

Chiropractic's new role in the golf community Part 4

Treating the Injured Golfer

The previous installments of this series have for the most part focused on the healthy golfer and how you can play an instrumental role in helping their game. In this article, the injured golfer will be the subject, and will be your main role in the golfing community. It goes without saying that Chiropractic treatment is great for treating golf related injuries, but the goal of this article is to discuss common golf related injuries and detail how to evaluate and treat golfers in a way that will maximize your results and increase your referrals from local teaching professionals.

In dealing with golf related injuries the majority will be due to repetitive strain or over-use in nature, as is the case with many injuries or pain syndromes seen in our clinics. In the golfer these injuries are most commonly produced by *poor body mechanics, poor swing mechanics, excessive practice, poor nutrition, and improper club fitting*. In Chiropractic, we pride ourselves in finding and treating the underlying cause of the pain, not just covering up or only ridding our patients of pain. As we all know, pain is the last to come and the first to go and comes back if the dysfunction is not treated and corrected. With that being said, you would be missing the boat if you only evaluated and treated the poor body mechanics, when the cause of their pain or injury may be caused by improper swing mechanics or improper club fitting. Improper swing mechanics may be the root cause of their joint/muscle dysfunction and pain. For this reason, a full evaluation should include video analysis of the golf swing to determine if any swing faults are producing their pain. The video analysis should be performed when the golfer can swing normally without any pain. I challenge you to take any golf certifications that teach this information because it is an extremely valuable tool in truly evaluating the cause of injury in golfers. If this knowledge is not currently possessed, setting up a referral system to local teaching professionals for swing and equipment analysis is recommended.

The most common repetitive strain injury sites in golf occur to the low back, lead elbow, lead shoulder, lead wrist and left ankle in order of prevalence. These injuries consist of sprain/strains, tendonitis/tendonosis, arthritis, disc injuries, and tears. Knowing what injuries occur to golfers is important, but knowing how poor swing mechanics causes those injuries is what will separate you clinically in the golf community. Below is a list of most common low back and elbow injuries and what swing faults cause them.

Most Common Back Injuries in Golf

- 1) Sprain/Strain- Muscles, SIJ, Soft Tissues
- 2) Facet Syndrome- Lumbar Facets
- 3) Disc Pathology
- 4) Spinal Stenosis
- 5) DJD
- 6) Spondylolisthesis

Most Common Elbow Injuries in Golf

- 1) Tennis Elbow- Lead arm
- 2) Golfer's Elbow- Trail arm
- 3) Ulnar Collateral Ligament injury
- 4) Ulnar Neuritis

Swing Faults that Cause Low Back Injuries

Swing Faults are technique flaws and improper swing mechanics that place under stress on the body and negatively affect the golf swing.

S-Posture: Excessive lordosis in the lumbar spine during address and throughout the swing. This causes inhibition of the abdominals and glutes. This "Lower Crossed" presentation produces facet syndrome and myofascial pain.

Reverse Spine Angle: The golfer's spine tilts towards the target at the top of the backswing. The golfer uses the erector spinae to go into extension on the back swing and causes excessive compressive and shear loads on the lumbar spine.

Early Extension: The golfer goes into rapid hip and spine extension during the downswing which causes the hips to move towards the golf ball. This movement shuts off the abdominals ability to stabilize the core.

Restricted Right Leg Follow-through: The golfer does not release his/her right side during the downswing and after impact. This forces a large deceleration torque in the low back and spine.

Reverse "C" Finish: Finishing in a full hyperextension position that puts excessive stress on the lower right facet joints

Swing Faults that Cause Elbow Injuries

Chicken Winging: The lead arm doesn't fully extend into impact. This causes excessive lead arm extension forces and excessive trail arm flexion forces at the elbow.

Over-the-Top: The plane of the downswing is too steep. This causes the lead wrist to extend and the lead elbow to flex causing excessive loads to the forearm muscles.

Casting: Early release of the proper wrist angles prior to impact. This places excessive forces on the trail arm forearm flexors.

Dysfunctional Lower Body- The inability to optimally fire and utilize the hips and legs in the golf swing is the main cause of chicken winging, scooping, and over-the-top swing faults. The lack of power production from the lower body forces the upper body to over compensate and leads to over-use strain of the upper extremity. Also, the inability to separate the pelvis independently of the torso will cause early initiation of the upper body/upper extremity in the golf swing. This will produce an upper body dominant golf swing.

Case Study

- 43 yr old Male Right-handed Golfer with left- arm Lateral Epicondylitis (Tennis Elbow)
- 18 Handicap
- No Golf Pro
- **Video Swing Analysis:** reveals the Chicken Wing and Casting Swing faults.
- **Concise Physical Screening:** reveals lack of hip internal rotation bilaterally, inability to separate the pelvis independently of the torso, and limited right wrist extension. (lack of right wrist extension inherently places the left wrist into too much extension at impact and causes increase forces to the extensor muscles)
- **Chiropractic Exam:** Relevant findings include lumbo-pelvic restrictions, limited hip mobility, and myofascial restrictions and carpal fixations in the right wrist/forearm and left forearm/elbow.
- **Treatment Plan:**
 - Referral to golf professional to assist in cleaning up the dysfunctional golf swing and evaluate equipment.
 - Chiropractic treatment to the lumbo-pelvic region, hips and upper extremity.
 - Therapeutic modalities to left elbow and possible tennis elbow brace.
 - Myofascial Release to the right wrist/forearm and left forearm/elbow.
 - Corrective exercises to assist in cleaning up the physical limitations and help in getting the hips to rotate more efficiently and independently of the torso.
 - Address the golfers sleeping position. Avoid sleeping on the affect arm or and keep the arm below shoulder level when sleeping.

As depicted above, the ability to understand the golf swing and utilize the teaching professionals assistance in correcting the underling cause of the golf-related injury will greatly increase your success rate and networking in the golf community.