

Pain Management: Which Treatment Is Right for You?

An array of pills and practices are available to pain sufferers today. But be sure you understand the limitations—and risks—of each.

By Consumer Reports
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Ancient Romans thought that jolting the temples of headache sufferers with electric shocks from live torpedo fish would make the pain vanish. It's not clear whether zapping a person with fishy electricity was helpful or if it simply gave the victim another source of agony to focus on. But it didn't take humans long to discover other sources of pain relief. By 1300 B.C., the Inca in Peru had discovered that coca leaves—the source of cocaine—could numb pain when chewed or applied to wounds. By that time, people in Asia and Egypt had learned to extract opium from the poppy plant, creating the earliest version of an opioid pain drug, similar to what we use today (think hydrocodone and oxycodone). We have (mostly) moved beyond electric fish to other treatments that can alleviate or reduce pain. Here's our overview of some common pain management treatments and the conditions for which they work best.

Acetaminophen

Found in more than 600 prescription and over-the-counter products, medicine such as Tylenol and its generic versions are among the most often used drugs in the U.S. Acetaminophen isn't as effective at relieving pain as drugs like ibuprofen (Advil and generic) or naproxen (Aleve and generic), according to an analysis by Consumer Reports Best Buy Drugs. But it won't put you at risk for stomach bleeding and a heart attack or stroke the way those two drugs do. In fact, it's easier on the gut and is a good option for those who suffer from acid reflux or ulcers. **But its overuse is the leading cause of liver damage**, sending almost 80,000 people per year to an ER. That can happen if you take only slightly more than the Food and Drug Administration's maximum recommended dose of 4,000 mg in a 24-hour period, and is especially worrisome if you're a heavy drinker or if you have liver disease. Our medical experts say limit use to no more than 3,250 mg within 24 hours.

Acupuncture

Legend has it that in 200 B.C., a Chinese soldier shot with an arrow noticed a "good" side effect: His pain from a previous injury disappeared. But acupuncture's exact origins remain a mystery. And there's still uncertainty about its ability to treat pain. Some evidence suggests that it can ease lower back, neck, and knee pain, and reduce the frequency of headaches and migraines. Multiple studies have compared real acupuncture, in which thin needles are inserted into specific points on the body, with sham acupuncture, in which the needles don't break the skin or are inserted in random spots on the body. A few studies have suggested that real acupuncture was sometimes slightly better, but many found that the sham procedure was just as effective, and both were more effective than no treatment at all. This pain management treatment should be done only by a licensed practitioner who uses sterile needles.

Aspirin, Ibuprofen, and Naproxen

On any given day, about 17 million Americans take one of those pain relievers, which are called nonsteroidal anti-inflammatory drugs (NSAIDs). Available from big brands (Advil, Aleve, Bayer) as well as in generic versions, they work by blocking the production of substances called prostaglandins that trigger pain and inflammation. Both over-the-counter and prescription versions of NSAIDs work best on tension headaches, mild migraines, lower back pain, osteoarthritis, and pain associated with muscle soreness or swelling. If you take an NSAID more than 10 days in a row, ask your doctor for an alternative, because taking too much or taking them too often can cause bleeding in the intestines, kidney failure, heart attacks (though naproxen possibly poses less risk for that), stomach ulcers, and stroke. Aspirin is the exception; when used for pain relief, it can cause stomach bleeding even at low doses.

Biofeedback

The theory is that you can control pain by using such techniques as deep breathing or muscle relaxation to consciously control or monitor otherwise involuntary bodily functions such as heart rate, skin temperature, muscle tension, or blood pressure. The jury is still out on whether biofeedback works, though experts think it

might help people by simply teaching them how to relax. And several large reviews have found it works best for conditions sometimes brought on by stress, such as backaches, migraines, and tension headaches. One advantage is that biofeedback is generally free of risks and side effects.

Botox Injections

At very low doses, this powerful natural toxin temporarily blocks nerve signals and paralyzes muscles, preventing them from contracting. The treatment is FDA-approved to help prevent migraines in people who have 15 or more each month. It requires undergoing up to 31 injections in different areas of the head and neck every three months. But studies have found that the results are modest. People getting Botox shots had one or two fewer headache-days per month than those getting placebo injections. Some doctors also treat tension headaches and less frequent migraines with Botox, but the American Academy of Neurology doesn't recommend it for those cases because large-scale studies show it doesn't help.

Chiropractic Care

This hands-on therapy, in which a person's spine and other parts of the body are manipulated to alleviate pain and promote healing, dates back to ancient China and Greece. Modern chiropractors perform "adjustments," which use a strong, controlled force to manipulate the spine or joints to improve alignment and restore mobility.

There's good evidence that chiropractic care helps alleviate lower back pain, including some suggesting that it works as well as medication. A 2010 comprehensive review found that the therapy may be helpful with joint, neck, and shoulder pain, and tension headaches. In a **2011 online survey of more than 45,000 Consumer Reports subscribers, 65 percent of those who had chiropractic care said it helped.**

Cognitive Behavioral Therapy (CBT)

Several large studies show that CBT can help prevent migraines and neck pain, and ease chronic low back pain. This form of psychological counseling, or talk therapy—combined with behavior changes—helps ease pain by teaching coping and relaxation skills. Most important is instruction on how to short-circuit negative thoughts, which can intensify pain sensations. Negative emotions such as anxiety, depression, and fear stimulate chemicals in the brain involved in pain perception, so reducing them not only helps you feel better mentally but also helps you hurt less.

Glucosamine and Chondroitin

These popular supplements, often used in combination, are said to help protect cartilage and ease joint pain and swelling. But there's little evidence that they ease arthritis pain or improve joint function. And they could pose risks, including increased blood glucose (sugar) levels. Other side effects can include a heightened risk of bleeding when taken with blood thinners, worsening high blood pressure, or possibly triggering abnormal heart rhythms. The American Academy of Orthopaedic Surgeons doesn't recommend glucosamine or chondroitin.

Massage

Tomb paintings show that ancient Egyptians used massage as part of their medical practices, and some massage schools still use Chinese instructional texts dating to 2700 B.C. A few studies have shown that massage helps alleviate headaches and muscle or joint pain in the back, hip, knees, and neck. Before trying it, confirm with your doctor that it won't be harmful for your condition. Your massage practitioner should be licensed by your state and certified by a national organization, such as the American Massage Therapy Association.

Muscle-Pain Creams and Patches

Popular drugstore products such as Bengay and Icy Hot contain chemicals called counterirritants (such as capsaicin and methyl salicylate) that can create a feeling of heat, and menthol, which triggers a cooling sensation. In both cases, the active ingredients inflame the area near the pain, which stimulates the nerves and creates a milder sensation, distracting you from the pain you're trying to treat. There's little evidence they actually address the underlying pain, though some people still might find relief. **This isn't the same as using ice, which can reduce inflammation.**

Muscle Relaxants

Prescription medications such as cyclobenzaprine (Fexmid and generic) and metaxalone (Skelaxin and generic) are used to treat back and neck pain, and other conditions caused by muscle spasms. But studies have

failed to show that they work well for chronic pain management. Reserve muscle relaxants for acute, severe neck or back spasms, or muscle spasticity associated with cerebral palsy, multiple sclerosis, or a stroke. For short-term pain, they can be an option if you have liver disease or can't tolerate acetaminophen or ibuprofen. People ages 65 and older should steer clear of muscle relaxants because they're associated with an increased risk of falling.

Oxycodone and Hydrocodone

These opioid narcotic painkillers (OxyContin, Percocet, Vicodin, and their generics) work by attaching to receptors in the brain, spinal cord, and elsewhere in the body and blocking pain signals sent to the brain. But they don't directly treat the problem causing the pain. And the drugs can be highly addictive. **An analysis of 39 studies involving people with chronic pain who took opioids found that the drugs didn't relieve their pain over the long term but did increase their risk of overdose**, compared with those who took a placebo. If you must take an opioid, limit it to just a few days for short-term pain relief—after surgery, for example. Otherwise, skip them. Even when used for a short period, opioids can cause side effects including abdominal cramps, constipation, nausea, sedation, and vomiting.

Physical Therapy

In the early part of the 20th century, therapists began to exercise the limbs of bedridden polio patients to rehabilitate them and relieve their pain. During World War II, wounded soldiers were treated with electrical stimulation, massage, and hydrotherapy. Today, physical therapists use similar hands-on techniques such as massaging muscles and moving joints through their range of motion, along with exercises to improve strength and flexibility. Multiple studies have shown that physical therapy can help relieve joint pain as well as chronic lower back and neck pain **when it includes an exercise component.**

Steroid Injections

For lower back pain, corticosteroids are injected into the spine between the vertebrae and the protective covering of the spinal cord (the epidural space), to temporarily reduce inflammation around an irritated nerve. But they're not approved by the FDA for that use, though doctors can still use it. The shots can also offer modest short-term relief for neck and shoulder pain, and back pain that also travels down a leg. There's a risk of an epidural abscess (which can cause incontinence, urinary retention, fever, and paradoxically, back pain), and the FDA warns of rare but serious side effects, including vision loss, a stroke, paralysis, and even death.

Sumatriptan and Rizatriptan

Those drugs (Imitrex and Maxalt), known as triptans, can fight migraine pain by temporarily narrowing dilated blood vessels, and can relieve severe pain in about 2 hours. But they *aren't recommended for people with uncontrolled high blood pressure, heart disease, chest pain, or peripheral vascular disease because they can worsen those conditions and possibly cause a heart attack.*

TENS

A modern version of the Ancient Romans' use of electric fish, TENS, or transcutaneous electrical nerve stimulation, is available without a prescription. A small battery-operated device sends electrical currents through electrodes placed on areas that hurt. It appears to be safe, but whether it reduces pain is still up in the air. Some research suggests it helps, but others haven't found a benefit.

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