Chiropractic's new role in the golf community Part 2

Golf Specific Functional Screening

In part 1 of my golf and chiropractic series I discussed the basic principles of being the golf chiropractor in your area. Amongst other topics, I touched on the golf physical screening as the foundation for a golf fitness program. I will now expound on that concept as well as discuss using the screening for treatment purposes by detecting the root cause of the over-use injury. To properly utilize the golf specific screening, you must understand what physical limitations may produce certain swing faults.

As a Chiropractic Physician, the golf physical screening can serve many roles in your clinic and is a necessary tool when working with golfers. Being a chiropractor trained in golf fitness and injury prevention allows you to work with golfers in the following scenarios.

Scenario 1: You can perform a comprehensive head-to-toe screening for the purpose of developing a full golf fitness program to enhance the golfer's overall performance. This scenario often requires a trainer on staff to work with the golfer. I will discuss this scenario in detail in part 3 of this series titled *Program design for the golfer.*

Scenario 2: A golf pro sends you a golfer who is limited in his ability to maintain his posture throughout the swing. As the golf biomechanics expert, you perform a concise screening to check for proper ankle dorsiflexion, hip mobility, ability to separate the upper body from the lower body, and adequate core stability to see what, if any, physical limitations are causing this swing fault. Your spot screening will then dictate what stretches or exercises you prescribe the golfer to clear up those limitations you found. The use of chiropractic adjustments and soft-tissue therapy will hasten the process of correction.

Scenario 3: An injured golfer comes to you seeking treatment for golfer's elbow. The most effective evaluation would be to obtain a video analysis of the golf swing to see if the golfer is casting or swinging over-the-top, which would place excessive strain on the upper extremities, especially the elbow. It is recommended to first perform a full chiropractic examination and determine that the golfer is able to swing without significant pain. If this is the case, the next step would be to screen for the physical limitations that may cause this swing fault. Possible limitations may be lack of proper hip rotation on the downswing, lack of forearm and wrist strength and/or flexibility, and the above limitations that lead to loss of posture. When the golfer suffers from any of these physical limitations, he/she will be forced to swing over-the-top, swing with the arms excessively, and/or casting will be unavoidable due to the forearm and wrist issues**.**

After this detailed screening, you determine the golfer to be free of these limitations that cause golfer's elbow. This shows that the swing fault is not due to a physical limitation, but rather a technique flaw. If you don't have video analysis available you can opt to just physically screen the golfer for any physical limitations that are known to cause injury or a swing fault. However, I do recommend the use of video for a more thorough and revealing screening.

For this case your treatment plan should consist of conservative treatment of the elbow and referral to his or her golf pro for technique training to fix the swing faults mentioned. If the swing faults that cause the injury are not addressed the problem will persist or come back once the golfer resumes regular play.

Knowing when to perform the golf physical screening is obviously essential; however, the keys to the screening are knowing what areas of the golfer's body to screen as well as how to screen them. There are many different ways to screen the same joint or muscles and it would be impractical to discuss each one in detail. So, whichever way you have learned will be sufficient as long as the test is effective, consistent, and tests for movement patterns. Movement quality is more important than basic muscle testing for strength. We need to know how these muscles

would act during the golf swing. The following list is a comprehensive summary of what muscles and joints of the golfer should be tested and what they should be tested for.

Mobility/Flexibility

- Ankle Dorsiflexion
- Hip Internal/External rotation
- *Adductors*
- *Quadriceps*
- Hamstrings
- Hip Flexors
- *Quadratus Lomborum*
- *Pectoralis Major*
- *Latissimus Dorsi*
- Shoulder internal/external rot.
- Upper Trapezius/Levator Scap.
- Cervical Rotation
- Wrist mobility

Activation, strength, endurance, and power

- *Quadriceps strength & endurance*
- *Adductors strength*
- Gluteus Medius activation
- Gluteus Maximus activation, strength and power
- Core Stability (Abs, *Quadratus Lomborum,* Low back musculature)
- Mid Back (Rhomboids, Middle/Lower Trapezius)
- Rotator Cuff (especially subscapularis)
- *Pectoralis Major strength, end., power*
- *Latissimus Dorsi strength, end., power*
- Triceps/Grip Strength

The italicized muscles note the fact that these muscles need to be tested for strength as well as for flexibility. If one of these italicized muscles are excessively tight it will cause altered movement patterns as well as decrease the muscle ability for optimal power production. Flexibility and mobility of the muscles and joints allows the generation of elastic energy, and establishes a base for efficient power production. This is why a bodybuilder doesn't hit a golf ball as far as an average size professional golfer.

In addition to the muscles and joints the golfer should be screened for golf posture, balance, torso rotation, coordination, and scapular stability. Golf posture is extremely important to evaluate since it in itself can be a predictor of over-use injury and/or swing faults. The two main golf postures that should concern you is the upper crossed syndrome and the lower crossed syndrome. Both limit range of motion in the golf swing, as well as place increase stress on the surrounding structures. The upper crossed golfer looks hunched over from the mid back to the neck at address, while the lower crossed golfer has a Hyperlordosis of the low back with the appearance of the buttocks sticking out. For example, an upper crossed syndrome golf posture limits the amount of shoulder external rotation in the back swing as well as cause over-use strain to the shoulder, neck, and mid scapular region. The lack of shoulder external rotation will inhibit the golfer's ability to perform a full back swing.

The utilization of a golf specific screening in your clinic is essential if you want to excel in the golf community. Whether your screening is comprehensive for purposes of designing a full golf fitness routine or used as part of your treatment protocols for the golfer, it will separate you in the eyes of the golfer and local golf professionals. For any questions regarding how to screen a golfer for a particular muscle, joint or movement pattern email Dr. Christie at drkchristie@gmail.com