Golfing Woes: A Comprehensive Look at the Golf Swing and its Contribution to Low Back Pain
By Tim Pike MA ATC

Golf is a popular sport for both men and women of all ages, different shapes, sizes and physical abilities. There is no gold standard for the absolute perfect swing. In fact, the golf swing has been described as being an unnatural motion for the human body. Yet, so many individuals of different shapes, sizes, and abilities participate in this game. Due to the unnatural biomechanics of the swing in combination with the popularity of the sport, many individuals will sustain an injury at some point.

For instance, low back pain has been classified as the most common musculoskeletal injury affecting golfers at both the amateur and professional levels. Medical professionals attribute the occurrence of low back pain to one, if not all of the following: overuse, poor technique, and poor physical conditioning.

The ballistic nature (quick bouts of explosive motions) of the game places unreasonable demands on muscular strength, flexibility, and muscle onset timing. Greater club head velocity generated at ball impact will result in greater force, increasing the potential for further distance of ball travel. Thus, participating in golf can be problematic for any golfers who lack the ability and/or skill to generate the appropriate club head speed at ball impact.

As stated before, the golf swing requires flexibility and mobility, resulting in a number of movements to generate the appropriate amounts of trunk rotation. Trunk rotation is produced when the generation of axial torque is coupled with the production of sagittal plane (side to side) torque. Professional golfers, in general, exhibit approximately a 45-degree hip turn, along with a full 90-degree shoulder turn, with the back swing while maintaining good balance with minimal weight shift. Research has shown that minimally skilled and older golfers have less trunk rotation, resulting in even more difficulty for these golfers to generate enough club head speed. Regardless of the available trunk rotation, amateur and professional golfers generate a large amount of torque throughout the trunk region (upper/mid torso and hip region), requiring muscular strength and conditioning to optimize swing performance while providing stability to the low back.

Therefore, there must be a balance between the demands of the larger muscle groups and the smaller muscle groups. These two types of muscle groups work together to support the skeleton while providing maximum torque.
An imbalance in muscle strength or onset time in either muscle group during the golf swing may result in low back injury.

It stands to reason that as an individual plays a round of golf, repetitive swinging of the golf club along with walking up and down hills, and constantly bending over for several hours will progressively produce muscle fatigue. Trunk musculature has been described to be better suited to provide low levels of activity for long periods of time as apposed to shorter more violent burst of activity, like in golf. Due to the ballistic nature of the game and the fact that trunk muscles are designed for maintaining posture, these muscles may be susceptible to injury. Muscle fatigue may compromise low back stability, thereby placing an individual at an increased risk of developing a low back injury. A good regimen of core stabilizing exercises along with functional exercises that also promote good golfing mechanics is key. It is also paramount that golfers realize his or her physical ability in regards to mobility and craft their golf swing and exercise regimen within their physical limits.

University of Kentucky Second Annual Coaches’ Golf Outing

Our second annual coaches’ golf outing was on June 21 at Houston Oaks Golf Course and was a huge success. Eighty-four coaches from contracted schools with the University of Kentucky were invited to play 18-holes of golf and had lunch provided by Chick-fil-a. We were able to raise over $800 for Tee It Up for the Troops - a non-profit organization created to help support the fallen and disabled members of our Armed Forces, and their families. Several University of Kentucky physicians, athletic trainers, and other medical staff were in attendance and contributed to the success of the outing.

Thank you to all of our sponsors:

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MRSA
Sheri McNew, ATC

What is it?
MRSA is a staph bacteria that is resistant to common types of antibiotics. Staph bacteria are one of the most common causes of skin infections and can cause pneumonia, surgical wound infections and bloodstream infections. These can become life-threatening infections if not treated properly. The majority of MRSA infections occur among patients in hospitals or other healthcare settings. Recently, it has become more common in the community setting.

What does MRSA infection look like?
Staph infections often begin with an open wound—allowing the bacteria to enter the body and develop into an infection. Look for:
- Pimples, boils, or blisters which become red, swollen, painful, or have pus or other drainage
- Sometimes mistaken for spider bites
- Some people may have chills, fever, feel nauseous and have acute pain

Is MRSA infection treatable?
Most staph and MRSA infections are treatable with antibiotics. If you go to your physician with a possible infection, ask them to culture the infection so they know what type of antibiotic to put you on.

Take all of the doses of the antibiotic, even if the infection is getting better. Do not stop unless your physician tells you to. Do not share antibiotics with other people or save unfinished antibiotics to use at another time.

Drainage of skin boils or abscesses should only be done by a physician. DO NOT attempt to squeeze or drain a boil yourself. This will only spread the infection.

How to prevent MRSA or staph infection.
MRSA or staph infections are spread through physical contact or touching surfaces the infection has come in contact with—i.e., sports equipment, weight equipment, tables, lockers.

PRACTICE GOOD HYGIENE!
- Keep your hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer
- Clean ALL cuts and scrapes daily with soap and water. Put over the counter triple antibiotic ointment on the wound and cover. This is especially important during physical activity when you are around other people. Keep wound covered daily until it is totally healed.
- AVOID contact with other people’s wounds or discarded bandages.
- AVOID sharing personal items such as towels, clothing, and razors.
- DO NOT share equipment if it has not been wiped down first with an alcohol based sanitizer.
- Shower after practices or games.
- Take practice clothing home every night and wash it in hot water with detergent. Dry on a hot setting. Do not wear dirty clothing for practice or games.

Wash sheets, towels or clothing at home that has come in contact with your open wound.
UK Sports Medicine Walk-In Clinic

- With our sports injury walk-in clinic, no appointment is necessary.
- Walk-in between 7:30 - 8am.
- We’re located within Kentucky Clinic, with adjacent parking available.
- Staffed by sports medicine fellowship-trained physicians.
- Physical therapy and rehabilitation services are available.
- We’re proud to be the team physicians for all UK Athletics.
- Call (859) 257-4577 for more information.

Meet the New Member of the Sports Medicine Team

Christian Lattermann, MD

Christian Lattermann is the newest orthopaedic surgeon that joined our sports medicine team on August 28th. He is originally from Germany and attended Hannover Medical School in Hannover, Germany. He was a resident and research fellow at the University of Pittsburgh under Dr. Freddie Fu. Dr. Lattermann specializes in cartilage restoration and orthopaedic sports medicine.