

Spring/Summer 2019

Health Review

Contents

- Managing Pain: Moving Beyond Opioids..... 1
- About the NIH HEAL Initiative 2
- Dealing Safely With Pain..... 3
- Understanding Acupuncture 4
- Weight Loss Can Help Knee Pain..... 5



Managing Pain: Moving Beyond Opioids

Pain can serve an important purpose: it warns the body when it's in danger. Think of when your hand touches a hot stove. Ongoing pain, however, causes distress and affects quality of life.

A class of drugs called opioids is often used to treat pain. This class of drugs can stop the body from processing pain on many levels.

Opioids also produce feelings of happiness and well-being. The more people take them, the more they crave them. This can lead to addiction, or continuing to take opioids despite negative consequences.

The longer someone takes opioids, the more they may need to take to get the same effect. This is called tolerance. Having a high tolerance doesn't always mean you'll become addicted. But taking higher doses of opioids increases the risk for both addiction and overdose.

News in Health (NIH) is an online site that produces a monthly newsletter that provides practical health information and tips based on NIH research findings. NIH medical experts and NIH-supported scientists at universities and medical schools ensure accuracy by reviewing articles before publication. Currently NIH is funding research into new and more precise ways to treat pain. It's also working to develop new treatments to combat opioid misuse and addiction.



ASSOCIATION OF
U.S. PROFESSIONAL
DRIVERS

About the NIH HEAL Initiative

In April 2018, NIH launched the HEAL (Helping to End Addiction Long-termSM) Initiative, an aggressive, trans-agency effort to speed scientific solutions to stem the national opioid public health crisis. This Initiative will build on extensive, well-established NIH research, including basic science of the complex neurological pathways involved in pain and addiction, implementation science to develop and test treatment models, and research to integrate behavioral interventions with Medication-Assisted Treatment (MAT) for opioid use disorder (OUD). Successes from this research include the development of the nasal form of naloxone, the most commonly used nasal spray for reversing opioid overdose, the development of buprenorphine for the treatment of OUD, and evidence for the use of nondrug and mind/body techniques such as yoga, tai chi, acupuncture, and mindfulness meditation to help patients control and manage pain.

Over the past year, NIH has worked with experts from public and private organizations to identify the areas that would most benefit from focused efforts by NIH alone or in partnership with outside organizations.

The NIH HEAL Initiative will bolster research across NIH to improve treatments for opioid misuse and addiction and enhance pain management.

www.nih.gov

Opioids Not Always Needed

Opioids are often prescribed for acute pain. Acute pain is short-term pain, the kind experienced after an accident or an operation. But other drugs may be just as effective for acute pain, even after surgery. These drugs can include acetaminophen or ibuprofen, don't require a prescription. And using something other than an opioid first can be especially important to manage acute pain.

Many people receiving opioid prescriptions from dentists are teens or young adults who have never been prescribed an opioid before.

Healthcare providers who decide their patient needs an opioid are now being encouraged to give only a few pills at a time. People who receive shorter prescriptions are less likely to misuse their pills by taking more than prescribed or taking them after the pain is gone. This also cuts down the chance that the pills could be taken by others.

When Pain Is Chronic

Managing chronic pain is more complicated than treating acute pain. More than 25 million people in the U.S. alone live with

chronic pain, which is pain that lasts more than three months.

Chronic pain can be driven by brain changes, explains Dr. David Williams, an NIH-funded pain researcher at the University of Michigan. When these changes happen, the brain continues to perceive pain even though the injury has healed.

For people with this type of chronic pain, sometimes called central pain, opioids and some other kinds of pain medications can actually make the pain worse.

Research has shown that talk therapies, such as cognitive behavioral therapy, can help many people with chronic central pain. These types of therapies "emphasize behaving in different ways or thinking in different ways that alter the perception of pain," Williams explains. "Pain is a combination of a sensory and an emotional experience."



Spring/Summer 2019

Cognitive behavioral therapy can also help people with chronic pain manage related health problems, such as problems sleeping, feeling tired, or trouble concentrating. This can increase quality of life for people with chronic pain. It can also have overlapping effects.

“Pain processing and sleep and thinking and mood all share the same neurotransmitters in the brain,” Williams says. “So, by improving something like sleep, you’re also improving pain.”

Non-opioid drugs can help some people with chronic pain too. Many of these drugs were first developed to treat different health conditions, such as seizures, depression, or anxiety. But they can also change the way the brain processes pain.

Some people benefit from devices that stimulate the nerves directly to block pain signals from reaching the brain. Different devices can work on different parts of the nervous system, from the nerves in the skin to the spinal cord.

People with certain types of pain have also been shown to benefit from exercise, acupuncture, massage therapy, or yoga.

Expanding the Options

The alternatives to opioids we have now don’t work for everyone’s pain. More non-opioid, non-addictive treatment options could help reduce the number of opioids prescribed each year.

Recently, NIH launched the Helping to End Addiction

Long-Term (HEAL) Initiative to address the shortage of effective medications for chronic pain and other issues contributing to the opioid crisis (see page 2 for more details).

Some of the research funded by HEAL will focus on understanding how chronic pain develops. A better understanding of how acute pain becomes chronic could reveal new treatment targets.

Researchers funded by HEAL also hope to learn how to predict who will develop chronic pain from acute pain. This information could be used to guide early pain management. HEAL will fund research into new treatments for opioid misuse and addiction as well.

Reprinted from www.newsinehealth.nih.gov

Dealing Safely With Pain

Things you can do if you’re prescribed an opioid:

- Ask if there are ways besides opioids to relieve your pain.
- Make sure your healthcare provider knows about all other medications you are taking.
- Let your healthcare provider know if you or others in your family have had any problems with addiction, such as with alcohol, prescription medications, or illicit drugs.
- Ask about the risks of taking an opioid.
- Ask how to take the opioid and how long you should take it.
- Never use alcohol when taking an opioid.
- Store opioids in a safe place out of sight out of reach of children, preferably in a locked cabinet.
- Dispose of leftover prescription medicine quickly and properly.

If you believe you have an addiction call 1-800-662-HELP (4357). This service is supported by the U.S. Department of Health and Human Services. You can also look for a treatment center online at www.findtreatment.samhsa.gov. This online treatment finder will allow you to search geographically and will also give you information about the treatment center.

Understanding Acupuncture

Acupuncture is a traditional medicine that's been practiced in China and other Asian countries for thousands of years. Its proponents say it can do everything from relieving pain to bringing a general sense of wellness. Others think the only benefits you get from acupuncture are in your head. Recent studies have found that both sides may have a point. Acupuncture can be effective for certain health problems, such as some types of chronic pain. But how it works is something of a mystery.

Acupuncture is the stimulation of specific points on the body. The methods can vary, but the most well known type in the United States is the insertion of thin metal needles through the skin. At least 3 million adults nationwide use acupuncture every year, according to the latest estimates.

Acupuncture is part of a family of procedures that originated in China. According to traditional Chinese medicine, the body contains a delicate balance of 2 opposing and inseparable forces: yin and yang. Yin represents the cold, slow or passive principle. Yang represents the hot, excited or active principle. Health is achieved through balancing the 2. Disease comes from an imbalance that leads to a blockage in the flow of qi—the vital energy or life force thought to regulate your spiritual, emotional, mental and physical health. Acupuncture is intended to remove blockages in the flow of qi and restore and maintain health.

Researchers don't know how these ideas translate to our Western understanding of medicine, explains Dr. Richard L. Nahin of NIH's National Center for Complementary and Alternative Medicine. But the fact is that many well-designed studies have found that acupuncture can help with certain conditions, such as back pain, knee pain, headaches and osteoarthritis.

"In many research studies, it's clear that if you're comparing acupuncture to usual care, the acupuncture group almost always does better," Nahin says. The problem, he explains, is that when researchers have compared acupuncture to carefully designed "control" treatments, the picture becomes more complicated.

Well-designed clinical trials need control groups—people who get a sham or simulated treatment called a placebo. Placebos might come in the form of a sugar pill or a saline injection. They give researchers something to compare the real treatment with. But designing a placebo for

acupuncture is a challenge.

"I don't really think you can come up with a great placebo needling," says Dr. Karen J. Sherman, an NIH-funded acupuncture researcher at Group Health Research Institute in Seattle.

For example, when researchers have compared inserting needles with just pressing a toothpick onto acupuncture points, they've often found both treatments to be successful. But Sherman questions whether these are really controls. Many traditional acupuncturists would consider them true treatments, too. The important thing, in their view, is to hit the right spot, not necessarily how deep you go.

Another option for a placebo would be to test a different location. But Sherman says that would be inappropriate for treating pain because acupuncturists traditionally needle tender points. "To me, there's no place on the back, if you have back pain, where you can say you have a great control," Sherman says, "so I don't think that's a really solid idea."

Further complicating things is that acupuncture treatments are about more than just needles. "There'll be needles," Sherman says, "but there'll probably be other things they do in the course of the treatment. Acupuncturists will talk to you in a particular way. They might give you dietary advice or exercise advice that stems from a non-Western theoretical construct. They'll try to engage you in your own healing. They might give you a different model for thinking about your health."

"It's hard to design placebo-controlled studies of acupuncture when we don't understand what the active component of the intervention is," explains Dr. Richard E. Harris, an NIH-funded researcher at the Chronic Pain and Fatigue Research Center in Ann Arbor, Michigan.

Treatment for pain is the best-studied aspect of acupuncture. Many parts of the brain are connected in the processing of pain, and how much pain you feel partly depends on context. "If a person has an injury in battle, they might not feel it," Sherman explains, "but if they have a similar injury just walking down the street, they might just think it was dreadful."

"If you look at some of the data, what you find is that sham acupuncture and true acupuncture both produce some pain relief in whatever condition they're looking at," Nahin says. "But while both

treatments turn on areas of the brain, they turn on different areas of the brain.”

Harris and his colleagues, in studies of fibromyalgia patients, have found differences at the molecular level as well. “We were able to show that sham acupuncture and real acupuncture both reduced pain in fibromyalgia patients equally,” he says, “but they do it by different mechanisms.”

If acupuncture truly works by a different mechanism than sham acupuncture, Harris says, then they’re not the same thing, even if they both help relieve pain. Harris and others are now trying to get to the bottom of what acupuncture is actually doing. Their ultimate goal is to see if other treatments might pair well with acupuncture to reduce pain better than either alone.

Should you try acupuncture? Studies have found it to be very safe, with few side effects. If you’re thinking about it, talk to your doctor. “We tell people they really need to talk to their primary

care provider and discuss whether acupuncture is a viable option for them,” Nahin says. “While you could go to an acupuncturist independent of a medical practitioner, we feel that an integrated approach to care is always the best approach.”

“Find somebody who’s dealt with your problem before,” Sherman advises. “Talk to the practitioner about your specific situation and then see if it’s something you can live with because it might not be the right treatment for you.”

If you do decide to try acupuncture, she adds, “You need to know that you should give it some time. You can’t expect one session will tell you whether it works or not. Be open minded and willing to at least entertain some of the notions that the acupuncturist brings up. Give it a try if you’re open to it.”

Reprinted from www.newshealth.nih.gov

Weight Loss Can Help Knee Pain

Recent research shows that people who are overweight can reduce their symptoms of knee pain and disease, including arthritis, by losing at least 20% of their weight.

Millions of older adults have stiff, painful knees caused by arthritis. Arthritis causes a breakdown of the cushion of tissue inside the knee joint. Without this cushion, bone can rub against bone. That may cause pain and swelling. Being overweight could make the symptoms worse.

Experts generally advise adults who are overweight or obese to lose at least 10% of their weight to reduce symptoms of knee arthritis. Recently, an NIH-funded research team wondered whether 20% weight loss would help reduce symptoms even more.

The study included 240 overweight and obese adults over 55 with painful knee arthritis. The research team helped them to exercise and diet to lose weight.

The researchers compared the people who lost 20% or more body weight with those who lost 5%. The people who lost 20% or more reported less pain. They could walk farther in a 6-minute test. In addition, blood tests revealed a much lower level of a substance related to pain and swelling.

“The importance of our study is that a weight loss of 20% or greater—double the previous standard—results in better clinical outcomes and is achievable without surgical or pharmacologic intervention,” says lead researcher Stephen P. Messier at Wake Forest University.

The researchers are planning to enroll three times as many people for their next study of pain reduction from diet and exercise.

Reprinted from www.newshealth.nih.gov

The AUSPD Member Newsletter is published by:
Association for U.S. Professional Drivers

For information regarding your membership
and association services, call or write:

Membership Services Office
Association for U.S. Professional Drivers
16476 Wild Horse Creek Road
Chesterfield, MO 63017

1-866-522-8773

Articles in this newsletter are meant to be informative, enlightening, and helpful to you. While all information contained herein is meant to be completely factual, it is always subject to change. If you or someone you know is suffering from an addiction, please seek medical help. Articles are not intended to provide medical advice, diagnosis or treatment nor should they be misconstrued as the opinion of AUSPD. If you or someone you know is suffering from an addiction, please seek medical help.



ASSOCIATION OF
U.S. PROFESSIONAL
DRIVERS