Back Pain Continues Despite Advances in Medical Knowledge

Back pain leading to disability is an everyday problem for far too many people. In fact, chronic low back pain is the number one cause of disability among men and the number two most common cause of disability in adults of both sexes and all ages.

Many people ask: how come with all the scientific advances in medicine, it's so difficult to get a simple diagnosis for their back pain? That's a good question. Low back pain can be a very complex and challenging problem. Most of the time, a clear and accurate diagnosis is impossible.

Medical tests such as X-rays or other imaging studies can show that there are degenerative changes present. As we age there are more and more signs of osteoarthritis, stenosis (narrowing of the spinal canal), and degenerative disc disease.

But many people develop moderate to severe changes without any symptoms whatsoever. Current beliefs are that just because there are radiographic signs of degeneration doesn't mean that's the source of the pain or other symptoms. So, once again, the medical community is faced with the fact that they often can't pinpoint the exact cause of chronic back pain. And that can be as frustrating for the physician as it is for the patient.

Studies are ongoing as researchers actively look for the source of low back pain. Is it coming from the *facet* (spinal) joints? Patients with facet joint problems often have pain in the low back, buttock, hip, or groin regions. Extending the spine backwards makes this type of pain worse.

Is it coming from the disc? It starts in the low back or buttock and travels down the leg past the knee. This type of pain is called *lumbosacral radiculopathy*. Other symptoms of nerve involvement such as numbness and tingling in the calves, feet, or toes may be present.

Is it coming from the *sacroiliac joint* (SIJ)? It's estimated that up to one-third of all low back pain is actually coming from the sacroiliac joint. This is where the sacrum at the bottom of the spine attaches to the pelvis on both sides. Sometimes the difficulty in making a clear diagnosis is because the pain is coming from more than one place. Patients often have facet or disc pain along with sacroiliac joint pain. All of these sources of pain are considered *mechanical* in nature. This means the problem involves the alignment and movement of bone or soft tissues.

Treatment guidelines for chronic low back pain have shifted over the years. Rest is no longer advised. Patients are encouraged to stay active and keep moving. A short period of rest is acceptable for acute episodes or flare-ups. But with chronic low back pain, physical activity is a central key to improvement. Over-the-counter pain relievers and antiinflammatory drugs may be advised. When depression and/or sleep disturbance add to the problem, other medications may be prescribed.

This type of treatment often works well for mechanical pain. And when the source of back pain is determined to be mechanical, then it may be time to see a Physical Therapist. The therapist will evaluate posture, musculoskeletal alignment, and movement and formulate a plan of care. This may include manual therapy (a hands on approach to restore joints and tissues to their normal state) and prescriptive exercises.

A regular, daily routine of exercise is important to improve (and maintain) conditioning, flexibility, strength, and endurance. For some patients, lifestyle changes such as weight loss and quitting smoking (or other tobacco use) are necessary. Some studies have shown a benefit of acupuncture, massage, and cognitive-behavioral therapy. Combining two or more of these additional treatment approaches seems to help the most.

If the pain is not mechanical, then the physician will look for a potentially more serious problem such as fracture, infection, or tumor. The extent of the investigation will depend on the physician's interview with the patient. The doctor takes into consideration the patient's personal and family history, clinical presentation, and any red flag signs and symptoms. At that point, additional clinical tests, lab values, and imaging studies may be ordered.

Anyone with a history of trauma, cancer, use of systemic steroids, HIV infection, or other systemic illness may need special attention and more specific treatment. Children under the age of 18 and older adults (over age 50) require a second look-see to rule out the possibility of a more serious condition (other than mechanical back pain).

Certain symptoms such as a sudden, unintended loss of weight, severe morning stiffness, difficulty urinating, skin rashes, or bodily discharge will alert the physician to the need for immediate action. These kind of serious problems are rare and affect less than 10 per cent of back pain sufferers.

Most of the time, chronic low back pain responds well to a program of managed care. Chronic back pain suffers often find relief through a combined program of education, postural changes, and exercise. Understanding how activities with too much bending or twisting can add to the stress on the spine is essential.

Patients who understand the mechanical nature of their pain report the greatest satisfaction with their progress. Knowing that recovery is possible with time, exercise, and self-care can go a long way to alleviate the stress and anxiety that often comes with chronic pain of any kind.

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