THE PROBLEM
OF PAIN
Chronic Pain — What Is It?

Sudden pain comes from tissue injury. This pain usually goes away when the injury has healed. Chronic pain is pain that continues after the injury has healed. Sometimes this pain becomes worse than the original pain. It can lead to neuropathy, a health issue in which the nerves themselves are sick.

Chronic pain touches millions of people. Some people can point to an exact injury or disease that led to their chronic pain. Others may not have any illness or injury at all. You may have been born with a risk of getting chronic pain due to your family history. Someone in your family may have had chronic back pain, fibromyalgia, headaches, multiple sclerosis, or some other problem of the nervous system that may be hereditary.

Sometimes things in the world around you can set off your first pain event. An example of this could be a virus, such as chickenpox or shingles. Illness can sometimes damage nerves. Other events include trauma from an accident or surgery, childbirth and the hormonal changes of puberty. Some medical treatments such as chemotherapy or radiation and diseases like diabetes and cancer can cause chronic pain, even if the medical problem is cured.

How Do I Control Chronic Pain?

Taking care of your pain is very important as you go about your daily life. A healthy diet, plenty of sleep and continued activity are needed to control your pain. Keeping your mind and body healthy is very important. If you are physically ill or mentally stressed, your nervous system is more likely to send more pain signals.

Those who do best have accepted their chronic pain and limits. Despite their pain, they refocus and live life within their limits.

Tell your pain management doctor of any planned surgery, medical or dental procedure. Advice for pain control can be given.

Take your pain medicines as prescribed and on time. Live a healthy lifestyle and do not smoke or drink. It is important to treat any illness, even heartburn and seasonal allergies.

Do not self-medicate or change your medicines on your own. It is important to remember that short acting opioids are the least helpful for handling pain that is chronic or caused by sick nerves.

What Are the Goals for Someone with Chronic Pain?

Chronic pain can be compared to asthma. While there is no cure for asthma it can be controlled. Chronic pain is similar; it is often not curable but the pain can be controlled. People live long healthy lives with asthma if they stay away from irritants to their lungs and take treatments to help their lungs work well.

The purpose of the interventions for pain is to calm the nerves that are sending pain signals so that they can begin acting normally. This requires the support of a healthy lifestyle. You can live a long healthy life with chronic pain if you:
» Stay away from triggers to your nervous system.
» Maintain a healthy lifestyle.
» Take treatments to help your nervous system work well.

Goals for people suffering from chronic pain include:
» Safely join in the pleasures and activities of daily life.
» Have only a small amount of pain while active.
» Have the least amount of side effects from treatment.
» Take the least amount of medicines, particularly opioids, to meet these goals.
What Treatments Are Recommended for the Control of Chronic Pain?

- **Heat or Ice**: Use on the painful area for 20 minutes each hour as needed. Be very careful when using a heating pad as you can burn your skin if you use the heat for too long.

- **Massage, acupuncture, herbal therapy and chiropractic treatments**: These are available in the Integrative Medicine Clinic at UCH.

- **Anticonvulsants**: The same drugs that lower seizure activity in people with seizures can also lessen pain signals in people with chronic pain. Do not stop taking these all of a sudden; they need to be slowly lowered over time.

- **Antidepressants**: Pain and depression cause similar chemical changes in the nervous system. Even when there is no depression, certain types of antidepressants can successfully treat chronic pain. Do not stop taking these all of a sudden; they need to be slowly lowered over time.

- **Numbing medicines (anesthetics)**: Just as lidocaine takes away the pain of dental work, anesthetics can quiet nerve channels from sending chronic pain signals. These medicines come in patch and cream form.

- **Muscle relaxants**: These medicines work on the central nervous system. This results in less muscle tension.

- **Steroids**: Steroids work by lowering inflammation and reducing the activity of the immune system. Inflammation is the process where the body's white blood cells and chemicals protect against infection from bacteria and viruses. Your doctor may suggest taking calcium each day to lower the risk of bone loss. Wash your hands often. Stay away from sick people to prevent the risk of infection during steroid use. Do not stop taking steroids all of a sudden; they need to be slowly lowered over time.

- **Non-steroidal anti-inflammatory drugs**: These also work by lowering inflammation and reducing the activity of the immune system. This class of medicine includes ibuprofen and naproxen. The proper dose depends on your age and health of your heart and kidneys. They can damage your stomach so always take with a full glass of milk or food.

- **Injections**: These target pain medications (anesthetics and/or steroids) to the location of the nerves transmitting chronic pain signals in order to calm them and relieve pain.

**Healthy Tools for Coping**

- Value your every success
- Care for a pet
- Change your thoughts or focus on a task
- Go outside among plants and trees
- Use guided imagery
- Offer to help others in need
- Seek inspirational or spiritual support
- Start a journal of blessings and worries
- Teach yourself about chronic pain and treatments
- Limit known triggers to your pain
- Maintain loving relationships and intimacy
- Be sure to pace your level of activity
- Do self hypnosis
- Set realistic goals
- Share fears with loved ones, friends or caregivers
- Meditate
- Laughter

**Mental Health**

The brain chemicals that affect pain can also affect mood and one can affect the other. Chronic pain alters brain chemistry which can result in depression, anxiety and anger. Pain causes mental suffering. It can make you feel like life with chronic pain is not worth living. With so much mental stress to deal with, it is important that you build a strong support system to help you cope with your pain. Find another adult who you can call if you have a bad day, feel you have no hope or think of killing yourself. Do not keep guns in the house. A positive outlook about life does not take away all pain but can help you cope with your current chronic pain. The pain is not “in your head” but your feelings can alter the pain’s impact on your life. It takes daily effort to keep positive mental health.

Example: Take a few minutes upon waking up and before going to sleep to focus on positive self-talk; read something inspirational; meditate deep breathe while centering your thoughts. A professional like a counselor, social worker, therapist or pain psychologist trained in cognitive behavioral therapy can help you succeed. They can teach you ways to change how you think about the pain, help you get restful sleep and care for yourself well. Psychotherapy can also be helpful for some people. There is a pain psychologist in the Integrative Medicine Clinic at University of Colorado Hospital.
A Healthy Lifestyle as a Method of Pain Control

**Healthy Nutrition**
Adequate vitamins and nutrients support the health of your immune and nervous systems. Eat a healthy diet that includes fresh vegetables, fresh fruits, lean protein like chicken and fish, and is high in fiber. Drink unsweetened fluids like water and tea. Limit caffeine and soda. This will help you keep a stable blood sugar and normal cholesterol levels. Lastly, don’t forget proper portion control and to eat scheduled meals.

Read labels and avoid foods high in sugar such as:
- soda
- sports drinks
- cookies and candy
- cakes
- many breakfast cereals

Talk to your doctor about a daily intake of:
- 500 mg magnesium
- 400 mg riboflavin
- 1200 mg calcium
- 400 units of vitamin D

**Healthy Rest**
Restful sleep is restorative for your mind and nervous system. Try to get at least 7 to 8 hours of sleep a night. If you have trouble sleeping you can try many techniques to help you sleep better and longer:
- Remove any sources of blue light like TVs or computer monitors. Blue light is strongest in the morning sky. It can confuse your brain to think its early morning and time to wake up.
- Cover your alarm clock.
- Limit fluids to two hours before bedtime and don’t drink alcohol. It will actually take away from restful sleep while your body processes it.
- Limit caffeine to 2 cups and have none any later than 2 pm.
- Skip naps later in the day and keep them to less than 20 minutes.
- Use leg pillows between your knees to help with back pain.
- Go to bed and wake up at roughly the same time every day, even on weekends.
- Keep your bedroom quiet. If needed, use a “white noise” device such as a fan to drown out any distracting background noises like barking dogs or traffic.

- Keep pets out of your bed because their movements at night can wake you up.
- To help you relax, count backwards from your age with each deep breath. If you lose count, start at the beginning number and focus only on your deep breathing which will help in drifting off to sleep.

**Healthy Exercise**
Exercise is often the last thing anyone with chronic pain wants to do. Simply getting out of bed can take an hour. Lack of activity makes muscles weaker and smaller due to lack of use. It is important to try to get in some form of activity every day despite your pain. Eventually this increased activity may help control your pain. Start any new exercise plan slowly. Increase exertion over limited time periods.

Example: Start with one minute per hour of physical activity or five minutes per day and slowly increase the length of time and intensity. Gently move your body without straining while increasing your breathing and heart rate. Plan to do today what you can repeat tomorrow. Do not overdo it.

Some low impact exercises to try are:
- stretching
- simple yoga poses
- walking
- swimming

Physical therapies provided at Physical Therapy at UCH may include:
- ultrasound
- water therapy
- an exercise program
- back exercise education
- neuromuscular reconditioning
- use of transcutaneous electrical nerve stimulation
Immune Health and Hormone Stability

Immune Health
A healthy immune system is a vital part of caring for your health and of taking care of your pain. Ways to keep your immune system healthy include:
» Avoid tobacco, alcohol and substance use. Ask your doctor for tips to support you when you want to quit smoking, drinking or using drugs.
» Wash your hands often, especially after you use the bathroom.
» Get the yearly flu vaccine.
» Use condoms to prevent sexually transmitted diseases.

Hormone Stability
Women with chronic pain should consider treatment to stop their periods. Menstruation causes a release of inflammatory chemicals that can cause a flare up of chronic pain. There are many choices and methods for hormonal regulation that can be discussed with your primary care doctor or gynecologist.

A normal blood testosterone level is needed in both men and women. This is not only for the sex drive and sexual function, but also for cell growth, healing and managing the cells that get pain signals. Severe chronic pain can lower testosterone. Low testosterone can result in poor pain control, depression, sleep problems, lethargy and weakness. Testosterone can be supplemented if needed.

Are Opioids Helpful with Chronic Pain Treatment?
Opioids like Vicodin®, Percocet® and morphine attach to receptors in the nervous system. They can help long enough to mask the TEMPORARY pain of broken bones and surgery. When used for chronic pain, opioids are not as helpful. The body develops a tolerance to them. Taking more opioids can cause more severe side effects including:
» Constipation
» Itching
» Dizziness
» Deep Sleep
» Nausea and Vomiting
» Trouble Breathing
» Lowered Testosterone
» Overdose
» Unable to have sex
» Death

In addition, high doses of opioids (over 200 mg of morphine a day) can cause more chronic pain by changing your brain chemistry. It can cause an exaggerated response to pain (hyperalgesia). Moderate doses of opioids can interfere in the body’s making of its own natural endorphins that help it prevent and control pain. When used for chronic pain, opioids should be used at the lowest dose needed to support activities. Do not stop these suddenly.

Can Pain Medicine Alter My Balance Mentally and Physically?
Ask an adult partner to let you know if you are not acting normally and call your pain management doctor. Dizziness and drowsiness are the most common side effects. They may clear up after 3 days of taking the same dose of medicine. Stop a medicine only if it causes a side effect that you cannot stand and tell your pain management doctor. Pain medicine can have rebound effects when the body becomes dependent on it, so that when you “run low,” you may have greater pain. Test any new medicine or new doses at least 1 hour before any other scheduled medicine to find benefits and side effects of the change. Test new medicines no sooner than four days after the last medicine change to follow any changes that may happen. It is best to take pain medicine as scheduled to prevent and control pain rather than chase after it. Pain medicines often can help with about 50% of the pain. Take all medicines exactly as prescribed.
Chronic Pain Resources

Adelaide Spine Clinic http://www.spine.com.au (click on “fact sheets” for back pain information and exercises)
Alliance for Headache Disorders Advocacy http://www.allianceforheadacheadvocacy.org
American Chronic Pain Association: http://www.theacpa.org/
American Migraine Foundation http://www.americanmigrainefoundation.org
American Pain Society: http://www.ampainsoc.org/
Biofeedback Certification Institute of America: http://www.bcia.org
Facial Pain Association: Neuropathic Facial Pain including TMJ http://www.tna-support.org/
National Headache Foundation http://www.headaches.org/
Natural Medicine Comprehensive Database: http://www.NaturalDatabase.com
Partners Against Pain: http://www.partnersagainstpain.com/
Reflex Sympathetic Dystrophy Syndrome Association: raising awareness of Complex Regional Pain Syndrome
http://www.rsds.org
Medical Marijuana http://www.medicalmarijuana.procon.org

Books on Chronic Pain

*Dialectical Behavioral Therapy Skills Workbook* by Matthew McKay, 2007 New Harbinger Publications
*Full Catastrophic Living* by Jon Kabatt-Zinn, 2005 Bantam Dell Publishing
*Managing Pain Before It Manages You* by Margaret Caudill MD, PhD, MPH, 2009 Guilford Publications
INTERVENTIONAL PAIN CLINIC

University of Colorado Hospital
Anschutz Outpatient Pavilion
1st floor
1635 Aurora Court
Aurora, CO 80045

720.848.1970

www.uchealth.org/UCHPain

Parking

Save time by using the complimentary valet parking located at the front entrance to the Anschutz Outpatient Pavilion.