



Advanced

Physical Therapy Associates

Wellness Connections

March 2011

Here at Advanced PT Associates, we believe that patients should have the opportunity to access the most effective and efficient treatment strategies available. We provide one hour sessions in traditional and aquatic therapy to ensure full recovery or prevention of injury. We look forward to providing you with the highest quality, most effective and efficient physical therapy services!

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Back Pain in the Workplace

Harmful back pain is forced by unhealthy habits in the workplace. We all catch ourselves from time to time slouching in an unhealthful position while working on the computer or at a desk. Sitting in front of a computer in an uncomfortable office chair from nine to five can take a severe toll on the muscles in the back. The lowest discs in the spine, L4-L5 and L5-S1, are most likely to be herniated from being seated in a chair for an extended amount of time. Believe it or not, the pain felt in the back when at work is credited to poor posture. The muscles in the back are often credited as the basis of all back problems; however, tight hamstrings are

Remember R.I.C.E.



R: Rest
I: Ice
C: Compress
E: Elevate

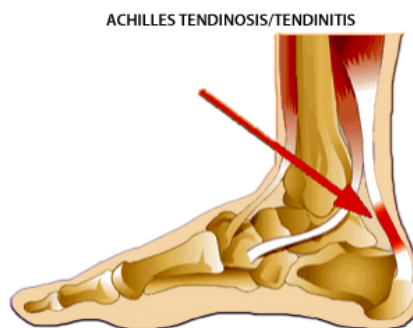
one of the sources. Tight IT bands create pain in the back that can elevate to much larger issues. To attempt to alleviate pain, stretch, **foam roll**, strengthen surrounding muscles (seek advice from your physical therapist for more details), and the use of **Thera Cane®**.

A weak core plays a role in chronic back pain, too. In order to attempt to prevent back pain in the workplace, abdominal exercise must be practiced on a regular basis. Just setting aside time each day to work on crunches or sit-ups can improve your core strength immensely. **Contact your physical therapist** for core strengthening tips and exercises. With a strong core, back pain will decrease or, ultimately, disappear.

Could you have Achilles tendinitis?

Achilles tendinitis, a common injury found in runners or sports activists, is the inflammation of the Achilles tendon (ankle region) that connects the heel bone to the calf muscles. Exercising without warming up, intense stair or hill climbing, and sports that require short bursts of activity (i.e. tennis, basketball, and volleyball) may contribute to the chance of developing Achilles tendinitis.

Amidst these risks, poor flexibility of the calf muscles amplifies the chance of this condition becoming a serious problem. Some warning signs may include: tenderness over the tendon, pain, stiffness, and mild swelling. In order to reduce the risk of Achilles tendinitis, stretch on a daily basis. The more flexible the calf muscles, the least likely you will develop. If you are showing signs of AT, rest, ice, and **contact your physical therapist**. Although Achilles tendinitis is treatable, recognizing the pain and determining the cause of the problem is key to increasing your speed of recovery. Treatments include: rest, ice, pain medication, **orthotic device**, night splints, and sports massage.



Gait Analysis: How does it work?



From PT Owen Quirk:

Running as a form of recreation and exercise has grown in popularity over the last few decades. With an increase in running,

there has also been a corresponding increase in running related injuries. Most of these injuries occur as a result of the forces caused when the runner's foot contacts the ground, which produces a force equal to 2 - 3 times the runner's body weight. As these forces are multiplied with increasing distance, the impact on the lower extremities is intensified. The average runner's foot strikes the ground approximately 3000 times over the course of a 5K race and with that repeated force through the body, it makes proper running form and biomechanics very important.

Running biomechanics can be analyzed by the trained eyes of a physical therapist or other health professional. Also, the use of evolving computer technology and high definition cameras, a person's running form can be studied even more precisely. These advances in technology allow physical therapists to assess lower extremity joint alignment or muscle weakness, which can have a profound effect on the development of an overuse running injury. As previously stated, many injuries occur as a result of poor joint alignment as the lower extremity attenuate the forces at initial contact with the ground. Poor joint alignment could be a result of improper running form, inadequate strength or flexibility to maintain proper form or a structural irregularity of the musculoskeletal system. Once any deficits are discovered through video gait analysis and a comprehensive physical therapy evaluation, these issues can be addressed through physical therapy so that the patient can return to pain-free running.

How it works:

1. Jog or walk on a treadmill in order for the source of your problem to be determined.
2. Physical therapist will simply watch your feet, ankles, knees, and hips to determine if anything needs to be altered.
3. A video camera will be set up to record the patterns your feet, ankles, knees, and hips make. When watching the tape, you will recognize what needs to be fixed.
4. After solving the problem, your physical therapist will give you tips on technique.

Beneficial Products for You

These products, along with an assortment of other items, are available in our clinic for purchase.

Orthotic Devices: Orthotics are shoe inserts that elevate the heel to reduce strain on the tendon. With Vasyli® Orthotic inserts, wearing a shoe will always be comfortable. These inserts range in size, color, and shape in order to fit your needs. Not only are shoe inserts available, Vasyli® offers sandals in many different styles, including flip-flops and slide-ons. Orthotics are used to treat foot problems, as well as preventing new issues from arising. Remember, only use orthotics if necessary. The inappropriate use of this product can cause harm to the structure of the foot.

ThermalSoft® Ice Packs: These reusable packs can either be heated or frozen depending on the type of injury. To heat the pad, just microwave or heat in water. To use for cold therapy, freeze the pack. ThermalSoft® ice packs stay flexible at any temperature in order to fit around treatment areas for opportune exposure. ThermalSoft® ice packs will remarkably reduce soreness, as well as increase the speed of recovery.

Foam Rollers: The foam roller not only stretches out muscles, it breaks down lactic acid in muscles that causes soreness. Unlike a professional massage, the foam roller uses your own body weight to perform a beneficial self-massage while still releasing trigger points, relieving soreness, and increasing blood flow to soft tissue. Available in various sizes, the foam roller can be used on hamstrings, calves, shoulders, abdominal muscles, Achilles tendons, backs, and necks.

Thera Cane®: "Thera Cane® is a self-massager used to apply pressure to sore muscles. The unique design of the Thera Cane® lets you apply deep pressure massage to hard to reach areas of your body on your own," says Thera Cane Co®. Whether your shoulder is tight from leaning over a computer all day or your quadriceps are sore from a workout the day before, the Thera Cane® can relieve any type of pain in a matter of minutes.

BIOFREEZE®: BIOFREEZE® relieves sore muscles and joints, which increases mobility and increases recovery time (from an injury). This solution effectively aids in the relief of contusions, arthritis, muscle stiffness, muscle spasms, cramps, strains, sprains, hip stiffness, back

stiffness, shoulder stiffness, painful hip, knee, elbow, and shoulder joints. BIOFREEZE® is available in gel, lotion, roll-on, and cloth wipes.

You deserve a choice in your physical therapy treatment! At Advanced Physical Therapy Associates, LLC we offer our patients state-of-the-art traditional and aquatic physical therapy services under one roof. By offering two separate treatment environments, we can customize the best rehabilitation fit for each patient. Count on us to improve your quality of life.

Call today for a free consultation and clinic tour.

(919)290-2799

Sincerely,

**Ken Easters
Advanced PT Associates**