

# **Golf Injuries and Your Feet**

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Golf is not a contact sport but it still puts enormous demands on the body.

Recognizing the potential golfing injuries and planning ahead can prevent any injuries down the road.

## **The mechanics of your feet and the golf swing**

### **Summary**

During the golf swing the body acts as a whip, power production starts with the feet pushing against the ground. The foot pivots and provides intrinsic lateral movement to enable the hip to fully rotate around a fixed leg position. Each foot moves differently during a golf swing, the back foot must allow for more pronation during the follow through of the golf swing than the front foot.

### **Biomechanics**

The anatomy of a biomechanically sound swing goes like this: During set-up, your weight should be evenly distributed on both feet with slightly more weight on the forefoot as you lean over, and slightly more weight on the insides of both feet.

Maintenance of proper foot alignment on the back swing is critical for control of the

downswing and contact position. During the back swing, weight should be shifted to the back foot. It should be evenly distributed on the back foot or maintained slightly on the inside. Shifting weight to the outside leaves you susceptible to the dreaded "sway," a common error in swing. Without an exact reversal of the sway in the downswing, swaying will result in improper contact with the ball.

As the back foot remains in a solid position on the back swing without any rolling to the outside, the front foot is in turn rolling to the inside. The front heel occasionally comes off the ground to promote a full shoulder turn. Completion of the back swing places the weight on the back foot, evenly distributed between forefoot and rear foot, with the weight left on the front foot rolling to the inside.

The downswing involves a rapid shift of weight from back to front foot; momentum brings the heel of the front foot down, and follow-through naturally causes a rolling of the back foot to the inside and the front foot to the outside. Golf should always be played from the insides of the feet.

### **Common Golfing Injuries**

#### **Lower Back**

Pain and stiffness in the back and neck are usually caused by the twisting motion of the golf swing as the shoulders rotate around the hips. This twisting of the torso in a coil fashion can put enormous pressure on the vertebrae, muscles and ligaments of the spine especially during the recovery phase. Indeed when the club hits the ball the bent back puts one in a most vulnerable position. Not surprisingly the US PGA cites lower back

pain as the dominate golf injury. One of the most common causes of lower back pain is over pronation in the feet. Even a slight postural misalignment caused by over pronation can lead to back pain.

#### **Inflammation of Arm Joints**

Swelling of the tissue around the joints is simply a symptom of over-use especially when playing on hard surfaces. A good period of rest is the best medicine though physiotherapy can help to speed up recovery.

#### **Knee Problems**

Inflammation or pain in the knees is caused by the twisting motion of the golf swing and sometimes by walking in ill fitting shoes. Rest is the best medicine. However, a re-evaluation of one's swing and orthotics can prevent this condition from occurring.

#### **The Shin**

Pain in the muscles of the lower leg are usually caused by excessive walking after a period of inactivity. It can also be caused by over pronation in the feet putting excessive pressure on the lower leg. Orthotics and custom orthotics are a ideal treatment option.

#### **The Foot**

Painful feet are common amongst golfers. Common conditions include:

**Heel Pain** - This condition is also known as plantar fasciitis and commonly occurs due to excessive pronation in the feet. Golfers will often complain of pain when first rising in the morning and after periods of rest. Pain will be located in the center of the heel.

**Metatarsalgia** - This term refers to any pain in the fore foot region. This can be caused due to corns, hard skin or bony pain.

**Morton's Neuroma** - Inflammation of the nerve in between the metatarsals (bones at the sole of the foot) occurs. This can be very painful for golfers who walk around the fairway.

**Tendonitis** - Inflammation of the tendon that runs along the arch region. This is a common golfing injury as the foot can be placed under excessive pressure during the golf swing.

### ***Custom Orthotics and Golfing Injuries***

**Custom Orthotics allow a golfer's body to establish a better point of contact with the ground when executing a golf swing.** They will also stabilize your feet, evenly redistribute weight and correct your entire body posture during the golf swing. Recent research published in the Journal of Manipulative and Physiological Therapeutics reports that 71% of participants felt their balance was improved while using orthotics and playing golf. **An impressive 50% felt that they were hitting the ball harder and 38% of participants reported a lower golf score while using orthotics.**

This research suggests that Custom Orthotics can help golfers improve balance, hit the ball harder and obtain a lower golf score.

Custom Orthotics also prevent and treat a variety of painful injuries that can affect your concentration and ultimately your golfing handicap. Bringing painful knees, legs, feet or an aching lower back to the

fairway can prevent you from playing to the best of your golfing potential!

## **Dr Keyes Recommends**

Custom Golf Orthotics to gently re-align the feet to their natural position and correct your body posture, relieving many chronic complaints in the process. In turn, Dr Keyes Custom Golf Orthotics help you hit further, play longer, putt better!

At *Keyes to Health* we understand how important balance and stability are to technique. Balance and stability have a direct bearing on the two most elusive aspects of many golfers' games: control and distance. Besides stabilizing your feet during your swing, Dr Keyes Custom Golf Orthotics make your feet more comfortable and your legs less prone to fatigue. And you know how critical that can be during one of those five-hour rounds.

Dr Keyes' Custom Golf Orthotics control excess pronation and significantly reduce the shearing and stretching forces which can cause heel pain, foot pain, knee pain, shin pain, hip pain and lower back pain.

Custom Golf Orthotics are specifically designed for golfers. Your feet have the sole responsibility of orientating your swing and generating a full hip turn around a fixed leg. Even a slight

postural misalignment can dramatically affect your swing and control over that vital drive or putt.

Custom Golf Orthotics allow a golfer's body to establish a better point of contact with the ground when executing a golf swing. They will also stabilize your feet, evenly redistribute weight and correct your entire body posture during the golf swing. Research suggests that Custom orthotics can help golfers improve balance, hit the ball harder and obtain a lower golf score.

At Keyes to Health we use state of the art Gaitscan™ technology to digitally assess pressure and timing sequences of the foot through the gait cycle, allowing us to create a precise and accurate orthotic to fit your golf shoe. These unique custom orthotics prevent and treat a variety of painful injuries that can affect your concentration and ultimately your golfing handicap. Bringing painful knees, legs, feet or an aching lower back to the fairway can prevent you from playing to the best of your golfing potential!

Visit Dr. Keyes at *Keyes to Health* to obtain **your** pair of Custom Golf Orthotics and/or assess and treat the pain interfering with **your** golf game!

To make an appointment to see Dr. Keyes please call 905-420-1248, visit [www.keyestohealth.com](http://www.keyestohealth.com), or drop by at 750 Oklahoma Drive, Pickering, ON L1W 3G9