

Pain Management

Overview

While we have all experienced pain, the term remains difficult to define. According to the International Association for the Study of Pain, pain is "*an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.*"

There is no question that pain is a *sensation* in a part of the body, but it is always unpleasant, making it an *emotional* experience. All pain is subjective, meaning that the amount of pain each person feels is affected by his or her personal views, experience, or background.

Types of pain

- **Acute pain** is directly related to tissue damage and has an obvious source; it can last for a moment, such as when a bee stings, or for months, as in the case of a severe burn or surgery. Pain signals are sent to the brain, but they become fewer as healing progresses. Also, acute pain is limited in duration and responds to treatment.
- **Chronic pain** is persistent and harder to find the source. Sometimes after an acute injury has healed, pain signals continue to be sent to the brain. Chronic pain is often present in ongoing conditions such as arthritis or cancer. In some cases the pain comes and goes, or it may be present all the time. In addition to the real sensation of pain, chronic pain sufferers may fall into a cycle of pain, inactivity, sleeplessness, anger, and sadness.

Causes of pain

Pain is commonly caused by an injury, illness, or aging. Pain specialists classify pain as either mechanical, biochemical, or psychogenic.

Mechanical pain comes from something obviously wrong in the body, such as an injury, tumor, or degenerative disease such as arthritis. *Biochemical* pain can come from herniated discs when the disc material irritates nearby nerves. *Psychogenic* pain comes from the mind and is related to mental or emotional problems.

Most common forms of pain:

- Headache: tension headache, vascular headache, migraine
- Back, neck, arm or leg: pain due to an irritated or pinched nerve in the spine

- Cancer: constant pain caused by tumors compressing the spinal nerves, or scarring from previous radiation therapy
- Arthritis: osteoarthritis, rheumatoid arthritis
- Neurogenic: trigeminal neuralgia, shingles, amputated "phantom" pain
- Psychogenic: emotional distress that we cannot express that turns into physical pain

Where to get help?

When a person first experiences pain, the family doctor is usually consulted. If pain requires further evaluation, a consultation with a specialist such as a neurologist, physiatrist, or surgeon may be recommended to find and treat the source of pain. If the source of pain cannot be identified or treatment has not provided relief, you may be referred to a pain management specialist.

A doctor who specializes in the treatment of pain may be board certified by the American Board of Anesthesiology, American Board of Pain Medicine, or the American Academy of Pain Management.

What is pain management?

Pain management is an integrated approach to making pain tolerable by learning physical, emotional, intellectual and social skills. This may include exercise, physical therapy, medication, holistic therapies, and counseling. With these techniques, you stay in control of your health.

Self care

Stress is the number one obstacle to pain control. Pain increases when you are tense and stressed leading to emotional feelings of fear and helplessness. Relaxation exercises are one way of reclaiming control of your body. Deep breathing, visualization, and other relaxation techniques can help you to better manage the pain you live with.

Learning to live with chronic pain is not impossible; there are resources to help you. Look beyond your pain to the things that are important in your life. Set small goals for yourself. Choose to focus on what you can do, not what you can't. Pain does not have to be the center of your life.

Commit to living a healthy lifestyle:

- Get enough sleep
- Maintain an appropriate weight
- Eat a healthy diet
- Refrain from harmful habits such as smoking, drinking alcohol, and drug use.

Exercise / physical therapy

No matter how much pain you're in, there are always gentle stretches and exercises you can do. Weak muscles feel more pain than toned flexible ones. Regular exercises can strengthen muscles that support your spine, easing pain and preventing further injury. Stretching exercises encourage your muscles to stay flexible. Your doctor can show you how to make modifications to your daily standing, sitting, and sleeping habits. For example, learning how to lift properly or sitting for shorter periods of time (see Physical Therapy). Check with your doctor before you begin any new exercise program.

Complementary / alternative medicine (CAM)

Recognizing the body's natural healing process, CAM looks at the whole patient. It offers a broader range of therapies that address the mind-body dynamics of pain. Because conventional medicine often has adverse affects, the role of integrative medicine is appealing for many.

- **Natural products:** vitamins, diet, herbal medicines, dietary supplements
- **Mind-body medicine:** meditation, deep-breathing exercises, guided imagery, progressive relaxation, biofeedback, hypnotherapy, tai chi, qi gong, yoga, prayer, music/dance/humor therapy, pilates
- **Alternative medicine systems:** acupuncture, Ayurveda, homeopathy, native American healing practices, traditional Chinese medicine, naturopathic medicine
- **Manipulative and body-based:** spinal manipulation (e.g., chiropractic, osteopathic) and massage therapy
- **Other CAM therapies:** Alexander technique, psychophysical integration, Therapeutic Touch, and manipulating energy to affect health by Reiki, pulsed fields, magnetic fields

Medication

Pain medications vary considerably. Specific types and causes of pain may respond better to one kind of pain medication than to another kind. Also, each person is slightly different in the way they respond to a pain medication. Chronic pain sufferers who are on medication may have breakthrough pain. These are uncontrolled severe flares of pain that "break through" the medication. Medications used to treat pain include:

- **Analgesics**, such as acetaminophen (Tylenol) and tramadol (Ultram) can relieve pain but without anti-inflammatory effects of NSAIDs.

- **Nonsteroidal anti-inflammatory drugs** (NSAIDs)—aspirin, ibuprofen (Motrin, Nuprin, Advil), and naproxen (Aleve) are examples of drugs used to reduce inflammation and relieve pain. Long-term use of analgesics and NSAIDs may cause stomach ulcers as well as kidney and liver problems.
- **Muscle relaxants** can be used to treat pain associated with muscle spasms and spasticity.
- **Steroids** can be used to reduce the swelling and inflammation of the nerves. They are taken orally as a Medrol Dose Pack tapered over a five-day period or as an injection directly into the source of pain. See epidural steroid injections and facet injections.
- **Antidepressant and anticonvulsants** can be used to relieve nerve pain.
- **Narcotics** (opioids) are very powerful pain relievers that actually deaden a person's perception of pain. They are used for a short period (2 to 4 weeks) after an acute injury or surgery. Narcotic medications cause impaired mental function, drowsiness, nausea, constipation, and sometimes addiction.

Surgical treatments

Surgery is considered once all appropriate nonsurgical and medical treatments have been explored. Because surgery involves cutting or interrupting the nerves that carry the pain signals, you may lose sensation in that area of your body.

- **Spinal cord stimulation** uses a small generator, implanted in your back or abdomen that transmits an electrical current to your spinal cord. The result is a tingling sensation instead of pain.
- **Intrathecal pain pumps** use a small pump that is surgically placed under the skin of your abdomen and delivers pain medication through a catheter directly to the area around your spinal cord.

Sources & links

If you have more questions or would like to schedule an appointment with one of our Spine Center specialists, please call (515) 875-9888.

American Chronic Pain Association
www.theacpa.org
American Academy of Pain Management
www.aapainmanage.org
American Pain Society, www.ampainsoc.org
National Center for Complementary and Alternative Medicine, nccam.nih.gov



updated > 3.2013

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