

# PT HEALTH UPDATE

Kern & Associates Physical Therapy

January 2005

## Minimizing Golf Injuries

Every weekend all the public golf courses are jammed with people playing up to six hours in an 18 hole course. If your lucky you can belong to a private course and can actually finish your round in four hours. We shank, we duff, we hit the water, hit way left, or right into the rough, complain about our aching backs, shoulders, necks, elbows and still we continue to play and love it.

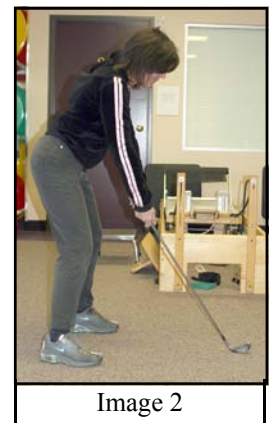
What is so addicting about trying to get a little white ball into a cup? All it takes is one good shot to bring you back to the golf course. But sometimes it takes a lot of swings to get that one good shot. In an 18 hole golf course you will swing about 36 times, if you are a par golfer, and 72 times if you take a practice shot too. In addition you will bend down to either place you tee, pick up your tee, or mark your ball almost 72 times. Golf is a repetitive stress strain in two ways: repetitive shearing and torquing of the spine from swinging and repetitive loading of the low back disc by bending forward. This article is about minimizing injuries in golf from a physical therapist specializing in the biomechanical aspects of the golf swing.

There are three key elements to help prevent golf injuries:

- 1) Maintaining the correct golf stance which would also include a solid base of support.
- 2) Assuming proper grip.
- 3) Using your hips or large muscle groups to power through your swing.

In normal stance, posture is regulated by the position of the pelvis which is almost in a vertical position. In the golf stance you maintain a vertical position of the

pelvis with the hips flexed 15 degrees, the knees flexed 10 - 15 degrees, and the trunk slightly in sidebend. You don't have to "stick your butt out" (anterior pelvic tilt) which causes increased tightness in the low back from the shortening of the hip flexors. You don't have to "sit on the toilet" (posterior pelvic tilt) which also increases back strain by shortening of the hamstrings. To achieve good stance (and correct placement of the club on the ground), stand with your feet shoulder width apart holding the club in a horizontal position (image 1), slightly bend forward through the hip and knees as you place the club on the ground (image 2). You will automatically be in slight side-bend because of your grip which will be discussed later.



### Upcoming Events

**Wednesday, January 12, 2004 at 5:30pm - *Get Into the Swing: Optimizing Your Golf Game and Minimizing Golf Injuries*: With Sue Klein, PT teaching stretching, balance, body mechanics, and strength training techniques to help you improve your golf game and minimize injuries while you play the greens.**

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Make sure your feet are solidly planted (good base of support) with the weight over your arches. This requires good balance with the ability to be able to stand on a single limb (image 3), since your weight has to shift from one foot to the other during the golf swing.

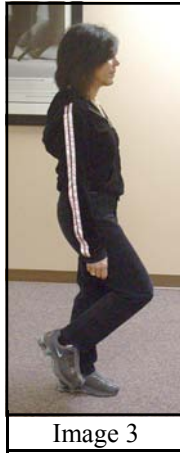


Image 3

## RELAX

Relax the shoulders and the hands. Increased tension in the shoulders tightens the front of the chest which will cause strain on the neck. Increased tension in the hands will cause more pressure in the elbows (golf elbow or medial epicondylitis, even lateral epicondylitis), and slow down your club head speed resulting in a loss of distance.

Proper grip prevents elbow and some shoulder injuries, and prevents “shanking” or “pulling” the ball. Proper grip is designed to maximize wrist and forearm strength. To grip the club, hold the club with the last three digits of the left hand on the club so that the “V” between the thumb and index fingers faces the right shoulder (if you are playing right handed). Place the right hand under the left using an interlocking, overlapping or even a baseball grip. The “V” of the thumb and index finger should also face the right shoulder. Hold the club firmly but not tightly. To check if the grip is correct, hold the club at a horizontal position (image 4). Drop your right hand. If there is no wobbling in the left wrist, your grip is most likely correct.

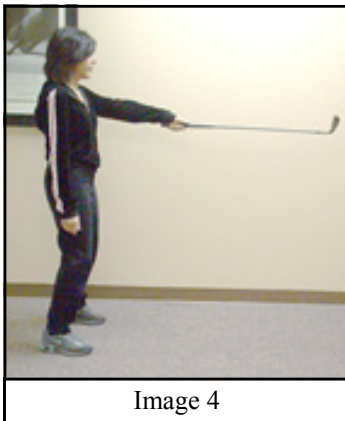


Image 4

Another key element to minimize injuries is using your large muscle groups to power through the ball. This includes firing of the gluteus muscles (buttocks) and quads. The backswing is initiated with the arms. After that, the arms become relatively passive in relationship to firing of the lower body. In the

downswing, the arms drop while your hips rotate and power through the ball.

Repetitive bending can also cause low back problems. Each level of the lumbar spine has a disc in between each space which acts as a shock absorber. The discs in the back of the spine are held in place by ligaments. Bending forward increases the pressure of the discs pressing on ligaments. Repetitive bending can increase disc pressure so much that the discs can start to bulge.



Image 5: Good

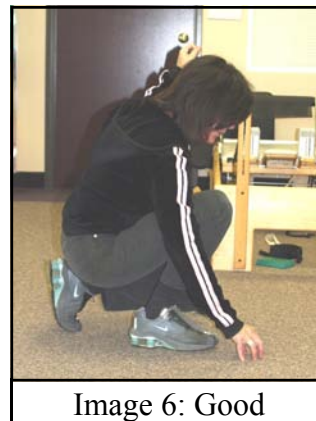


Image 6: Good

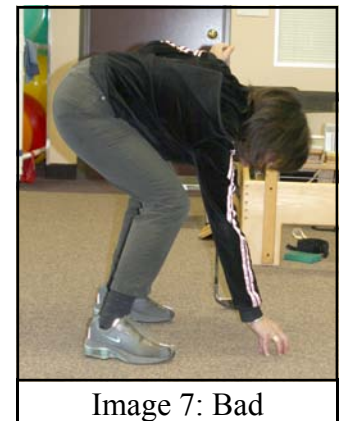


Image 7: Bad

To minimize disc injuries, do not bend forward from the back to the place or mark your ball (image 5 & 6). Bend through the knees. Again, use your large muscle groups, like your quads, to do the work instead of the small back muscles (image 7).

Lastly, don't think about your golf swing on the course. Work on your mechanics at the range, not on the golf course. Trust your mechanics and just hit the ball and have fun.

### Our sports therapy program strives to:

- ❖ Reduce or eliminate pain.
- ❖ Improve mobility and function.
- ❖ Restore strength.
- ❖ Complete the healing process.
- ❖ Return to your favorite sport.
- ❖ Help prevent re-injury.



*The Staff at Kern & Associates Physical Therapy  
wishes you a  
Happy Holiday and a Wonderful New Year*

**In the new year, please let us take care of  
your physical therapy needs**

**Some of our ongoing services**

- Orthotics Evaluations
- Sports Injury
- Manual Therapy
- Women's Health
- Vestibular/Balance treatments
- Alexander Technique
- Incontinence prevention
- Spinal rehabilitation
- Post-Op Rehabilitation
- Pilates
- Pediatrics Physical Therapy

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