



CHRONIC PAIN MANAGEMENT

Manifestation Code

INTRODUCTION

Chances are you or someone very close to you struggles with chronic pain, considering that research released by the Centers for Disease Control and Prevention (CDC) in September of 2018 suggests an estimated one in five adults living in the United States (around 50 million people) struggles with some type of chronic pain. While only a limited number of studies have estimated how common chronic pain is among adults in the U.S., most show that prevalence ranges from 11 to 40 percent of the total population.

According to the CDC, "Chronic pain has been linked to numerous physical and mental conditions and contributes to high healthcare costs and lost productivity ... Chronic pain contributes to an estimated \$560 billion each year in direct medical costs, lost productivity and disability programs. "

Certain groups of people are more likely to experience chronic pain, especially women, older adults, people with public (not private) health insurance like Medicaid, those with less than a high school education and those living in poverty.

CHRONIC PAIN

What Is Chronic Pain Syndrome?

The definition of chronic pain (or chronic pain syndrome, or CPS for short) is any pain lasting more than 12 weeks (roughly three months). Chronic pain is different than acute (short-term) pain because it typically arises from an initial injury or illness but then doesn't subside, rather causing ongoing symptoms for many months or years. Roughly 25 percent of people with chronic pain will develop chronic pain syndrome (CPS) that causes psychological symptoms such as depression and anxiety in addition to physical pain.



Chronic pain has been shown to contribute to limitations in major life domains, including work, social, recreational and self-care activities. It's also one of the most common causes of doctor's visits, missed days of work and reasons for psychological distress or addiction to pain-killing medications (one of which is opioids, now the the leading cause of death among adults under 50 years old living in the U.S.).

Complex regional pain syndrome (CRPS, sometimes called chronic regional pain syndrome) is pain lasting greater than six months that usually affects one limb (arm, leg, hand or foot), most often following an injury. CRPS is believed to be caused by malfunction of the peripheral and central nervous systems.

What is an example of chronic pain? Some of the most prevalent types are:

- Muscular pains
- Back pain
- Neck pain
- Joint pain and arthritis
- Nerve pain, including tingling and jolting
- Bone pain
- Headaches/migraines
- Uterine pain/endometriosis
- Inflammatory bowel pains and other forms of stomach pain or digestive discomfort



Can chronic pain go away?

The National Institutes of Health tells us that “chronic pain usually cannot be cured, but it can be managed.” Treatment for chronic pain — including natural painkillers like supplements and therapy, in addition to medications — can often at least help reduce symptoms, improve daily function and help the person being treated to go about their day-to-day activities. However, the pain may not ever completely go away, depending on its underlying causes.

Chronic pain may not respond well to medications or other treatments, which can be extremely frustrating for patients. Because each person responds differently to treatment options, pain is best managed with a “multidisciplinary approach” that may include medications, psychotherapy and a number of alternative treatment approaches.



SYMPTOMS

Chronic Pain Symptoms

While about 20 percent of all U.S. adults are believed to experience chronic pain, an estimated eight percent (nearly 20 million people) have “high-impact chronic pain,” which is considered pain that frequently limits life or work activities on most days or every day during the past six months.



How does chronic pain impact one’s quality of life? Chronic pain symptoms, which studies show can be both physical and mental/emotional, typically include:

- Discomfort that is sharp or dull, constant or on-and-off or feels like burning or aching
- Restrictions in mobility and daily activities
- Reduced flexibility, strength and stamina
- Increased anxiety, depression, irritability and other mood changes
- Higher risk for dependence on alcohol, opioids and other pain-killing medications
- Poor perceived health or reduced quality of life

- Fatigue and sleep disturbances
- Changes in appetite and sometimes weight loss/weight gain
- Low libido
- Higher risk for marital or family problems and loss of employment
- Increased risk for suicidal thoughts and attempts

Is chronic pain a disability? According to the NIH, "Chronic pain may limit a person's movements ... This difficulty in carrying out important and enjoyable activities can lead to disability and despair."



CAUSES & RISKS

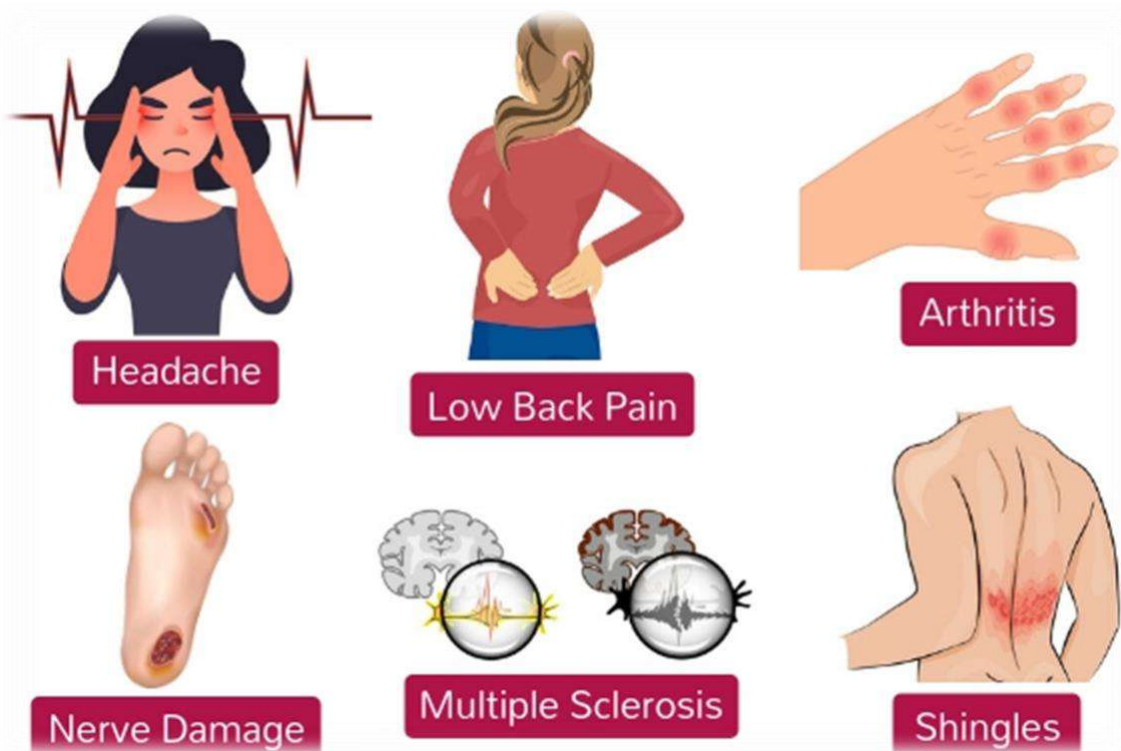
Chronic Pain Causes and Risk Factors

What is the cause of chronic pain in most instances? It can be caused by many different factors, such as neuromuscular, reproductive, gastrointestinal (GI) and urologic disorders. Sometimes multiple contributing factors may be the cause, or sometimes there is no clear or identifiable cause of chronic pain at all. Other times, it's obvious that an injury or illness was the trigger for chronic pain developing.

Some common chronic pain causes include:

- Injury or trauma, such as an accident
- Musculoskeletal disorders, such as osteoarthritis/degenerative joint disease/spondylosis
- Autoimmune diseases such as rheumatoid arthritis or Lyme disease
- Infections
- Cancer
- Gastrointestinal disorders such as visceral pain syndrome, GERD, ulcers, bowel obstruction or inflammatory bowel disease
- Stroke
- Epilepsy
- Fractures or compression of lumbar vertebrae
- Poor posture and a sedentary lifestyle
- Fibromyalgia
- Reiter syndrome
- Allergies
- Endometriosis and other reproductive conditions
- Cardiovascular disease

- Side effects resulting from chemotherapeutic, radiation or surgical complications
- Disk herniation/facet osteoarthropathy
- Damage to the tailbone that causes mechanical low back pain
- Muscular strains, spasms and sprains (including back spasms)
- Pelvic floor myalgia
- Piriformis syndrome
- Hernias (such as obturator, sciatic, inguinal, femoral, spigelian, perineal, umbilical hernias)
- Abdominal wall myofascial pain
- Chronic overuse syndromes such as tendonitis or bursitis



Some researchers have also suggested that chronic pain syndrome might be a learned behavioral syndrome that continues because it is reinforced, whether through attention from family members and friends, socialization with physicians, use of medications, compensation and time off from work.

Risk factors include:

- Being over the age of 65
- Being a woman
- Being overweight
- Being non-Hispanic white
- Being a veteran
- Not currently being employed, but having previously been employed
- Living in poverty
- Having public health insurance/Medicaid
- Being a rural resident
- Not having more than a high school education (chronic pain and high-impact chronic pain were significantly lower among adults with at least a bachelor's degree compared with all other education levels)
- Having a history of psychological syndromes, such as major depression, somatization disorder, hypochondriasis or conversion disorder



DIAGNOSIS & TREATMENT

Diagnosis and Conventional Treatment

Some consider chronic pain syndrome to be a “poorly defined condition” because some researchers consider ongoing pain to be the type that lasts longer than six months, while others think that 12 weeks/three months should be the minimum criterion.

It can be difficult for doctors to diagnose chronic pain syndrome because pain itself is a subjective experience and differs from person to person. There is not one test that can be used to make a reliable diagnosis of chronic pain, but rather a number of tests that can measure symptoms and locate pain. Often times, it’s up to a patient to describe the type, timing, location and history of their pain in order to help their doctor make a diagnosis and treat the underlying cause.

Doctors can use a number of tests to help identify the cause of pain, some of which include: imaging studies, radiography, magnetic resonance imaging (MRI) and computed tomography (CT) scanning.



No single drug is approved by the U.S. Food and Drug Administration specifically for treatment of chronic pain syndrome. One problem with treating chronic pain with medications is that they don't always work and many cause side effects, such as drowsiness, dizziness, increased heartbeat, impaired memory, appetite/weight changes and also sometimes dependence/addiction. The National Pain Strategy, the first national effort to transform how pain is perceived, assessed and treated among adults in the U.S., recommends the following treatment options for people with chronic pain:

- Medications: Some examples of medications used to treat chronic pain include: antidepressants, bisphosphonates, non-steroidal anti-inflammatory drugs, over-the-counter aspirin, ibuprofen and naproxen; corticosteroids that treat inflammation/swelling
- Nerve blocks (injecting an anesthetic next to the spine to directly block the activity of sympathetic nerves and improve blood flow)
- Electro-stimulation
- Physical therapy
- Surgery
- Talk therapy/counseling
- Biofeedback training

6 natural treatments

1. Physical Therapy and Other Hands-On Therapies

Studies show that rehabilitation services including physical therapy, occupational therapy and exercise programs can be used to help manage chronic pain because they have benefits such as: improving blood flow/circulation, reducing stiffness and edema and improving the affected body part's flexibility, strength and function. Exercise and movement have also been shown to help relieve stress, improve quality of life and sleep and prevent or reverse secondary brain changes that are associated with chronic pain.

Physical therapy techniques used to help manage chronic pain can include hot or cold applications, positioning, stretching exercises, traction, foam rolling exercises or self-myofascial release, rolfing and massage. All of these can make it easier to return to work and perform daily tasks, increasing independence and self-reliance.



2. “Eastern Medicines” — Including Yoga, Acupuncture and Tai Chi

Many people seeking chronic pain treatment find that complementary or alternative medicine (CAM) approaches, sometimes in addition to medications, can provide additional relief. Certain studies have found that people with chronic pain, such as due to injuries, arthritis or fibromyalgia, can benefit from practicing mind-body techniques such as tai chi, acupuncture, meditation, yoga and other treatments.



A 2015 analysis published in the *Journal of the American Medical Association* found that “acupuncture is associated with reductions in chronic pain as compared to sham acupuncture and as compared to no acupuncture control.”



3. Psychotherapy and Behavior Modification

Physical and psychological stress both contribute to the experience of pain. New research suggests that therapy and “self-management programs” are often an integral aspect of chronic pain treatment, especially when someone is dealing with secondary symptoms like depression or post-traumatic stress disorder (PTSD). These treatments work by teaching different ways of thinking about and responding to pain, improving decision making and increasing the ability to cope with pain.

Types of therapies that may be utilized include:

- Cognitive behavioral therapy (CBT), in which the person living with pain addresses their thoughts and behaviors with help from a therapist in order to think, feel and do better, despite the persistence of pain
- Self-management programs, in which the patient becomes an active participant in his or her pain treatment and learns to better communicate with their physician/ healthcare provider



4. Relaxation Therapies and Self Care

The importance of general self-care and relaxation shouldn't be overlooked when it comes to managing pain.

Some of the ways that pain can be reduced with self-care/relaxation practices include: avoiding becoming overly fatigued, avoiding uncomfortable/stressful positions and bad posture, trying to get gentle but regular exercise, establishing good sleeping habits, eating balanced meals and taking time out of your day to practice simple relaxation techniques — like breathwork techniques, prayer, visualization, journaling or meditation.



5. Cannabidiol Oil (CBD Oil)

CBD stands for cannabidiol, which is one type of cannabinoid from the cannabis sativa (hemp) plant that is non-psychoactive (it won't get you high). The use of CBD in various forms, such as tinctures, capsules or topical salves, has been shown in some preliminary studies to help manage pain by supporting the body's endocannabinoid system receptors.

According to the Arthritis Foundation, "preliminary research suggests that CBD may help with arthritis pain. In animal studies, which may not translate to humans, CBD relieved arthritis pain and inflammation. While CBD research in humans is still ongoing, so far from mostly animal studies, it seems that CBD may have effects including inhibition of pain pathway signalling and anti-inflammatory effects.



It's best to speak with a healthcare provider who is knowledgeable about using CBD for chronic pain before trying it. CBD appears to be safe overall, but it's recommended that people start with low doses, which seem to work best for pain relief, and to increase slowly if needed. Use only at night at first and be cautious if using any product that also contains THC.

6. Essential Oils and Supplements

Certain essential oils can help manage inflammation and pain, such as peppermint and frankincense oils. Lavender oil is also beneficial for helping with relaxation and sleep, while evening primrose oil can be used for uterine pain/cramps/PMS-type pains.

Below are some examples of supplements and other natural remedies that can support pain management:

- Turmeric, which contains curcumin and other anti-inflammatory compounds
- Collagen, a protein that helps to repair connective tissue, including those that form joints, the GI tract, certain organs
- Omega-3 fatty acids, which have anti-inflammatory effects. NIH-funded research suggests that omega-3 fatty acids in fish/fish oil supplements can be used as a possible alternative treatment for inflammatory pain when other drugs do not improve symptoms.
- Capsaicin, found in cayenne, helps treat muscle soreness, tension and even skin infections.
- Magnesium-rich Epsom salt, a natural painkiller for bone and joint pain and muscle soreness



FINAL THOUGHTS

Chronic pain affects roughly 20 percent of all adults living in the U.S. ... and eight percent so badly that it seriously impacts their quality of life on most days.

Symptoms can include not only physical discomfort like throbbing or aching, but also: anxiety, depression, fatigue, poor sleep, reduced flexibility, strength, and stamina, higher risk for dependence on alcohol, opioids and other pain-killing medications and relationship problems.

There are dozens of possible chronic pain causes, some of which are: injuries, infections or illnesses, fibromyalgia, autoimmune diseases, arthritis, overuse injuries, cancer, gastrointestinal disorders, stroke and many others.

Treating chronic pain usually takes a multi-disciplinary approach, which can include use of medications, physical therapy, psychotherapy, mind-body practices that promote relaxation, exercise and use of supplements/essential oils.

