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UNDERGROUND



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Low Back Pain: A Common Problem

How common is low back pain (LBP)?

About 2/3 of U.S. adults suffer from LBP at some point in their life.¹ According to Cowan², LBP is the 5th most common reason for all doctor visits in the U.S. In one survey, 25% of adults reported having LBP in the previous 3 months; 7.6% reported having severe LBP in the past year; and 20% reported activity limitations due to LBP.

Each year back injuries cost American industry \$10 – \$14 Billion dollars in workers compensation (direct cost) and 93 million lost work-days.³ Two percent of the workforce are compensated for back injuries. Miners, compared with workers in many other industries, are at higher risk for back and other musculoskeletal disorders and report higher back injury rates.¹

Back pain may be acute, subacute or chronic.⁴ Acute pain, the most common type of back pain, starts quickly and lasts less than 6 weeks. Generally, acute pain gets better without treatment. Subacute pain lasts from 6 – 12 weeks. Chronic pain is often defined as lasting 3 months or longer. It usually impacts one's quality of life and ability to carry out normal day-to-day activities.

Back pain is a leading cause of disability^{1,9}

Back pain is the leading cause of disability in Americans under age 45. Compared to adults without back pain, more adults with back pain rate their health as fair or poor and have more limitations in their day-to-day activities. Miners, compared with other workers, file more worker compensation claims for LBP.

What causes low back pain?^{1,3}

Sources of short-term LBP include 1) muscle strain and/or spasms due to the muscles becoming overstressed and damaged at or near the point where the muscles and tendons join and/or 2) stretched or damaged ligaments (fibrous tissue that connects bones to other bones). Sources of chronic LBP include 1) disc breakdown and inflammation due to fractures of spinal vertebrae caused by high or repeated loads on the spine, 2) breakdown of spine joint surfaces, and 3) disorders of joints located at the very bottom of the back (sacroiliac joints). Injuries from sprains, fractures, falls, and accidents can also result in acute and/or chronic back pain. Other conditions that can cause back pain include stress, scoliosis (curvature of spine), arthritis, spinal stenosis (narrowing of spaces of the spinal canal), kidney stones, fibromyalgia, infections and tumors.

Doctors are unable to identify the exact cause of back pain for up to 85 percent of patients.^{4,5} They refer to these patients as having nonspecific back pain. About 5 percent of patients have symptoms that suggest significant pathology such as vertebral fracture, tumor, infection, or serious non-spinal conditions such as kidney stones.

When should I see doctor for LBP?³

If your back pain does not go away within a few days or is so severe that you are unable to manage your normal day-to-day activities, you should see a doctor. If you have any of the following serious signs of pain, request an immediate appointment with a doctor: 1) new pain that shoots down your leg, 2) new weakness or numbness in leg, 3) change in bladder or bowel control, and/or 4) fever.

Because the exact cause of back pain is often not clear, the medical evaluation may be frustrating, both for the patient, as well as the doctor. Current medical guidelines suggest that the doctor complete a thorough medical history and physical examination. Specific medical tests will depend on findings from your medical history and physical exam. X-ray imaging is often not necessary, as medical tests may not show the cause of your back pain. Note, however, that back pain can and often gets better without knowing the exact cause of the pain.

What should I expect concerning treatment for LBP?^{4,5}

If we examine the recovery and reoccurrence rates of LBP, data suggests that LBP is a chronic problem with intermittent flare-ups rather than an acute illness that can be cured. Up to 40 percent of patients will have a recurrence of non-disabling LBP within 6 months.⁶ On the other hand, up to 90 percent of patients with non-specific LBP generally recovery within a month. More than 50 percent of patients categorized as having sciatic pain recover within a month and more than one-third of individuals with LBP for more than 3 months recover within 12 months.

What can I do to relieve non-specific LBP?⁷

Unfortunately, there is not a single treatment for LBP that is effective for everyone. However, some activities may be helpful in reducing or alleviating LBP. Some require a doctor's prescription; others do not. The effectiveness of any one activity will vary from one individual to another. Using a combination of activities may be of more help. For example, taking non-prescription medication, following a prescribed physical therapy routine, and applying hot packs may reduce or eliminate the pain over time. Activities that many have found helpful include the following:

- Applying cold or hot packs or taking hot baths or showers as they can soothe sore, stiff backs and relieve acute back pain. Cold reduces swelling and numbs deep pain; heat reduces muscle spasms and pain.
- Resting, but avoiding complete bed rest as this leads to muscle stiffness and deconditioning of the body.
- Being physically active, but in moderation.
- Listening to your body and respecting its limits.
- Changing positions such as lying down or elevating your legs periodically.
- Using good posture and supporting your spine when sitting and sleeping.
- Shedding excess pounds that strain your back.
- Eliminating use of tobacco (smoking or chewing) as its use is associated with more intense back pain.
- Taking a nonprescription pain medication, such as ibuprofen (Advil), acetaminophen (tylenol), or naproxen (Aleve) and/or applying a topical pain relieving cream. Speak to a doctor before taking pain medication if you are allergic to a pain reliever; drink 3 or more alcoholic beverages daily; have ulcers in intestines or stomach; have kidney, liver or heart disease; have a bleeding disorder; or take a medication to thin the blood.⁸
- Discuss use of prescription pain medication, muscle relaxant, and/or anti-depressant with doctor for severe acute or chronic pain.
- Discuss value of physical therapy treatments with a doctor. Most types of exercise programs including aerobic, muscle strengthening, postural control or stretching are helpful.

- Consider counseling to help cope with chronic pain. Group or individual counseling may be helpful in reducing anxiety and depression often associated with chronic pain.

By Dana Hughes, RN, PhD

References

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Safety Rules to Follow if You Are Taking Prescription Pain Medications¹

1. **Only take prescription pain medication that are prescribed for YOU.** Everyone responds differently to pain meds. What are safe for another individual may not be safe for you.
2. **Follow your health care provider's instruction carefully in terms of dosage and frequency.** Taking more may hurt or kill you.
3. **Do not take pain pills with alcohol or with sleeping or anti-anxiety medication unless prescribed by your doctor.** The combination may be deadly.
4. **Report any side effects to your health care provider.**
5. **Lock up your prescription pain medicines to prevent children, other family members or others from taking.**

¹ Pain Foundation.org. Problems with opioids can be prevented. <http://www.painfoundation.org/learn/back-pain>. Accessed 07/28/2011.

Internet Resources

There are resources on the Internet that may increase your understanding of pain and how to cope with it.

American Chronic Pain Association offers support and education in pain management skills to people with pain, family and friends.

<http://www.theacpa.org/>

American Pain Foundation educates, supports and advocates for people affected by pain

<http://www.painfoundation.org/>

PainKnowledge offers educational resources regarding pain assessment, treatment and management approaches.

<http://www.PainKnowledge.com>

WebMD provides valuable health information, tools for managing your health, and support for a multitude of health problems including pain and chronic pain.

<http://www.Webmd.com>

Miners Hospital

The Miners Hospital was created using funds from Federal land grants provided to the State of Utah. In 2004, the Miners Hospital was created within the University of Utah Rehabilitation Center located in Salt Lake City, Utah. The Miners Clinic is located at 125 West University Parkway in Orem, Utah.

Services of Miners Hospital & Clinic

- Medical evaluation & treatment for mining related illness or injury
- Screening for Federal Black Lung Program
- Health education programs and materials
- Two merit-based University of Utah scholarships for children of disabled coal, metal or non-metal miners

The Miners Hospital
50 North Medical Drive
Salt Lake City, Utah 84132

Who is eligible for services?

Any miner who

- 1) has worked in a Utah coal, metal or non-metal mine for at least 2 years
- 2) has lived in Utah for at least 2 years immediately prior to applying for services, &
- 3) is experiencing symptoms associated with a mining related injury or illness.

To be seen at the Miners Clinic, an application for services must be completed and mailed to

The Miners Hospital
50 North Medical Drive
Salt Lake City, Utah 84132
FAX # 801-585-0452

Call Miners Hospital (1-866-864-6377) to request application or download from website:

http://healthcare.utah.edu/Miners_hospital/information/