MIGRAINE WORLD SUMMIT

Migraine Trigger Guide:

Sleep

Explanation

Poor sleep is one of the most common migraine triggers.

Adequate sleep is essential to your migraine health.

It's a restorative brain function that affects many other aspects of bodily function.

> "… Eliminating sleep problems as a trigger (can) only help any migraineurs"
>
> Source: Headache: The Journal of Head and Face Pain (May, 2006)

Trigger causes

It is often oversimplified but we know that any of the following can be a sleep-related trigger:

- Too little
- Too much
- Disrupted
- Poor quality
- Irregular sleep routines
- Jet lag

How do you know if this is an issue?

- Are you refreshed, or still tired, when you wake up?
- Do you get sleepy during the day and feel the need to nap?
- Do you have difficulty falling to sleep?

What are your options?

1. Set up a sleep routine

- Keep a regular sleeping routine or schedule, and minimize disruptions during the weekend.
  - Try waking up at the same time each morning. Get into a habit of

doing this.
    - Keep this time through the weekend.
    - Go to bed when you feel tired. Ideally this should occur at the same time more and more often.
    - Don't worry about perfection. Strive for progress and adapt as required.

2. Avoid stimuli

Turn off the TV, computer and phone. The content and noise stimulates the brain, but the light itself plays tricks on the pineal gland of the brain which controls our circadian rhythm.

- The influence of light on our physical bodies is strong. In the winter, light is used to trick the pineal gland in the brains of animals so springtime activities such as early shedding of their winter coat and breeding can be induced. Although people do not shed their coat nor breed seasonally, the effect of changes in the human brain is similar.
- Keeping screens on can result in reduced levels of the hormone melatonin that assists our bodies in restful sleep.
- Melatonin levels decrease as we age, and sometimes adding this hormone in pill form can help some regain a healthy sleep pattern.
- Beware, melatonin supplementation is not enough to ignore the television rule … it only assists.
- Interestingly, blue light was found to be particularly stimulating to the brain, and one of the worst types of light to be exposed to if you're trying to calm the brain into sleep mode. All LED devices such as phones, computer screens and TVs have blue light within their spectrum.
- Cover up all light sources in the bedroom. Digital clocks, nightlights, and computer lights can wreak havoc with the pineal gland and our circadian rhythm.
- Turn clocks to the wall, cover computer lights with black electrical tape or specially made light buffering stickers, and turn off the nightlights.
- Cover windows with light-blocking drapes or liners available at most department stores.

3. Be careful with napping

- Be smart about napping.
    - Not only can a nap itself act as a trigger, but it can cause insomnia — yet another sleep trigger for some.
    - Nap only when necessary, and try to make those naps count.
    - Limit nap time to 20 mins.

4. Bed is for sleep and that's it.

- The bed is for bedtime.
    - This means sleep. Just as Pavlov's dogs learned to associate being fed with the ringing of a bell (they began to salivate at the sound, even when there was no food present), your body will begin to unconsciously associate the act of going to bed with physical changes needed to fall asleep.
    - After a period of time, your body makes these adjustments more easily, and sleep comes more easily and quickly at bedtime and is more restful.

5. Temperature

- Keep the bedroom cool.
    - The body falls asleep more easily when relaxing is coupled with a lowering of the body temperature.
    - To make this effect even stronger, take a hot shower before bed and multiply the temperature lowering effects.

6. Don't overeat before bed

- Eat your last meal 4 hours before you plan to go to bed.
    - This gives your body plenty of time to empty your stomach before you go to bed.
    - This also helps to eliminate reflux issues. Because of the neurologic nature of the disease, those with migraine often don't empty their stomachs especially well.
    - Don't overeat, and keep that last meal free from spicy or acidic foods as these, too, may cause problems with digestion as well as sleep.

7. Be careful what you drink

- Avoid excessive fluids 2-4 hrs before bedtime.
    - Keep the acid low (no soda, no acidic juices, etc.).
    - No caffeine for 6-8 hrs before bedtime.
    - This will help keep stimulant levels low, minimize reflux and keep bathroom breaks to a minimum during sleep.

- No alcohol before bed.
    - While the depressant action of alcohol may initially make it easier to fall asleep, your body loses the ability to get into deeper sleep states required for restful and restorative sleep.
    - Alcohol before bed usually results in waking in the early morning hours, and this can act as a trigger for many people.
    - Even those who don't have migraine should avoid alcohol within 3 hours of bedtime.

8. No smoking, please

- Don't smoke before bed.
    - Nicotine is a stimulant and causes multiple symptoms that can keep your body from easily slowing down into sleep mode.

9. Get a hit of magnesium

- Magnesium is a mineral responsible for relaxing muscles in your body.
    - This relaxation works on skeletal muscles as well as the involuntary muscles that line our blood vessels.
    - A significant percentage of those with migraine are deficient in magnesium and find that daily supplementation of magnesium (such as magnesium glycinate powder that dissolves in water) for 3-6 months may help reduce the frequency or severity of their attacks.
    - Magnesium is easily absorbed through the skin, and many find relief with a warm Epsom salt (another form of magnesium) bath just before bed. Magnesium taken orally or topically usually relaxes the body and helps to induce sleep.

10. Exercise

- Exercise during the day.
    - Beyond tiring your body, exercise acts to balance your body's oxygen levels and metabolic processes as well as the neurotransmitters and hormones that are frequently imbalanced in the brains of those living with migraine.
    - Regular exercise is often prescribed by headache specialists, but sometimes neglected by patients who fear it will make their condition even worse. Often it is the opposite.

11. Sleeping position

- Fix your sleeping position
    - Laying on your back can help with a number of daily problems ranging from acid reflux to chronic neck and back pain.
    - It does however make you more likely to snore, if you are prone.
    - The worst position for those who already experience mild back or neck pain is lying on the stomach.
    - Using a pillow when lying on your stomach puts strain on the spine and neck muscles.

12. Quality and quantity

- Improve your quality of sleep
    - The hours of sleep during the night hours (while the sun is down) count more than sleep taken during the light hours (i.e. if sunrise is at 6 am and you sleep 9 hours from 12 midnight to 9 am, this may not be better for you than 8 hours of sleep from 10 pm to 6 am).

Watch-out for

Look out for sleep disorders which may be making it more difficult to get restorative sleep. Some examples include:

- Bronchitis
- Snoring
- RLS (Restless Leg Syndrome)
- Sleep apnea
- Reflux problems such as GERD or LPR
- Pain (including headache disorders and migraine)
- Menopause
- Medication reactions
- Endocrine disorders
- Anxiety or depression
- PTSD (Post Traumatic Stress Disorder)
- Bladder or continence problems such as IC (Interstitial Cystitis) or BPH (Benign Prostatic Hyperplasia)
- Vitamin deficiency
- Excessive light or heat
- Poor sleep habits

Head pain in the morning is a potential indicator of sleep Apnea. One 2005 study reported that more than 30 percent of patients with recurring head pain and other sleep apnea symptoms saw their head pain diminish after the sleep apnea was treated.

Another 2005 study of 1,283 migraine patients found that more than half frequently had trouble falling asleep and/or staying asleep.

In that study, 38 percent slept an average of six hours nightly and half of the study subjects said that sleep disturbances triggered migraine attacks.[1]

Research suggests that not just sleep position, but sleep itself, can play a role in musculoskeletal pain, including neck and shoulder pain.

In one 2008 study, researchers compared musculoskeletal pain in 4,140 healthy men

[1] According to Chateau, O. "Migraine and sleep disorders" migraine.com Nov 2010.

and women with and without sleeping problems. Sleeping problems included difficulty falling asleep, trouble staying asleep, waking early in the mornings, and nonrestorative sleep. They found that people who reported moderate to severe problems in at least three of these four categories were significantly more likely to develop chronic musculoskeletal pain after one year than those who reported little or no problem with sleep.

One possible explanation is that sleep disturbances disrupt the muscle relaxation and healing that normally occur during sleep.

Additionally, it is well established that pain can disrupt sleep, contributing to a vicious cycle of pain disrupting sleep, and sleep problems contributing to pain.

Why is sleep so important?

Sleep is essential for health and well-being, yet many people do not get enough sleep. For example, surveys conducted by the National Sleep Foundation between 1999 and 2004 revealed that at least 40 million Americans suffer from over 70 different sleep disorders, and 60 percent of adults report having sleep problems a few nights a week or more.

A few reasons sleep is so important:

1. Protects your mental health

    a. Sleep helps your brain function optimally.
    b. Good sleep improves learning and problem-solving skills.
    c. Sleep deficiency is linked with depression and suicide.

2. Protects your physical health

    a. Ongoing sleep deficiency is linked to an increased risk of heart disease, kidney disease, high blood pressure, diabetes, and stroke.
    b. Increases your risk of obesity.
    c. Your immune system relies on sleep to stay healthy. You may have trouble fighting common infections if you're sleep deprived.

3. Improves your quality of life

    a. Adequate sleep helps you function well throughout the day. If you're not well slept, you are often less productive at work or school.
    b. You may take longer to finish tasks, have a slower reaction time and make more mistakes.

4. Improves your safety

a. Damage from sleep deficiency can occur in an instant (such as a car crash) or it can harm you over time.
b. Ongoing sleep deficiency can raise your risk of several chronic health issues.

Resources

More advice or tools that can help:

- Get some help from technology with apps to help track and monitor your sleep.
- Consider reaching out to a sleep clinic or sleep specialist.