

REFLECTIONS  
SEPTEMBER 2005



**STUDIO 1 & 2 HOURS**

5 a.m.-10:30 p.m. M-F  
6 a.m.-10:30 p.m. Sat.  
7:45 a.m.-8:30 p.m. Sun.

**UPCOMING EVENTS**

**September**

- 7 Health and Fitness Showcase
- 12 Cholesterol Testing
- 13 Shoulder Injury Prevention Workshop
- 13 Boot Camp with Ramses Begins
- 14 Carlsbad Weekend Getaway Seminar

**October**

- 5 Carlsbad Weekend Getaway Seminar
- 5 Health and Fitness Showcase
- 24 Flu Shots
- 26 Flu Shots

**November**

- 2 Carlsbad Weekend Getaway Seminar
- 2 Health and Fitness Showcase

**December**

- 7 Carlsbad Weekend Getaway Seminar

**Member Services**



**SHOULDER INJURY PREVENTION WORKSHOP**

Tuesday, Sept. 13, 6p.m.

Local chiropractor Dr. Gentry McGrath will host a free shoulder injury prevention workshop on Tuesday, Sept. 13 beginning at 6 p.m. in the multipurpose room. No sign up is necessary. For more information, please contact the Fitness Service desk at 688-3177.

**Shoulder Pain 101**

By Thomas Gentry McGrath

**T**ennis and golf are games of accuracy, strength and stamina. The skills used to participate in these games are much more demanding than you may think. Although you might spend your day intellectually challenged by the day's workload, when you have the chance to escape the daily grind of work and go play tennis or golf, it should be fun and rewarding. Why let soreness or an injury keep you from performing well?

The arm motions for tennis and golf are rotary actions. Both are quite different, but each requires strength, speed, accuracy and stabilization. Take tennis, for example. The shoulder muscles must be able to withstand the forces put upon them to accurately place the ball in an opposite court with the desired speed and bounce.

With golf, the shoulders must guide the club through the stroke and contact the ball with appropriate angle to lift and propel it with optimal speed and height to the next green. The shoulder muscles often feel sore or painful after playing a game. Why? The key is the strength, endurance and integrity of the rotator cuff muscles. The rotator cuff muscles are a group of four muscles named the supraspinatus, subscapularus, infraspinatus and teres minor. Their role is to stabilize the shoulder girdle in every motion.

The shoulder girdle is a ball and socket joint composed of the scapula, commonly known as the shoulder blade; the clavicle, commonly known as the collarbone; and the humerus, the upper bone of the arm. This is a very shallow joint that allows 360-degree movement of the upper extremity.

The bones in the body do not move themselves. They are moved by muscles, which are acted upon by the nervous system. When the larger muscles of the arm and shoulder are used to accelerate the arm to control the racquet or club, the arm must decelerate once the ball is contacted.

The rotator cuff muscles maintain the integrity of shoulder muscles during acceleration and deceleration.

These rotator cuff muscles can fail after an extremely hard effort or after repeated efforts. The muscle, tendon or joint capsule can all tear. These can be micro-tears that can cause soreness with or without movement. Larger macro-tears can be even more painful. Muscles can go into protective spasm as a result of injury and cause a burning, aching or throbbing feeling. The muscles can also pinch nerves and cause changes in sensation in the shoulder, arm and hand.

What causes these types of problems of the rotator cuff? Usually they result from an inherent weakness established sometime earlier. Maybe the weakness is the result of a fall that occurred some time ago or maybe it was an ergonomic problem at work that continues to persist. It could be the result of one weak muscle or multiple weaknesses. The key to prevention is maintenance of the shoulder articulations, balanced strength of the muscles and integrity of the nerves activating these muscles. This is a complex of bones, articulations, muscles and nerves.

Appropriate exercise, warm-up and stretching are key components to preventing these aches and pains. Proper techniques are imperative to prevention of injury. A coach or physical trainer can help with the appropriate swing and/or rehabilitative exercise. Also knowing your own abilities and limits is helpful. To prevent an injury or once an injury has occurred, be sure to seek proper advice from your health care professional and/or your trainer as to the best preventative or rehabilitative procedures.



*Thomas Gentry McGrath, D.C., D.A.C.N.B. is a chiropractor specializing in neurology & sports. He takes a natural approach to correcting problems through treatment & muscular rehabilitation. His client base includes golfers; tennis players, swimmers, runners, cyclists & triathletes.*