Lower back pain

Introduction

It is estimated that lower back pain affects 60-80% of people, at some stage in their lives. Although low back pain is not a life-threatening disorder, it is a significant health problem, and becomes more common as people age. It is also a costly problem in terms of healthcare and disability payments, as well as missed work.

Generally, acute or short-term back pain is regarded as pain that lasts less than six weeks. Most non-serious cases of acute back pain are mechanical in nature, i.e. the result of trauma to the lower back.

Chronic back pain is measured by duration. Back pain that has been present for more than 12 weeks is considered to be chronic.

Causes

Muscle strains and ligament sprains are the most common causes of lower back pain. Strains and sprains may result from lifting, exercising, or moving in an unexpected way, i.e. falling, or being involved in a car accident.

The lower back is more likely to be injured when the person is in poor physical shape, and the supporting muscles of the back are weak. The lower back is particularly vulnerable to the effects of obesity, and a lack of exercise. A poor posture, lifting objects incorrectly, and being tired, are other contributory factors.

Other more common causes of lower back pain include osteoarthritis and a herniated (bulging) disc. The latter occurs when the cushion between the vertebral bones (intervertebral disc) is strained, and bulges out, and presses on the nearby nerve, causing pain. Where the pain is located depends on which disc is herniated, and which spinal nerve root is affected, but typically, movement intensifies the pain.

Occasionally, lower back pain may indicate a more serious medical problem. Pain, accompanied by fever, or loss of bowel or bladder control, pain experienced while coughing, or associated with progressive weakness in the legs, or radiating from the back, down one or both legs, may indicate a serious condition. People with these symptoms should contact a doctor immediately. Back pain that is felt in the middle-to-upper part of the back is less common, and if it has been present for several days, a referral to the doctor is best.

Prevention

Recurring back pain, resulting from poor body mechanics, or other non-traumatic causes, is often preventable. A combination of exercises, maintaining correct posture, lifting objects properly, and losing excess weight, can help prevent injuries.

Aerobic exercise, such as swimming or walking, improves general fitness, and strengthens the muscles. This should be combined with specific exercises to strengthen and stretch the muscles in the abdomen, buttocks, and back, to help stabilise the spine. It is important to exercise regularly, every day, or every other day, and not to continue doing any exercise that causes pain.

Treatment

Bed rest is not recommended to treat simple lower back pain. The emphasis is on maintaining activity supported by pain relief. It has been shown that staying active results in increased rate of recovery, reduced pain, reduced disability and reduced time off work, compared with advice to rest.

Pain relief for acute lower back pain

Ice and heat

As soon as possible following the injury, apply a cold pack or a cold compress to the tender spot several times a day, for up to 20 minutes. After two to three days of cold treatment, apply heat, such as a heating lamp or hot pad, for brief periods to relax the muscles and increase blood flow.

Nonsteroidal anti-inflammatory drugs

Over-the-counter non-steroidal anti-inflammatory drugs (NSAIDs) can be taken orally to relieve pain and reduce inflammation. Topical NSAIDs can also help to reduce pain and inflammation.

Counterirritants and rubefacients

Counterirritants, applied topically to the skin as a cream or spray, stimulate the nerve endings in the skin to provide feelings of warmth or cold, and dull the sense of pain. Methylsalicylate and wintergreen are widely used and are effective counterirritants.

Treatment of chronic lower back pain usually requires additional measures, and opioid analgesics may be required.

Remember: If lower back pain has not improved noticeably after 72 hours of self-care, referral to the doctor is recommended.

References