

# OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Wayne Terai

## Chiropractic Relieves Muscle Spasms

*It's a beautiful morning for a jog; the birds are chirping, the sun is shining and all is right with the world. Then — without warning — your pleasant reverie turns into a nightmare as the calf muscles in your right leg spasm. The pain brings you to your knees.*

*Muscle spasms are painful, debilitating and unpredictable. These sudden contractions may occur anytime, anywhere and to anyone. Fortunately, Dr. Terai is here to help.*

Although every muscle in the body is susceptible to spasms, the most common areas of attack include the calves, feet, hands and back. Instigators consist of spinal misalignment, drugs and dehydration. Lack of — or improper — stretching is another causative factor.

Muscle spasms are the result of involuntary muscle contractions. While generally benign in nature, they may indicate the presence of a serious ailment.

The good news is that chiropractic care offers effective, all-natural relief of muscle pain and related conditions. Read on to learn how Dr. Terai helps patients steer clear of muscle ache.

### The Spinal Connection

When spinal movement is restricted or spinal bones (vertebrae) become misaligned, the result is a common condition known as **vertebral subluxation**. Dr. Terai corrects vertebral subluxations with safe and gentle maneuvers called **chiropractic adjustments**.

Other body parts are also subject to misalignment, a condition known as **joint subluxation**.

Vertebral and joint misalignment is linked with a myriad of health concerns, such as carpal tunnel syndrome, headaches and backaches. Research

indicates that these conditions often go hand-in-hand with muscle spasms.

Bones that are slightly out of place disrupt the natural balance of the muscles attached to them. Dr. Terai explains that this disruption triggers muscle spasms. Conversely, muscle spasms due to overuse or improper posture may pull bones slightly out of place, spawning subluxations. In addition to pulling on bones, sore muscles create restriction of movement — another major risk factor for subluxations.

### Chiropractic Reduces Likelihood of Spasms

A study of ten anesthetized adult cats found that chiropractic adjustments change electrical signals in the muscles via nervous-system activity.

Simulating the force of human chiropractic adjustments on the cats' spines, scientists used an electronic feedback-control system to monitor changes in the felines' muscles. It was determined that chiropractic adjustments encourage muscle activity, thereby reducing the likelihood of spasm (*J Manipulative Physiol Ther* 2001;24:2-11).

### Low-Back Pain Relief

Chiropractic adjustments also significantly bolster muscle activity in hu-



mans, subsequently reducing the incidences of spasms. In a study of patients suffering from low-back pain (LBP), researchers used a measurement instrument called a surface electromyography monitor to assess muscle activity before and after chiropractic adjustments. Surface electromyography was also used to record information from a control group.

The study included 40 LBP patients. Half of the group received chiropractic adjustments; ten received a placebo treatment that did not include adjustments; and the other ten formed a control group against which the results from the first two groups were compared.

A positive elevation in muscle activity was recorded in 19 of the 20 patients enrolled in the chiropractic group. On the other hand, there were no significant changes in the group that underwent placebo treatment or the control group (*J Manipulative Physiol Ther* 2000;23:585-95).

**Dr. Wayne Terai, Burtch Chiropractic (250) 860-4518  
229-1634 Harvey Avenue, Kelowna, BC V1Y 6G2 [www.burtchchiropractic.com](http://www.burtchchiropractic.com)**

## Joins Benefit Too

It's no wonder that chiropractic adjustments administered directly to joints throughout the body (such as knees, elbows and wrists) restore motion and alignment. But did you know that chiropractic adjustments to the spine may spark a chain reaction relieving joints in the extremities?

For instance, chiropractic adjustments to the spine of the low back also benefit the knees by combating muscle inhibition (MI) — a phenomenon associated with knee pain. MI is thought to prevent full functional recovery, and modalities that reduce or eliminate MI appear necessary for successful rehabilitation.

In a study of 28 patients with anterior knee pain (AKP), participants were randomly assigned to either a chiropractic care or control group. The chiropractic group received adjustments aimed at correcting sacroiliac (SI) joint dysfunction. The control group received no adjustments.

A 7.5 percent decrease in knee MI was noted in the chiropractic cohort. However, MI did not change in the control group.

“The results of this study suggest that SI-joint manipulation reduces knee-extensor MI. Spinal manipulation may possibly be an effective treatment of MI in the lower limb musculature.” (*J Manipulative Physiol Ther* 2000;23:76-80.)

## Are Your Muscles Thirsty?

Want to really irritate your muscles? Skimp on the H<sub>2</sub>O.

Dehydrated muscles are substantially more susceptible to injury and spasms than are hydrated muscles.

Dehydration wipes the body out of sodium, potassium, magnesium and calcium. This disrupts chemical and electric reactions in muscles and nerves, issuing spasm.

## Medication

Many prescription and over-the-counter medications may produce muscular discomfort.

Since they were introduced 64 years ago, the number of antihistamines on the market has increased at an astounding rate.

Designed to help control allergies, these drugs are available without a prescription. “However, some serious adverse effects involving the central nervous system have been reported, such as depressive reactions (sedative effects) or other psychiatric complications (paranoid psychosis and schizophrenic-like symptoms) ... other known side effects are stimulatory reactions such as muscle spasms.” (*Journal of Occupational Medicine* 1990;32:327.)

Prochlorperazine, marketed as Compazine™, is often prescribed for nausea. However, it also causes tremors and muscle spasms in the tongue, shoulders, neck or eyes. “Other drugs which also cause the same reaction include chlorpromazine [Thorazine™], haloperidol [Haldol™] and fluphenazine [Permitil™ and Prolixin™].” (*Nursing* 1996;26:30.)

Lipitor®, the popular drug used to lower cholesterol, is implicated in numerous cases of mild to severe muscle ache and weakness.

And, an underreported side effect of antipsychotic drugs, antidepressants and drugs to prevent vomiting is impairment of muscle tone: a condition known as dystonia. “Patients with acute dystonia develop abnormal postures or muscle spasms within 7 days of starting an antipsychotic drug ... It can also occur if the dosage is increased.” (*British Medical Journal* 1999;319:623.)

Dystonia isn't just a byproduct of prescription drugs. Illegal drugs — specifically cocaine — increase the odds of developing the condition.

Ironically, the “cure” requires the administration of more prescription drugs, each with its own side effects.

This chiropractic office is committed to helping patients adopt the **chiropractic lifestyle**, a way of life that focuses on preventing health problems, rather than merely masking symptoms with drugs.

## If a Spasm Occurs ...

When a muscle spasm strikes, heed its warning. Listen to your body and make an appointment for a chiropractic checkup immediately. Why is this so important? Because doctors of chiropractic don't just treat symptoms; they focus on the underlying cause of health problems.

In addition to chiropractic care, the doctor may suggest one or more of the following all-natural ways to calm and soothe frazzled muscles:

**Ice & Heat** — Cold causes muscles to relax and reduces swelling. Conversely, in the case of chronic pain, heat may also ease muscle pain. However, heat can exacerbate symptoms in situations of acute pain. Before self-treating, check with the doctor to learn whether ice or heat is better for your specific injury.

**Pineapple Power** — Bromelain, a powerful pineapple enzyme, is available in supplement form and is usually taken three times per day in dosages ranging from 250 to 750 mg. This anti-inflammatory promotes muscular health that, in turn, reduces spasms.

**Other Supplements** — Ginkgo biloba and Japanese quince (*Chaenomeles speciosa*) work to prevent muscle spasms. Vitamin E, niacin and magnesium may also do wonders.

Insufficient levels of vitamin D and calcium may also trigger muscle spasms (*Am J Clin Nutr* 2001;74:494-500).

As with any supplementation therapy, however, talk to your doctor of chiropractic first. Never self-medicate — even with seemingly harmless supplements.

Optimal Health University™ is a professional service of PreventiCare Publishing®. The information and recommendations appearing on these pages are appropriate in most instances; but they are not a substitute for consultation with a health care provider. Optimal Health University™ may be photocopied (NOT reprinted) exactly as they are published noncommercially by current subscribers ONLY to share with patients or potential patients. Optimal Health University™ may NOT be reprinted in any print or electronic publication including newsletters, newspapers, magazines or Web sites. Any other reproductions are subject to PreventiCare Publishing® approval. Copyright, 2009. PreventiCare Publishing®. 1-912-897-3040.