



Education Series

SHOULDER PAIN IN GOLF

Causes and Cures

Understanding how to manage
and prevent golf related shoulder pain

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FITforeGOLF™

SHOULDER PAIN IN GOLF

About this Booklet

The purpose of this brochure is to educate golfers on how to avoid golf-related shoulder injuries. The brochure is divided into 2 parts. The first explains the main injuries that can occur to the shoulder and how the golf swing creates stress on these structures. This is followed by a special "What can I do?" section that includes technique advice as well as important exercises for improving the strength and flexibility of the shoulder muscles and joints.

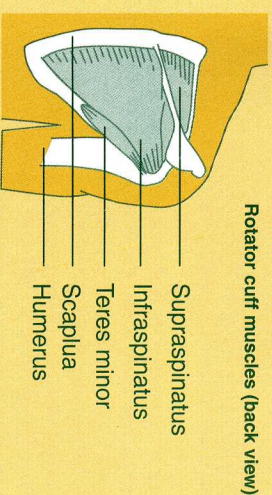
ROTATOR CUFF SHOULDER INJURY

There are many golf injuries that affect the shoulder. These include overuse problems (tendinitis / bursitis), traumatic injuries (rupture) and wear and tear conditions (arthritis).

The most common shoulder problem in golf is injury to the rotator cuff muscles. These muscles help rotate the shoulder joint plus provide extra reinforcement for the normally loose shoulder ligaments. Research has shown that the rotator cuff muscles are the critical shoulder muscles for correct execution of the golf swing.

Anatomy of the Rotator Cuff muscles

There are four rotator cuff muscles in each shoulder: the supraspinatus, infraspinatus, teres minor and subscapularis. They all start from separate parts of the shoulder blade, pass under the large deltoid muscle, and attach as one broad tendon (hence the name cuff) around the very top of the upper arm (humerus).



How does Rotator Cuff injury occur?

Rotator cuff injury is very common even amongst non-golfers. When this injury does occur from golf, it usually affects the lead shoulder (left shoulder in a right-handed player). This is usually due to the extra stress placed on the lead side during impact with the ball and/or ground. The pain often develops gradually during the round or practice session.

Rotator Cuff Rupture

Occasionally a complete rupture of part of the rotator cuff can occur. The rupture is usually caused by a traumatic incident involving a rapid deceleration of the club during impact (e.g. taking a deep divot). Sometimes a small "pop" or tearing sensation is felt inside the shoulder. Senior golfers are particularly susceptible due to age-related wear and tear and reduced blood supply to the rotator cuff tendons.

Typical symptoms of a rotator cuff tear are constant pain and considerable weakness when trying to lift the arm or rotate it out away from the body. Golfers suffering this injury are often diagnosed as having rotator cuff tendonitis / bursitis before the chronic nature of symptoms leads to the correct diagnosis of rotator cuff rupture. A special test such as a MRI (magnetic resonance imaging), diagnostic ultrasound or an arthrogram is often required to confirm the diagnosis. Surgery is usually necessary to repair the tear and allow the golfer to swing without pain.

The following pages show you what you can do to relieve your shoulder pain

Senior golfers are at risk of rupturing their rotator cuff tendon. Surgery may be required to repair the rupture.

1**HELP THE SHOULDER HEAL**

- Consult your physician or physical therapist if the pain is intense or prolonged.
- Avoid movements that make you grimace (this may require you to temporarily stop playing golf).
- Ice the shoulder regularly and for 15 minutes at a time. ALWAYS use a moist towel between your skin and the ice.
- Anti-inflammatory medication and physical therapy treatment may help speed the healing process.
- An injection of cortisone (which is an anti-inflammatory drug) is often helpful in controlling chronic shoulder pain.
- Start back at golf gradually. Don't hit balls until you can swing a club in the backyard for several minutes without pain.
- Warm up properly before hitting balls (see STRETCH Your Golf Game booklet).
- When returning to the course, use preferred lies for the first few rounds to make it easier to contact the ball without taking a large divot.
- Continue to stretch your shoulder muscles during each round and practice session (see attached exercises)
- Give yourself several days off between rounds.

Make sure you warm up all your golf muscles before hitting balls

2**ADJUST YOUR TECHNIQUE**

- Since poor technique can cause shoulder problems, a lesson from a PGA teaching professional may be necessary.
- Keep your trail elbow more "tucked in" towards the trunk on your back-swing.
- Keep your hands below the top of your head on your follow-through. The shaft of the club should finish more horizontally across the back of the neck rather than vertically down your back.
- Don't swing as hard (i.e. use an extra club to hit your normal yardage).

3**STRETCH & STRENGTHEN YOUR SHOULDER MUSCLES**

- Always check with your physician or physical therapist before starting any new exercise program.
- STOP if these exercises cause pain.
- Exercise tubing may be purchased from your local **FITforeGOLF™** facility.
- In addition to the following exercises, make sure your back and trunk muscles are strong and flexible (see **POWER UP Your Golf Game booklet**).

Contact a licensed **FITforeGOLF™** facility if you have questions about any golf injury.
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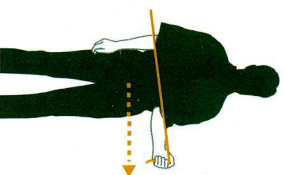
4 ROTATOR CUFF STRETCH

Place the hand of your injured shoulder on your good shoulder. Gently pull the elbow of the sore shoulder towards your good shoulder. You should feel a stretch across the back of your injured shoulder. Hold for 10 seconds.



6 EXTERNAL ROTATION STRENGTHENING

Securely attach one end of the elastic exercise tubing (available at most physical therapy clinics), at elbow height. Stand side-on to where the tubing is attached. Keep your elbow bent to 90 degrees and your upper arm against your side at all times. Rotate your lower arm away from your body and against the elastic resistance. Perform 3 sets of 10-20 repetitions. Fatigue should be felt in the back of the shoulder.

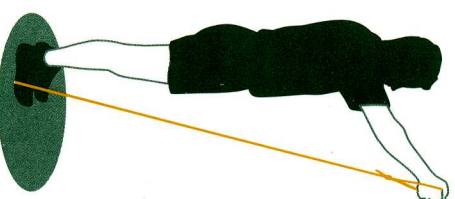


8 SHOULDER RAISES

Securely stand on one end of the elastic tubing and hold the other end in your hand. Slowly raise your arm in the air until your hand is about level with the top of your head. Keep your elbow straight as you lift your arm. It is also important to maintain good posture by keeping your abdominal muscles tight. You can increase or decrease the resistance of this exercise by varying the length of tubing between your hand and foot. Perform 2-3 sets of 10-20 repetitions.

WARNING

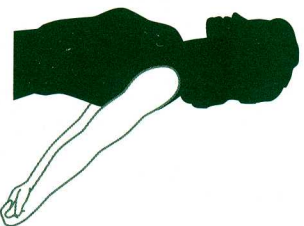
Do not attempt this exercise unless you are able to reach overhead without pain.



Additional exercises to improve the strength of all the important golf muscles can be found in the **STRENGTHEN Your Golf Game** booklet (ask your local **FTYforeGOLF™** Affiliate for details).

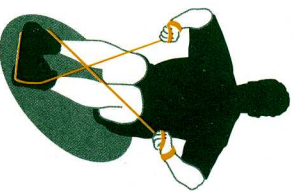
5 HAND BEHIND BACK STRETCH

Interlock your fingers behind your back. While keeping your elbows straight, pull your shoulder blades together. Raise both arms up until a gentle stretch is felt in your chest and shoulder blade regions. It is important to keep your elbows straight and the injured shoulder relaxed. Hold for 10 seconds.



7 SHOULDER BLADE STRENGTHENING

Sit as shown and cross the elastic around your feet. Keep your toes pointed down at all times to prevent the elastic from slipping off and possibly hitting you. With your elbows about shoulder height, pull both elbows back as though you were rowing. **CONCENTRATE** on squeezing your shoulder blades together. Keep your neck muscles relaxed as you do this. Perform 2-3 sets of 20 repetitions.



Who is most at-risk?

Rotator cuff injuries can occur in male and female players of any age group although male senior players appear to be especially susceptible.

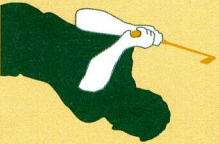
What symptoms will I have?

Typical symptoms of rotator cuff injury include:

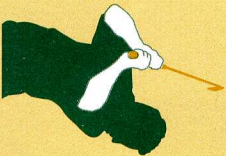
- Vague non-specific shoulder ache which can turn into sharp pain as the arm is elevated over-head. The pain often radiates about halfway down the arm.
- Pain and weakness with twisting motions of the upper arm (opening a heavy door, reaching for the seat-belt).
- Difficulty sleeping on the affected side.
- Pain and apprehension when swinging hard or taking divots

What about my technique?

Golfers who allow their elbows to "fly", meaning there is excessive separation between the trunk and the elbow on either the back-swing (trail shoulder) or follow-through (lead shoulder), are also susceptible to rotator cuff problems.

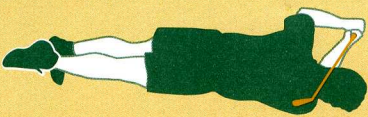


Normal trail shoulder

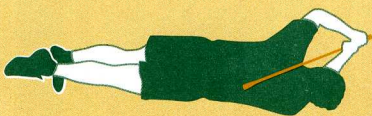


Elevated trail shoulder

Golfers who finish with their hands very high (i.e. above their head) on the follow-through, are also at risk.



Normal finish



Excessive shoulder elevation at finish

Over-swinging, where the player tries to "muscle" the ball using the small shoulder and arm muscles instead of the large and powerful trunk and hip muscles, is a common technique flaw causing rotator cuff injury.

Rotator cuff injury can also occur from over-compensation. Typical examples include poor trunk rotation or wrist release resulting in the need to compensate or over-use the chest, scapula and shoulder muscles in order to improve club-head speed.

Your local affiliate is:

FTTforeGOLF™ delivers a multifaceted program designed to help keep you injury free and add years to your game. *The better the body the better the performance!*

See your **FTTforeGOLF™** affiliate for other Educational Series booklets.

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