



Reducing Back Pain Recurrence By Training Specific Muscles

The causes of lower back pain are multiple (see Online Orthopaedics article dealing with causes of lower back pain). Pain and disability connected with the first episode of acute lower back pain often resolves spontaneously within a few days or weeks. It has been known, however, that the occurrence rate is high and recurrent disabling episodes of lower back pain are a major management problem for physicians and physical therapists.

Physical therapists have been aware for decades that rehabilitation of the lower back and abdominal muscles are important in the treatment of lower back pain. Recent research has demonstrated that a particular spinal muscle, the multifidus muscle, is a primary stabilizer of the spine. After back injury from whatever cause there seems to be a deficit in this muscle and neuromuscular control is reduced and proper function of the muscle is inhibited. This leaves that injured segment of the back prone to reinjury in the future. This leads to instability and the possibility of further injury. The deficit in the Multifidus muscle does not seem to resolve spontaneously when the symptoms diminish and activities are resumed.

Inevitably our lives grow more complex and this is true for physical therapy management as well. Because of recent attention called to this problem with the multifidus muscle, physical therapists are paying particular attention to the function of this muscle and its function in stabilizing the spine. Therapists refer to this as dynamic stabilization exercise instruction. Other studies have identified poor stabilization at the abdominal muscles, particularly the transversus abdominis, to be a predisposing factor in the cause of lower back pain.

Ideally, even after the initial episode of lower back pain, a physical therapist needs to actively intervene in all cases to educate the patient on their prospects for pain and recurrence if they do not participate in a program of lumbar stabilization exercises. As stated, multifidus muscle activity has been shown to be inhibited by one episode of lower back pain and its function does not return spontaneously.

Physical therapists have shown that the recurrence of back problems can be reduced from 84% to 30% in those patients who have done the specific stabilizing exercises for the multifidus muscle.



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Please consult Dr. Haverbush or a physician for specific treatment recommendations.

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