double vision; blurred vision; drooping eyelids; hoarseness or

change or loss of voice; trouble saving words clearly; loss of bladder control; trouble breathing; and trouble swallowing.

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX has been used at the recommended dose to treat chronic migraine. BOTOX may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of receiving BOTOX. If this happens, do not drive a car, operate machinery, or do other dangerous activities.

**Do not receive BOTOX if you** are allergic to any of the ingredients in BOTOX (see Medication Guide for ingredients); had an allergic reaction to any other botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); have a skin infection at the planned injection site.

The dose of BOTOX is not the same as, or comparable to, another botulinum toxin product.

Serious and/or immediate allergic reactions have been reported, including itching; rash; red, itchy welts; wheezing; asthma symptoms; dizziness; or feeling faint. Get medical help right away if you experience symptoms; further injection of BOTOX should be discontinued.

#### IMPORTANT SAFETY INFORMATION (continued)

**Tell your doctor about all your muscle or nerve conditions,** such as ALS or Lou Gehrig's disease, myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects, including difficulty swallowing and difficulty breathing from typical doses of BOTOX.

Tell your doctor about all your medical conditions, including if you have or have had bleeding problems; have plans to have surgery; had surgery on your face; have weakness of forehead muscles, trouble raising your eyebrows, drooping eyelids, and any other abnormal facial change; are pregnant or plan to become pregnant (it is not known if BOTOX can harm your unborn baby); are breastfeeding or plan to (it is not known if BOTOX passes into breast milk).

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Using BOTOX with certain other medicines may cause serious side effects. Do not start any new medicines until you have told your doctor that you have received BOTOX in the past.

Tell your doctor if you received any other botulinum toxin product in the last 4 months: have received injections of botulinum toxin such as Myobloc®, Dysport®, or Xeomin® in the past (tell your doctor exactly which product you received); have recently received

an antibiotic by injection; take muscle relaxants; take an allergy or cold medicine; take a sleep medicine; take aspirin-like products or blood thinners.

Other side effects of BOTOX include dry mouth; discomfort or pain at the injection site; tiredness; headache; neck pain; eye problems such as double vision, blurred vision. decreased eyesight, drooping eyelids, swelling of your eyelids, and dry eyes; drooping eyebrows; and upper respiratory tract infection.

For more information, refer to the Medication Guide or talk with your doctor.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see accompanying Summary of Information about BOTOX®.

If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

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# Summary of Information about $\textsc{BOTOX}^{\circledcirc}$ (onabotulinumtoxinA)

What is the most important information I should know about BOTOX®?

BOTOX® may cause serious side effects that can be life threatening. Call your doctor or get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX®:

- Problems swallowing, speaking, or breathing, due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are pre-existing before injection. Swallowing problems may last for several months
- Spread of toxin effects. The effect of botulinum toxin may affect
  areas away from the injection site and cause serious symptoms
  including: loss of strength and all-over muscle weakness,
  double vision, blurred vision and drooping eyelids, hoarseness
  or change or loss of voice, trouble saying words clearly, loss of
  bladder control, trouble breathing, and trouble swallowing

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX® has been used at the recommended dose to treat Chronic Migraine.

BOTOX® may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of taking BOTOX®. If this happens, do not drive a car, operate machinery, or do other dangerous activities.

BOTOX® dosing units are not the same as, or comparable to, any other botulinum toxin product.

#### What is BOTOX®?

BOTOX® is prescription medicine a medical professional injects into muscles to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older.

It is not known whether BOTOX® is safe or effective to prevent headaches in people with migraine who have 14 or fewer headache days each month (episodic migraine).

#### Who should not receive BOTOX®?

Do not receive BOTOX® if you are: allergic to any of the ingredients in BOTOX® such as botulinum toxin type A and human serum albumin; had an allergic reaction to another botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); or have a skin infection at the planned injection site.

# What should I tell my doctor before treatment?

Tell your doctor about all your muscle or nerve conditions, such as amyotrophic lateral sclerosis (Lou Gehrig's disease), myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects.

Tell your doctor if you have or have had breathing problems such as asthma or emphysema; swallowing problems; bleeding issues; plan to or have had surgery; have forehead muscle weakness such as trouble raising your eyebrows; drooping eyelids; or any changes to your face.

Tell your doctor if you are pregnant, plan to become pregnant, are breastfeeding or plan to breast feed. It is not known if BOTOX® (onabotulinumtoxinA) can harm your unborn baby or if BOTOX® passes into breast milk.

#### What Are Common Side Effects?

The most common side effects include neck pain; headache; migraine; slight or partial facial paralysis; drooping eyebrows; eyelid drooping; bronchitis; musculoskeletal stiffness; muscular weakness; pain in 1 or more muscles, ligaments, tendons, or bones; muscle spasms; injection site pain; and high blood pressure. Other side effects have been reported including allergic reactions e.g. itching, rash, red itchy welts, wheezing, asthma symptoms, or dizziness or feeling faint.

These are not all of the possible side effects. Call your doctor for medical advice if you experience any side effects after treatment with BOTOX®.

# What Should I Tell My Doctor About Medicines and Vitamins I Take?

Using BOTOX® with certain other medicines may cause serious side effects. Do not start any new medicines until you have told your doctor that you have received BOTOX® in the past. Tell your doctor if you have received an injection with another botulinum toxin product in the last 4 months, such as Myobloc®, Dysport®, or Xeomin®. Be sure your doctor knows which product you received.

Tell your doctor about all prescription and over-the-counter medicines, vitamins and herbal supplements you take; recent antibiotic injections; anticholinergics; muscle relaxants; allergy or cold medicine; sleep medicine; aspirin-like products; and blood thinners. Ask your doctor if you are not sure whether your medicine is listed above.

#### To Learn More

If you would like more information, talk to your doctor and/or go to BotoxChronicMigraine.com for full Product Information.

You may report side effects to the FDA at www.fda.gov/medwatch or call 1-800-FDA-1088.

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# THE CHALLENGES OF CHRONIC MIGRAINE

# **MORE THAN JUST HEAD PAIN**

By Rachel Reiff Ellis

Reviewed by Melinda Ratini, DO, WebMD Medical Reviewer

If you're plagued with migraine symptoms for at least 15 days per month for at least 3 months, your doctor is likely to diagnose you with chronic migraine. About 3% to 5% of people in the U.S. have chronic migraine, and studies suggest about 3% of people with migraine episodes will eventually develop chronic migraine.

"I often ask my patients whether they have more headache days per month compared to headache-free days per month," says Sara Elizabeth Sacco, MD, director of the Carolinas Headache Clinic in Matthews, NC. "If headache days win out, that fits the definition of chronic migraine."

# **BEYOND HEADACHES**

For your headache to be classified as a migraine, you'll also have symptoms such as nausea or vomiting, and you may be sensitive to sound and light. Your head pain is also typically moderate to severe.

Living with these symptoms has a huge impact on your everyday life. You may find it hard to maintain relationships or keep up with work responsibilities. Migraine can make it hard to be physically active, which can affect your mood and overall wellness.

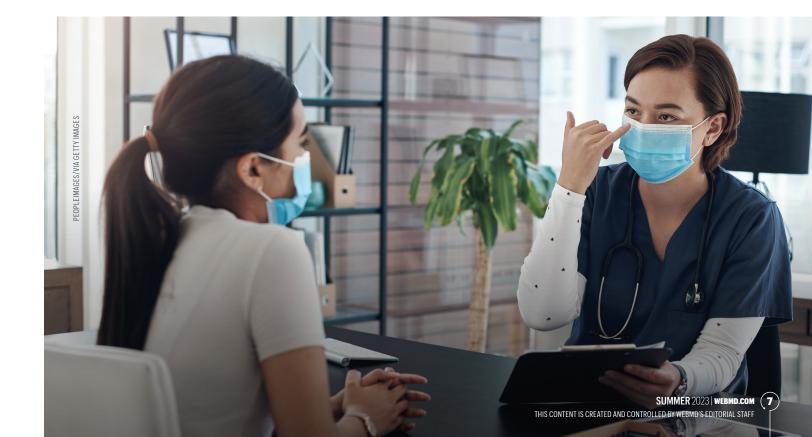
Many people with chronic migraine say they have a lower quality of life and poorer health than people with episodic migraine, or migraines that happen fewer than 15 days a month. Between 30% to 50% of people with chronic migraine deal with depression and anxiety, often because of the constant stress and pain of migraine symptoms.

# FINDING A TREATMENT BALANCE

It can sometimes be challenging to find treatment that works for you. What's more, taking some painkillers such as over-the-counter nonsteroidal anti-inflammatory drugs (NSAIDs) and triptans too frequently can create a new type of head pain called medication overuse headache.

"Virtually all acute medications we use to treat headache can lead to medication overuse headache," Sacco says. "It makes an already difficult-to-treat disorder worse."

Medication overuse headache not only creates more frequent headaches, but it also decreases the chances that preventative medications will work on your migraine. Talk to your doctor about how to carefully use these treatments to help avoid the negative cycle of medication overuse headache.

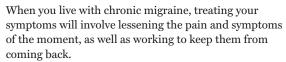




# **MANAGING AND** PREVENTING MIGRAINE

By Rachel Reiff Ellis

Reviewed by Melinda Ratini, DO, WebMD Medical Reviewer



"There are two main types of therapy: preventive therapy, like a medication you use on a regular basis to reduce the frequency and severity of headache, and acute—or as-needed—medication you use on the days you have headaches," says Chia-Chun Chiang, MD, assistant professor of neurology at Mayo Clinic in Rochester, MN.

# TREATING MIGRAINES AS THEY HAPPEN

Acute treatments are medications you take at the first sign of migraine headache. They don't keep migraines from happening, but they offer pain relief during one.

When a migraine strikes—or when you can tell it's about to strike-your doctor may suggest starting with an over-the-counter medication like an NSAID or acetaminophen. Other options include dopamine antagonists,

ergot alkaloids, and triptans. Medications such as anti-nausea pills can help with nonpain migraine symptoms.

If you can't take other options, your doctor may try opioids. These drugs are highly addictive, so you can only take them for a short time.

If you start using any of the pain-relief medications more than two to three times a week, or 10 days a month, it's time to talk to your doctor for another plan.

"If you use an as-needed pain medication such as

# **LIFESTYLE CHANGES**

These prevention measures can also help.

- + Keep a headache diary.
- + Control your stress.
- + Maintain a healthy weight.
- + Stay hydrated.
- + Eat regular meals.
- + Go to sleep and wake up at about the same time.

acetaminophen or an NSAID too frequently, it could potentially cause a condition called medication overuse headache, meaning that taking those medications too frequently itself can cause headache," Chiang says.

That's why it's important to have preventative therapies as well.

#### **REDUCING YOUR MIGRAINES**

The goal of preventive medication is to reduce how often you get a migraine, how severe your attacks are, and how long they last. You might take an oral medication or an injection.

"There are three oral medications we consider," says Dmitri Aleksenko, MD, neurologist at Pierremont Neurology Clinic in Shreveport, LA. "Blood pressure medication like beta-blockers, anticonvulsants, and antidepressants."

Injection medications include onabotulinum toxin A (Botox), CGRP antagonists, and an injectable ergot alkaloid (also available as a nasal spray). You take these on a regular basis, sometimes as infrequently as every 3 months.

The type of treatment your doctor tries for you first depends on other medical conditions you might have, such as high blood pressure, insomnia, or weight problems. Chiang says doctors typically consider oral medications first before trying injection options.

"Most of the time insurance requires patients to try at least two or three traditional oral daily medications first before they'll approve either Botox injection or the CGRP monoclonal antibodies," she says.

# **OTHER OPTIONS**

Chia-Chun Chiang, MD, lists some nonmedication treatment choices.

- + Magnesium supplements
- + Riboflavin (vitamin B2)
- + Neuromodulation devices
- + Nerve blocks



# MY LIFE WITH CHRONIC MIGRAINE

# HERE'S HOW I CHOOSE TO MANAGE THIS CONDITION

By Tessie Mandeville
Reviewed by Melinda Ratini, DO, WebMD Medical Reviewer



My name is Tessie Mandeville. I'm 53 years old, and I live in Bellingham, WA.

At first, I'd get a migraine every few months. They'd generally be gone by the next morning. Then I got a few a month. Then they became chronic and intractable. I average 10 to 15 a month. Sometimes I get them every day, and that's with incredible amounts of medicine and wonderful healers.

# **CHRONIC MIGRAINE AT WORK**

I am a Unitarian Universalist minister and a hospital chaplain. I work in palliative care with patients who have chronic and terminal illnesses and their families. As I developed migraines, I began to understand suffering in a different way. I could tap into that in a way that let me be very real with the patient.

But the hospital environment is not good for my migraines. The bright, fluorescent lights, the sounds, sirens of course, the strong smells in the hospital, and the stress. When a family calls in the chaplain, it's not because things are going well. There's a lot of stress involved.

I've worked with a migraine, but when they became too much, I started to use intermittent FMLA (Family and Medical Leave Act) so that I could take off the days when I was too sick without fear of losing my job. Then I took the summer off, which really reduced my migraines, but as soon as I went back, I got really sick again, so I had to resign. I couldn't keep doing that to myself and

my body.

Now I am a certified interfaith spiritual director. I have a private practice in my home. It's a much gentler rhythm for me. So far, it's working.

# **KNOWING YOUR TRIGGERS**

I have a lot of triggers. Besides the ones at the hospital, lack of sleep is one.

Gluten and dairy might have been triggers. When I eliminated those from my diet, it seemed to help at first. That's how it is with everything: Something might work for a little while, but then it stops. Like sleep. Sometimes I can sleep for 10 to 12 hours and still wake up with a migraine. It's constant trial and error. What can trigger me one day, won't the next. And vice versa.

I'm sure hormones play a role. When I started getting migraines, I was perimenopausal. Many women stop having migraines when they enter menopause. I hope I'm one of them. But sometimes I think the air I breathe is a trigger.

# FINDING EFFECTIVE TREATMENTS

I've tried all sorts of medicines. They help for a while and then they stop.

Currently, I use several preventive and abortive medicines and some complementary therapies, like chiropractic, acupuncture, and massage. But it takes a lot of energy to get to these appointments, and sometimes I just don't have it in me.

#### LIVING WITH CHRONIC MIGRAINE

I have a lot of help living with chronic pain. I have a wonderful, compassionate partner of 23 years who was with me before I ever got sick. It has brought to life those vows, "In sickness and in health."

I journal and write poetry, which helps me emotionally. Laughter helps, too. You have to laugh because life can be so absurd.

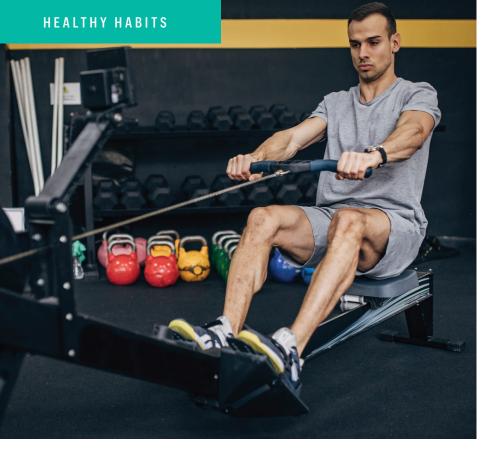
I am in several online support groups. Some days, when I am feeling really bad, I say, "I need to be in my support groups today." Then, on the days that I can offer support and say to someone in the group, "I'm so sorry you're struggling," that makes me feel a little better, too.

# LOOKING FOR A MIGRAINE SUPPORT GROUP?

Here are some places to start your search:

- + MilesForMigraine.org
- + PainConnection.org
- + MVertigo.org
- + AmericanMigraineFoundation.org
- + USPainFoundation.org
- + TheCenterForChronicIllness.org

Inclusion of these organizations does not constitute an endorsement by WebMD and no endorsement is implied.



# MANAGE YOUR MIGRAINES

# TAKE STEPS TO HELP PREVENT ATTACKS

By Sonya Collins

Reviewed by Jennifer Robinson, MD, WebMD Medical Reviewer

You didn't do anything to cause your chronic migraines, but new habits may help put off your next attack.

# MANAGE YOUR STRESS

"Perceived stress is probably the No. 1 thing that people attribute their migraines to," says Teshamae Monteith, MD, chief of the headache division at University of Miami Health System in Florida.

Not only can stress cause a migraine, but living with chronic migraines can cause stress. It's a self-perpetuating cycle.

Some stressors, like bills and deadlines, you simply can't eliminate. But you can change the way you

respond to them. Make time in your day for stress reduction. Take a daily walk, meditate, practice breathing exercises, or spend time with friends regularly.

#### MIND YOUR SLEEP

Both too much and too little sleep can trigger a migraine.

"It's important to have good sleep hygiene," Monteith says. Good sleep hygiene is a set of healthy habits that include sticking to a set bedtime; winding down about an hour before bed; and keeping your bedroom cool, dark, and screen-free.

Sleep disorders such as chronic

insomnia, sleep apnea, and restless legs syndrome are more common in people with migraine. People with chronic migraine are twice as likely as those with less frequent headaches to have a disorder. If you have trouble sleeping that you can't resolve with better habits, talk to your doctor. "Studies that look at treating insomnia with cognitive behavioral therapy show that you get improvement in frequency of migraines," Monteith says.

# **DON'T MISS MEALS**

When you skip a meal, go on a diet, or exercise on an empty stomach, your blood sugar drops, which triggers a migraine in some people. If hunger triggers migraines for you, be mindful about getting enough calories throughout the day through proper, satisfying meals and snacks. If you need to lose weight, do it slowly over time-not with a crash, starvation diet. When you live with chronic migraine, an extreme diet could set you up for even more headaches.

#### MAKE TIME FOR MOVEMENT

Regular exercise may help reduce migraine pain. In a study, a routine that included aerobic exercise and relaxation reduced migraine pain as much as topiramate, a common migraine medication. On top of that, regular physical activity can help lower risk for other possible migraine triggers, like stress, anxiety, and poor sleep.

If exercise triggers your chronic migraines, first get your migraines under control and then experiment with exercise as a way to keep future headaches at bay.

# **MONITOR MENSTRUATION**

For some people, monthly periods trigger migraines. If that's the case for you, "You might benefit from treating preemptively with nonsteroidal anti-inflammatories or long-acting triptans in those one to two days leading up to your menstrual cycle," Monteith says.

If you have migraines without aura, it may be safe to take estrogen-containing birth control pills continuously to stop your periods altogether. These pills may raise the risk for stroke in women who have migraines with aura.