

MANAGING CHRONIC LOW BACK PAIN WHILE MINIMIZING USE OF DANGEROUS PRESCRIPTION OPIOIDS



SELF-MANAGEMENT

- Prescription Opioids ~ An Overview
- ✓ Prescription Opioids 2 ~ Self-Management
- Prescription Opioids 3 ~ Acupuncture
- Prescription Opioids 4 ~ Other Treatments



This fact sheet describes what a sufferer can do to manage chronic low back pain (CLBP) and, at the same time, to reduce the chances of misusing or overusing prescription medications. This fact sheet is for people diagnosed with nonspecific CLBP. The approach described is called **self-management**. Subsequent fact sheets (3 and 4) describe how allied health professionals can help a patient address chronic pain using acupuncture, cognitive behavioral therapy, spinal manipulation, exercise, massage, and other nonmedication treatments as alternatives to opioid medications or narcotics that are addictive and may have dangerous side effects.

■ How Is Chronic Low Back Pain Experienced?

CLBP is experienced by each person in a unique way. It can manifest as persistent pain that does not change much over time, pain that ebbs and flows like a wave throughout life, pain that goes away temporarily but inevitably comes back, or pain-free intervals with occasional flare-ups. No one experiences exactly the same pain syndrome.

■ What Is Self-Management?

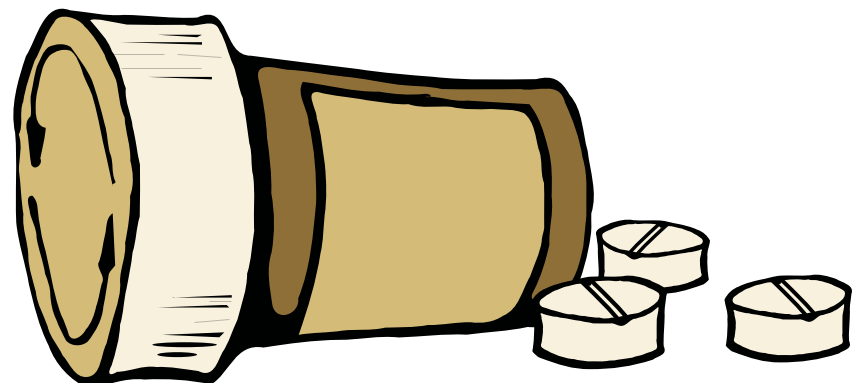
The person with CLBP knows his or her body better than anyone else does. Therefore, he or she is in the best position to determine which treatments are most beneficial. This is called **self-management**. Self-management is about self-discovery—that is, finding ways to heal one's own body. Self-management should be part of a wellness strategy that includes partnering with a health care provider. The self-management information below suggests some ways that others have found to reduce their pain, be more mobile, live happier lives, and reduce their chances of having a recurrence. The information is presented as ways to (1) reduce back pain directly; (2) exercise to

maintain functioning and reduce the risk of recurrence; (3) cope with pain; and (4) address other concerns that contribute to back pain.

■ Reduce Pain Directly

Weight Loss: Even a few extra pounds can tip the balance from being pain free to experiencing a flare-up of CLBP (Han, Schouten, Lean, & Seidell, 1997), so staying thinner can really make someone feel better. To reduce weight, eat at least five servings of fruit and vegetables a day, limit calories, eat out less, and avoid sugar-sweetened beverages. Alcohol contains more calories than carbohydrates, so drink in moderation. Eat meals and snacks on a regular schedule (do not skip meals), and choose foods you know are within your calorie limits. Have an occasional splurge, but choose a smaller portion when you do. Remember that restaurant meals typically contain twice or three times (or even more of) the calories you need. Ask for a to-go package as soon as the waiter brings the food, and put most of it there, out of sight, to enjoy later.

Medications: Certain medications may reduce or alleviate your pain. They all have side effects and should be taken with care, so read and follow label guidelines. Aspirin, ibuprofen (Advil®, Motrin®), and other nonsteroidal anti-inflammatory medications



(naproxin, ketoprofen, meloxicam, ketorolac, and others) relieve pain by reducing inflammation (irritation and swelling). They also can cause stomach ulcers, bleeding, and harm to kidneys if taken in large doses or for long periods (Hernandez-Diaz & Rodriguez, 2000). Some require a prescription. Acetaminophen (found in Tylenol®) treats pain without addressing its cause. Its main side effect, if taken in large doses, is liver damage. Muscle relaxants—such as lioresal, carisoprodol, chlorzoxazone, cyclobenzaprine, metaxalone, methocarbamol, and orphenadrine—require a prescription and can help get a patient over an acute episode by reducing muscle spasms (Wright, 2012). However, they are not recommended for older adults and are less effective for CLBP (Fick & Semla, 2012). They also cause drowsiness, can be addictive, and have other side effects. Nonnarcotic prescription medications that reduce transmission of pain impulses, such as antidepressants and anticonvulsants, have also shown some success in treating CLBP. Patients can ask their health care provider about these medications.

Codeine, a relatively weak opioid, is prescribed alone or in combination with aspirin, other anti-inflammatory medications, and acetaminophen. Stronger opiate pain medications, like oxycodone and hydrocodone, are generally not recommended to treat mild-to-moderate CLBP. This is because these medications have dangerous side effects, are addictive, and do nothing to treat the cause of the pain (Bogduk, 2004; Chou & Huffman, 2007a). Furthermore, developing research suggests that long-term use of opioids may increase the nerve endings' pain sensitivity, worsening the pain.

Heat/Cold Applications: Some people find that taking hot baths or showers or using a heating pad relieves their pain. Others find that cold packs are more effective. These and locally applied creams are acceptable to use if they seem to be beneficial.

Exercise to Maintain Function and Reduce Risk Recurrence

Protecting One's Back: It is important to protect an injured back and prevent further injury at work and home. The health care provider may refer the patient to a physical therapist for instruction on ways to protect and strengthen the back. Most importantly, avoid lifting heavy objects. In bending, keep the back straight. Rely on your legs when lifting objects, and keep the objects close to the body. At work, it is important for the patient to talk with his or her supervisor about CLBP and to develop a plan for working without risking injury.

Exercise: Exercise such as walking, strengthening and stretching exercises, and yoga or Pilates classes may be recommended after acute symptoms have subsided (Sherman et al., 2011). Exercise helps keep off weight, makes a person feel stronger and sleep better, increases the levels of natural painkillers (called **endorphins**) in one's body, and generally improves mood (Fentem, 1994; Vuori, Urponen, Hasan, & Partinen, 1988). If their doctor approves, some people find it useful to do something every day to keep their back strong. Others try walking every other day. Using a pedometer, they might start with about 2,000 steps and gradually increase this amount to 10,000 steps, the equivalent of 5 miles of walking. On nonwalking days, try back and abdominal muscle strengthening exercises for 10 minutes. These are available online (see below), from a health care provider, or from a physical therapist. These activities can reduce symptoms and lower the need for pain medications.

Coping with Pain

Some of the most effective means to alleviate CLBP involve ways not to cure pain but to better coexist with it. Cognitive-behavioral therapy is effective in reducing chronic pain (Chou & Huffman, 2007b; Butler, n.d.). It relies on replacing negative thoughts and behaviors with more positive ones. Methods to use at home include distraction, guided imagery, and mindfulness-based interventions (MBIs), such as progressive relaxation and meditation. MBIs have many proven health benefits, including relief of distress caused by pain (Cullen, 2013).

Many people have experienced the power of **distraction** as a way to temporarily reduce or eliminate the experience of pain. For example, a person may unexpectedly receive an uplifting phone call from someone they like and, for the time they are talking, do not notice the pain. Distraction works (McCaffery, 1980). People with CLBP often can discover distractions that work for them and use those distractions to manage their pain.



Guided imagery is another healing exercise. It begins the same way as the other methods, with the person sitting or lying in a relaxed position. Think about (dream up) a safe, wonderful, and ideal place. Examine its details. Perhaps it is a beach, the top of a mountain, or under the ocean on a great reef. This is the person's oasis. The person can think of doing what they like there—resting, walking a path, or paddling a canoe. Now, imagine that something there can heal the back pain. It could be warm sand, a pool or stream of water, or a point of light. Go there. Enjoy the sights, sounds, smells, and feelings of the place, and imagine healing taking place, with the pain lessening and then vanishing. Dwell there for a few minutes, feeling the pain release. Then, gradually come back to the present. Visit often.

Pain can cause a person to tense up. This makes the pain worse. To alleviate tension and pain, try this method of **progressive relaxation**. Sit or lie down in a comfortable position. Think about your toes, and whisper, "I am relaxing my toes, my toes are relaxed." At the same time, concentrate on relaxing the toes and noting how this feels. Then work up your body—including feet, heels, ankles, shins, calves, and so forth—until even the top of the head is relaxed. Pay special attention to the muscles that support the back. This can take as little as 5 minutes or up to 30 minutes or longer, depending on how long it takes a person's body to relax. After the whole body is relaxed, stay in this position for a few more minutes. Another option is to tighten each area first, then let it relax. For people who might require assistance with this, trained therapists can use instruments (known as **biofeedback**) to help people gain greater awareness of their body so that they can change how their body deals with stress (i.e., decrease their heart rate and muscle tension).



Meditation is a way to slow down the racing mind. Many ways to meditate exist; in essence, the method is simple. Focus on one thing—such as breathing, a candle flame, or a word—and attempt to clear the mind of everything else. Here's how to practice one form of meditation: Sit or lie in a restful position. Partially close the eyes. Concentrate on breathing: breathing in, breathing out. When a thought comes to mind, or the mind drifts to thinking about the pain, bring it back to the breath. Sit quietly this way for 20 minutes. Be patient with it over several sessions. Some people find that this practice trains their minds to not pay attention to their pain, thus lessening it.

All of these practices improve with time and devotion, and they may help people deal with the pain they are experiencing. Benefits can include improving a person's outlook on life, helping them feel relaxed, and lowering stress levels (Cleveland Clinic, n.d.; Cullen, 2013; McCaffery, 1980). Give each a try, and see if they prove useful. Use them once or twice daily for best results.

■ **Address Other Concerns That Contribute to Back Pain**

Studies show that certain illnesses, such as anxiety (Von Korff et al., 2005) and depression (Fishbain, Cutler, Rosomoff, & Rosomoff, 1997), are much more common in people with CLBP compared to people who do not have these conditions. Not only can these conditions develop in response to the suffering of CLBP, but having them also increases the chance of someone developing CLBP. If someone with CLBP has these conditions, it is important that they are treated. People who successfully deal with depression and anxiety have better pain outcomes than those who do not get help (Bigos et al., 1991). Other life problems that may contribute to making back pain worse are distress; substance abuse (Wright, 2012), including tobacco use; and work-related problems (Linton, 2005). It may help to see a counselor or therapist to get treatment for these problems and to join a support group.

People with CLBP also may suffer from "fun deprivation." Chronic pain can prompt a retreat from normal daily life. Do not let this happen. People with CLBP should do more of the things that give them pleasure. Getting happier and healthier is good for the back!

Helpful Websites

Manage pain using self-management techniques:

http://prc.canadianpaincoalition.ca/en/self_management.html

<http://www.howtocopewithpain.org/resources/guided-imagery.html>

http://prc.canadianpaincoalition.ca/en/self_management.html

Diet:

<http://www.choosemyplate.gov/>

Meditation:

<http://www.shambhalasun.com/index.php?option=content&task=view&id=2125>

Occupational Safety and Health Technical Manual on Back Disorders and Injuries:

http://www.osha.gov/dts/osta/otm/otm_vii/otm_vii_1.html

Back exercises:

<http://www.webmd.com/back-pain/exercises-to-reduce-low-back-pain#>

Yoga:

<http://backandneck.about.com/od/yogaforbackpain/p/yogabackpainove.htm>

This series of issue briefs was developed with funding from the Substance Abuse and Mental Health Services Administration (SAMHSA) through a contract (IDIQ Task Order No. HHSS2832007000121) to the Pacific Institute for Research and Evaluation (PIRE).

References

- Bigos, S. J., Battie, M. C., Spengler, D. M., Fisher, L. D., Fordyce, W. E., Hansson, T. H. et al. (1991). A prospective study of work perceptions and psychosocial factors affecting the report of back injury. *Spine (Phila Pa 1976)*, 16(1), 1–6.
- Bogduk, N. (2004). Management of chronic low back pain. *Medical Journal of Australia*, 180(2), 79–83.
- Butler, M. Self-management. Retrieved from http://prc.canadianpaincoalition.ca/en/self_management.html
- Chou, R., & Huffman, L. H. (2007a). Medications for acute and chronic low back pain: A review of the evidence for an American Pain Society/American College of Physicians clinical practice guideline. *Annals of Internal Medicine*, 147(7), 505–514.
- Chou, R., & Huffman, L. H. (2007b). Nonpharmacologic therapies for acute and chronic low back pain: a review of the evidence for an American Pain Society/American College of Physicians clinical practice guideline. *Annals of Internal Medicine*, 147(7), 492–504.
- Cleveland Clinic. Integrative medicine: Guided imagery. Retrieved from http://my.clevelandclinic.org/departments/integrativemedicine/guided_imagery_facts.aspx
- Cullen, M. (2013). Mindfulness-based interventions: An emerging phenomenon. *Mindfulness*, 2(3), 186–193.
- Fentem, P. H. (1994). ABC of sports medicine. Benefits of exercise in health and disease. *BMJ*, 308(6939), 1291–1295.
- Fick, D. M., & Semla, T. P. (2012). 2012 American Geriatrics Society Beers Criteria: New year, new criteria, new perspective. *Journal of the American Geriatrics Society*, 60(4), 614–615.
- Fishbain, D. A., Cutler, R., Rosomoff, H. L., & Rosomoff, R. S. (1997). Chronic pain-associated depression: antecedent or consequence of chronic pain? A review. *Clinical Journal of Pain*, 13(2), 116–137.
- Han, T. S., Schouten, J. S., Lean, M. E., & Seidell, J. C. (1997). The prevalence of low back pain and associations with body fatness, fat distribution and height. *International Journal of Obesity and Related Metabolic Disorders*, 21(7), 600–607.
- Hernandez-Diaz, S., & Rodriguez, L. A. (2000). Association between nonsteroidal anti-inflammatory drugs and upper gastrointestinal tract bleeding/perforation: An overview of epidemiologic studies published in the 1990s. *Archives of Internal Medicine*, 160(14), 2093–2099.
- Linton, S. J. (2005). Do psychological factors increase the risk for back pain in the general population in both a cross-sectional and prospective analysis? *European Journal of Pain*, 9(4), 355–361.
- McCaffery, M. (1980). Relieving pain with noninvasive techniques. *Nursing*, 10(12), 55–57.
- Sherman, K. J., Cherkin, D. C., Wellman, R. D., Cook, A. J., Hawkes, R. J., Delaney, K. et al. (2011). A randomized trial comparing yoga, stretching, and a self-care book for chronic low back pain. *Archives of Internal Medicine*, 171(22), 2019–2026.
- Von Korff, M., Crane, P., Lane, M., Miglioretti, D. L., Simon, G., Saunders, K. et al. (2005). Chronic spinal pain and physical-mental comorbidity in the United States: Results from the national comorbidity survey replication. *Pain*, 113(3), 331–339.
- Vuori, I., Urponen, H., Hasan, J., & Partinen, M. (1988). Epidemiology of exercise effects on sleep. *Acta Physiologica Scandinavica Supplementum*, 574, 3–7.
- Wright, D. V. (2012). Non-narcotic options for pain relief with chronic neuropathic conditions. *Journal for Nurse Practitioners*, 4(4), 263–270.

