

# Three of the Most Common Golf Swing Faults that Can Cause a Back Injury

By: Dr. Brandon Crouch

It is no secret that there are many different ways to swing a golf club. With so many different ways to swing a club, the potential to put your body at risk for injury is very high. In this article I want to discuss three of the most common swing faults that create problems for golfers and are the top reasons that cause back injuries. I will attempt to explain them, their common causes, and tell you how to know if you suffer from them.

Three of the most common faults that create lower back injuries for golfers are the “S” posture, early extension, and the reverse spine angle. Each of these can cause excessive stress on the spine (vertebrae, discs, and nerves), ligaments, and supportive muscles. If you can eliminate these faults from your golf game then you increase your chances of playing golf injury free.

The best way to check to see if you have any of the above swing faults is to enlist the help of a friend and a video camera. You can check each other visually and then use the camera to show each other what you see. If you do not have a video camera then a digital camera should work fine. If your still in doubt then you will want to check with your local golf teaching professional or health professional that understands the mechanics of the golf swing.

**1** The first fault to look for is the “S” posture. The “S” posture is often caused by a player creating too much arch in their lower back by sticking their tailbone out too much in the setup position. When you have this excessive curvature in your lower back (“S” posture) it puts high levels of stress on the muscles in the lower back. In return the abdominal muscles have to relax. This lack of stability and balance of the “core” muscles of the body is a recipe for injury. To make it even worse, having the “S” posture can also set you up for having the “reversed spine angle” swing fault which I will discuss later in this article.

There are actually several different causes for the “S” posture fault. Common causes are having too much pelvic tilt, having a misunderstanding of position due to playing other sports, or from a series of muscle imbalances called a “Lower Cross Syndrome” (LCS). The LCS is simply where you have a group of weak muscles combined with overactive / tight muscles. As a chiropractor, I often see the Lower Cross Syndrome as a major cause of back injuries.

The only way to know if you have the “S” posture is to get a visual of yourself from behind the ball or “down the target line.” You want to have your friend stand at least 7 to 10 feet behind you and the golf ball as though they are going to watch you hit it down the fairway. They need to get a video or picture of your profile (the side of your body) just before you swing the club. (Remember to tuck in any shirt or jackets or you will



not be able to get a true picture of your posture.)

After taking the video or picture you need to draw an imaginary line along your back from the base of the neck down to the tailbone. If you see space or a gap between your lower back and that line then you have an “S” posture fault. If you look closely your back will also resemble an “S” shape.

The second swing fault that you want to check for is the “reversed spine angle.” It is an excessive upper body backward bend during the backswing. In other words, if your upper back is pointing more towards the target at the top of your backswing than away from the target then you have the reversed spine angle swing fault. Not only does this make it difficult to start your downswing in the proper sequence, but also it is one of the top causes of back injuries for the golfer.

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So let us look at the common causes for the reversed spine angle swing fault. First, the ability to separate your upper body from your lower body when you swing the golf club allows your shoulders to rotate around your spine without going into a backward bend (reversed spine angle.) Poor separation is often a result of reduced spinal

mobility and tight latissimus dorsi (lat) muscles. A second common cause for the reversed spine angle swing fault is poor internal hip rotation of the back leg. If your hip will not rotate it will force the spine to tilt into a backward bend. A third reason is a lack of core muscle strength. Core muscle strength allows you to keep your trunk forward flexed throughout your golf swing and keeps you from having a reversed spine angle. Lastly, other common reasons include: “S” posture at setup, no rotation of the forearms during the backswing, a shifted pelvis, and someone just trying to have a longer backswing.

To find out if you have the reversed spine angle, the best angle to get a picture or video of yourself is from a “face on” view. This one can also easily be seen in a mirror as well. You want to see yourself as if you were standing across from you. At the top of your backswing draw a box around your head and a box around your waist. Then connect a line from the center of each box. If the line is pointing toward the target then your guilty of the reversed spine angle swing fault.

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The last swing fault I want to discuss is “early extension” which is one of the worst on your back and on your golf game. It can be explained as a loss of posture from the top of the backswing through impact. Another way to explain it is that your hips and spine start to straighten up during the downswing which usually results in your body moving toward the ball before impact. This is called “early extension.” During early extension, your upper body has to lift up to maintain

balance.

“Early extension” can create a few different problems for the golfer. First, from a performance point, you will often feel as though you are stuck or trapped with your arms during the downswing. This is because your lower body has moved into the space where your arms need to go. This can result in a hook or a blocked shot as the hands try to deliver the club to the ball. If you do not correct for this then it can also cause you to shank a few shots. Another problem it can create is excessive stress on the back which can cause a lower back injury.

Common causes for “early extension” are many. First, restrictions or imbalance in the joints and muscles of the lower body will almost always cause the “early extension” swing fault. Second, your front hip must be able to have good internal rotation to allow the body to rotate properly through the ball on impact. It is



imperative that your pelvis and hips rotate through during the downswing. Third, you must be able to separate your upper body from your lower body as we stated earlier when we talked about the reversed spine angle. Other common causes are: weak core muscles, golf clubs are too long, standing too far from the ball, poor swing path, and too much weight on your heels at setup.

To check to see if you have the early extension swing fault you need to set up your video camera or camera behind the ball / “down the target line”. Your friend would be standing as if he is going to watch you hit it down the fairway. At setup you need to draw a vertical line along the tailbone on the outer edge of your pants. During the swing, at impact you want to take another picture or stop the video. If you see that you have moved off the line or towards the ball in anyway then you are “early extending.” Another sign is that at impact your club shaft will start to go vertical because you have taken away the space for your arms by moving your hips closer to the ball.

Of course these are just a few of the most common swing faults that can create havoc on your back and on your golf game. If you suspect you have any of the above swing faults and you want to improve on them you should contact your local golf teaching professional or a health professional who is trained in golf mechanics. In many cases there can be one or more causes for your swing fault(s). If you seriously want to improve in your golf performance and prevent future injuries make sure these swing faults do not become a permanent fixture in your golf game.

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Sources:

1. Spine Universe, Duvall, Is Back Pain Ruining Your Golf Game.
2. Titleist Perf. Inst. 2007. [www.mytpi.com](http://www.mytpi.com)
3. Better Golf With Fitness.Feb 23, 2007. Renna. [www.bettergolfwithfitness.com](http://www.bettergolfwithfitness.com)