

Winter Health Update 2010

What's New:

1. Combined ART® & Kinesio Foot Therapy
2. Core Values—Strengthening
3. Kids and Computers: A Pain in the Neck
4. We're on Youtube!

Combined ART® & Kinesio Foot Therapy

Active Release Techniques (ART) soft tissue treatment is an effective therapy for many common nerve, muscle, and joint problems. Kinesio Taping is another useful tool in the management of musculo-skeletal conditions. When the two are combined, they can produce a synergistic effect that really helps resolve injuries faster and more completely.

Bunions are a common foot condition and serve as a good example of how the combined ART and Kinesio Taping therapies can help. Some people are more prone than others to form bunions, but this structural deformity is definitely worsened by mechanical pressures on the big toe regardless of genetics.



When the big toe turns inward, often as a result of wearing of narrow-toed shoes for many years, the joint at the base of the toe can become irritated and the bone and tissue enlarged. Technically this condition is called "hallux valgus" of the metatarsal phalangeal joint. Symptoms may include redness, swelling, and joint pain.

Treatments commonly considered, as with many conditions affecting connective tissues, muscles, and joints, can be classified into a) palliative and b) corrective approaches. Palliative means symptom reduction (short-term) and corrective means improving or fixing the underlying problem (long-term). Both palliative and corrective approaches are necessary, but sometimes shortsighted people forget about correction once they *feel* better.



This is a picture of a patient with a mild case of hallux valgus (toe deviation) in that there is no bunion formation at the base of the toe so far. However, there is crowding of the toes and in the future bunion formation is likely.

Chiropractic treatment consisting of ART, Kinesio taping, toe spacers, and foot joint mobilizations was begun to reduce symptoms of toe stiffness and pain after long walks or runs. ART for this condition is



performed on the joint capsule (connective tissue surrounding the joint) of the big toe and the adductor hallucis muscle (a V-shaped muscle that pulls the big toe inward—much like that thumb muscle in your hand that helps you grip a key.)



Kinesio taping was applied to support a more favorable alignment of the long foot bone (metatarsal) joining the big toe, to support the arch of the foot, and to inhibit tight muscles.



Gel toe spacers were used to separate the toes and act much like braces for the teeth. It was also important to avoid wearing any narrow-toed shoes as much as possible. This is a long term strategy to avoid recurrences of the problem.

After a short time the big toe can maintain itself in better alignment and function better without pain on walking or running—now and in the future.



Core Values—Strengthening

The core of your body is its center, the part that joins the upper and lower sections. The muscles at your core brace and stabilize your spine by forming a girdle of support around your center. The major core structures include the abdominal and the back muscles. If you ever doubt just how involved the core muscles are in your everyday activities, get them good and sore from a thorough workout—after which you will fully experience your core.

The next day, you will feel your core muscles when you try to get out of bed, when you lift your arm to reach out, when you bend down, when you step up, when you cough or laugh, when you push or pull, when you walk or run. You will realize that these muscles engage when you do almost anything. And that's why they are so important.

Perhaps you remember TV's *The Six Million Dollar Man* with his bionic arm that could lift cars and his bionic legs that could outrun a car. Too bad he didn't get a bionic core too, because while his arm might have been able to lift a car, without core support, his body would have snapped in the middle. In regard to running, the pelvis twists backward as one leg extends, so the upper body has to counter-twist the opposite way to keep you running straight. Without a bionic core to keep up with his bionic legs, he would have spun out of control like a helicopter with no tail rotor.

Put another way, lack of core strength is like a construction site crane capable of lifting ten tons, but built on a tower of popsicle sticks. Upper body strength is not useable without core strength to back it up and help stabilize the spine—the platform upon which all movement is initiated and supported. For that reason, core strengthening is also helpful in preventing injury.

How to strengthen your core? There are a number of ways, but really, since the core is engaged with most activity, most exercises will in fact work your core. The exception might be some weight lifting machines that essentially stabilize for you and control the entire range of motion during the exercise. One example of this would be a preacher bench arm curl machine.

Calisthenics are perfect for building your core. Exercises such as lunges, jumping jacks, ab crunches, push-ups, pull-ups, and squats heavily engage your core. To increase the demand on core stabilization for greater workout intensity, a gym ball can be used to augment any core program.



This is a core exercise that alternates extension of one arm and opposite-side leg while balancing on the ball.



This is a core exercise that maintains a plank position on the ball while slowly rolling from side to side and from front to back.

I recommend doing a variety of different core exercises to keep it interesting, and if you do each exercise continuously for one minute, and then quickly switch to the next exercise, after 10-15 minutes you will have also increased your cardiovascular fitness at the same time! A helpful website I have found with a long list of animated core exercises is:

http://www.iwantsixpackabs.com/bodyweight/core_exercises.html

Kids and Computers: A Pain in the Neck

A recent study published in the scientific journal *Cephalalgia* looked at 1073 students aged 14-18 to determine the relationship between head and neck pain complaints and computer use. Overall, 26% of the students reported suffering from headaches and 20% reported neck pain. The average computer exposure was 8.5 hours per week.

Interestingly, long hours of computer use were not associated with headaches. The headaches were more common among girls and among students with “psychosocial” issues. Computer use did positively correlate with neck pain, that is, those students with more computer use were shown to have a higher incidence of neck pain symptoms. There were no other correlations found relating to the neck pain including participation in sports.

The authors of the study suggested that a poor ergonomic setup, poor posture, and soft tissue creep/strain during lengthy work sessions all contributed to the reported neck pain among the students. This shows that even otherwise healthy and young people can suffer from the effects of unchecked poor posture—yet more proof that *posture matters*.

We're on Youtube!

If someone you know needs a recommendation for chiropractic care, be sure to direct them to YouTube and search for “Dr. Gregg Carb” for our office video.

★ HAPPY CHINESE NEW YEAR ★