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GOLF INJURIES

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How many of you golfers out there have had some sort of muscle strain, backache, tendinitis, bursitis, torn muscles? Well, you're not alone. With the increasing popularity of golf, physicians are seeing an increased number of golf related injuries. Five years ago, I took up golf and joined the estimated 50 million golfers in the world today. I now consider myself a fairly avid golfer. So I am concerned that as many as 50% of golfers less than the age of 50 have suffered some type of injury related to golf. And for those golfers greater than the age of 50, 65% have sustained golf-related injuries.

Although golf is not considered a very rigorous sport, it is obviously a very repetitive one. With practice swings, a golfer can easily swing more than 250 times in a round, and that is not including the pre-round warm up on the practice range. Therefore, if you consider that golfing utilizes many of the large muscles of the back, thorax, arms and legs, it is no wonder that there are an estimated 40,000 every year who require treatment. Thankfully, golf injuries are rarely an acute traumatic event. The cumulative mini traumas of repetitive golf can lead to overuse syndromes such as rotator cuff tears, tendinitis, and sprains. Golf injuries are usually a result of a combination of factors: wrong stance, bad posture, poor swing mechanics, and untrained muscles.

The back, followed by the shoulders, elbows, wrists, hips, and knees are the most commonly injured. Pros' injuries are usually related to muscle overuse, while the rest of us hackers tend to result from poor form and weakness. The goal of every golfer is to hit the ball the maximum distance, with perfect accuracy, and control. To achieve the maximum distance, a golfer has to be able to transfer a large amount of energy from the legs and back to the arms, shoulders, and wrists and finally to the clubhead in a coordinated movement that can take a fraction of a second. Each part of the swing can swing from the take-away to the downswing and to the follow-through can subject the body to great forces. The downswing and impact undoubtedly puts the body at most risk.

In general, to treat a routine muscle strain and sore muscles, a golfer should begin with rest, ice, compression, and elevation (RICE). I prefer to have my patients rest and ice the injured body part until the pain subsides and the swelling dissipates. Over the counter non-steroidal anti-inflammatories such as Tylenol, ibuprofen, and aspirin can also be beneficial. There are prescription anti-inflammatories as well, but be sure to take them as prescribed. After the pain and swelling subside after a few days, it is important to begin a gentle exercise program that consists of gradual stretching for 20 second intervals interspersed with 5 second contractions of the involved muscle. The idea is to stretch the muscle while it is healing so it does not heal in a shortened position. Always ice the muscle prior to and after the stretching exercises. Once the pain is better, you may gradually resume playing again.

It seems every golfer has had an aching back at some point in their golf careers. To swing a golf club 100-mph, a golfer produces a tremendous amount of rotational forces that can disrupt any part of the lumbar spine which consists of bones, muscles, discs, and ligaments. The most common causes of back problems are poor conditioning and improper or no warm-up. Why is it that us weekend hackers wait until the last moment to get to the golf course, throw on the shoes, make bets with the rest of the foursome, and then complain about all of our aches and pains? If golfers would take the time just for a pre-game warm-up and stretch, many of the injuries to the back can be prevented. 95% of back pains are related to just strains; however, there are instances where more complicated back problems, like a herniated disc, can occur. A herniated disc is a protrusion of a soft fibrous material that normally acts to cushion your vertebrae. As the disc migrates, it can pinch nerve roots



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thus causing pain that radiates down a leg that can result in numbness or tingling. The pain is usually exacerbated by sitting or sneezing, and can often be reproduced by lifting the leg while keeping the knee straight. People with these kinds of symptoms should be evaluated by a physician.

The key to back pain is to prevent it in the first place. Besides warming up and stretching prior to golfing, some other simple tips can also help: 1) take lessons because a deviation from an ideal swing can be a setup for back problems; 2) a back and abdominal strengthening program that concentrates on conditioning and flexibility; 3) pull your golf back, don't carry; 4) if you want to carry a bag to more evenly distribute the weight; and 5) club up, and stop swinging so hard.

Shoulder pain is also frequent complaint in golfers. Several PGA golfers have had their fair share of shoulder problems. The well-publicized surgery and recovery of Greg Norman comes to mind. Several senior PGA tour veterans have had shoulder difficulties, among them Gil Morgan, Tom Watson, and Calvin Peete. Most shoulder injuries involve the rotator cuff musculature which consists of 4 muscles that surround the joint and help move the shoulder in all different planes. The most common affliction is tendinitis, which is inflammation of the tendons. Typically patients have difficulty raising their arm above shoulder height. It usually involves the lead arm of the golfer (left shoulder of a right-hander). Typically this is an overuse phenomenon and resolves with a short rest, ice, anti-inflammatories, stretching, and gradual return to activities.

Another common shoulder woe is bursitis, which is inflammation of a fluid-filled sac that lies above the rotator cuff tendons. The bursa normally provides lubrication for the tendons, but when it gets inflamed and swollen, it can cause pain because it can get pinched as the arm is elevated. The symptoms are similar to tendinitis.

The treatment for tendinitis and bursitis is a series of exercises that concentrate on shoulder flexibility and strengthening using light weights and more repetitions. Anti-inflammatories and cortisone injections can be helpful in the short term, but are no substitute for rehab. Adequate warm-up before playing, some gentle strengthening exercises, and hitting a few practice balls beginning with easy swings are also very important.

Sometimes all conservative measures fail, and your orthopaedic surgeon may recommend as a last resort, surgery. If the rotator cuff is not torn, this typically requires an acromioplasty. This procedure essentially removes the overlying pathologic bone that is impinging on the rotator cuff and bursa as you elevate the arm.

If the rotator cuff is torn, the patient typically has more pain and some loss of shoulder range of motion along with more significant weakness. Smaller rotator cuff tears can improve with an exercise program to re-strengthen the tendons. But, if pain persists, a rotator cuff repair may be needed. This is usually done with an incision over the top of the shoulder and involves placing sutures into the rotator cuff and pulling it back into the bone through tunnels placed into bone or suture anchors.

The elbows and are also a potential source of problems in golfers. Often times they are inter-related since the muscles that move the wrist originate from the elbow. The elbow can become inflamed from repetitively striking the ground when taking a divot. Acute trauma can also result from unexpectedly hitting something more solid. The lead elbow (left for a right-handed golfer) usually is the one that is involved. When the outside part of the lead elbow is inflamed, it is called lateral epicondylitis (a.k.a. tennis elbow). Characteristic symptoms include pain with wrist extension, pain with lifting objects with the palm facing down,



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and pain with gripping objects such as a golf club. The pulling of the club with the non-dominant elbow can irritate the lateral epicondylitis especially when taking divots.

When the pain is on the inside of the dominant elbow (right for a right-handed golfer) it is called medial epicondylitis (a.k.a. golfer's elbow or medial tennis elbow). Pain usually occurs with wrist flexion, picking things up with the palms up, and turning the palm over so it is facing down (pronation).

The treatment of either medial or lateral epicondylitis is the same, although I find the medial epicondylitis less common and most times more difficult to treat. Rest, ice, anti-inflammatories, followed by physical therapy that concentrates on a gradual stretching and strengthening of the wrist flexors and extensors almost always takes care of the initial symptoms. If pain persists, a cortisone injection can be used, and on very rare occasions, surgery to debride the pathologic, inflamed tendon and reattach it may be necessary.

Golf is often thought of as a social event, a time to smack a few balls around with your friends, but unfortunately golf is not an innocuous sport. Most injuries are fairly minor and can be treated easily, but it is important to remember that returning to the links is the ultimate goal. If you are injured, you do not want to stop using the injured joint, for inactivity can lead to atrophy and stiffness. Keeping the joint moving, concentrating on light weights and high reps can keep the muscles stimulated and the blood flowing to prevent atrophy. Bad technique, overuse, lack of strength, and bad posture can all lead to injury. Since we can't all have the perfect swing, your best option is to condition yourself the best you can even if it requires a visit to a personal trainer or therapist. At the very least, warm-up properly and try and stretch between shots. You can take solace in the fact that you will be able to return to the course except in the severest cases, but it can take time, therapy, practice, and sometimes a trip to your local golf professional.

Dr. Lin is a General Orthopaedic Surgeon with Des Moines Orthopaedic Surgeons, P.C. His primary location is at 1301 Penn Avenue Des Moines. He also offers satellite clinics in Chariton and Knoxville.