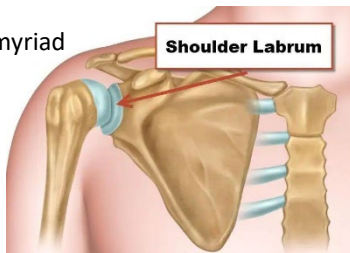


## Shoulder Adjustment for a Labrum Injury

Periodically a patient will present with a diagnosis or injury involving a labrum tear in their shoulder, wondering if there is anything at all that chiropractic can do to help them. Fortunately, there is a lot that can be done to help these types of shoulder injuries recover.

The shoulder labrum is a cartilaginous ring that resides within and supports the ball and socket joint of the shoulder. It protects and lubricates the shoulder joint, allowing for free, unrestricted range of motion. When the integrity of the labrum becomes compromised by injury, the normal biomechanics of the shoulder joint also becomes affected and impaired.

The labrum can become torn due to a myriad of shoulder motions and activities. Overhead throwing injuries, such as a pitcher in baseball is one of the most common types of sporting activities which have been known to precipitate a labrum injury or tear. It's not only athletes who are susceptible to labrum tears. Those who work with their arms overhead from prolonged periods such as carpenters or electricians are also at risk.



The biceps muscle tendon attaches to the top portion of the shoulder labrum. This can complicate things, and it's one of the reasons why labral injuries occur. Because of this, it's even possible to suffer a tear to the shoulder labrum through strenuous activities where the force applied to the body is at a distant location from the shoulder. One example is striking a hammer or swinging a racquet. In this case the arm acts as a long lever with the attachment to the body at the shoulder, coupled with the biceps tendon attachment to the labrum. Repetitive activity with hammering or use of the racquet will cause persistent tugging, pulling and stress at the area where the biceps tendon attaches to the labral cartilage ring.

There are two general types of labral injuries. Traumatic and non-traumatic. Traumatic labral tears happen during a single incident. This could be during a shoulder dislocation or during a heavy lifting activity. Non-traumatic injuries may occur through a gradual breakdown and weakness in the shoulder joint combined with continued stress and microtrauma being applied to the labrum through the attachment of the biceps tendon.

In addition to the two general types of labrum injuries, labral tears are also categorized by the specific location around the cartilage ring. If the labral tear is located near the top of the cartilage ring it's referred to as a SLAP tear (superior, labral, anterior to posterior) tear. If it's located near the bottom of the ring it's termed a Bankart lesion. It can also occur near the back of the shoulder labrum, which is known as a posterior labrum tear. The posterior type is far less common however.

Whatever type of labrum injury patients have, a common question is whether or not their shoulder would benefit from a chiropractic adjustment. The answer is always a resounding, yes!

One-hundred percent of labrum injuries are due to some type of biomechanical stress pattern, and there is always a misalignment process associated with that stress pattern. Therefore, by restoring the proper alignment of the scapula and humerus it will create an environment within the shoulder joint for proper healing to occur. Failure to restore proper shoulder alignment however will allow the shoulder joint to remain in that biomechanically insufficient, dysfunctional position. The adjustment is a gentle procedure which is designed to be comfortable to the patient's shoulder.

## Non-Surgical Solution for Hammer Toes

There are a few different toe deformities that can have a negative impact on foot health. One for instance is the formation of a bunion. With a bunion you would notice an enlargement on the inner side of the first toe near the metatarsal-phalangeal (MTP) joint where the big toe joins to the long bone of the foot. There is also another deformity known as a hammer toe.

The hammer toe is a flexion deformity involving the lesser toes of the foot, especially the second digit. The toe joints appear to be bent or flexed into an awkward position. This condition can progress to the point where it becomes difficult to wear narrow or constrictive footwear such as dress shoes.

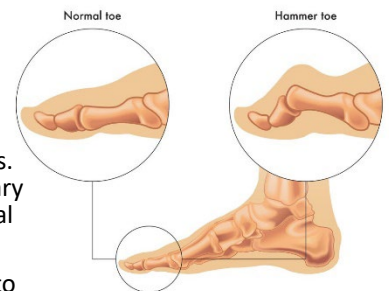
There are 26 tarsal bones in each foot. When these bones lose their healthy alignment, it may lead to the formation of a toe deformity or structural imbalance.

Although the hammer toe is the most common lesser toe flexion deformity, there are variations of this condition, such as mallet toe and claw toe. The variations depend upon which of the specific toe joints are affected, and the particular direction of misalignment.

There are several muscles that control the movement of the toes. Certain muscles are shorter, contained entirely in the sole of the foot, and are known as "intrinsic" foot muscles. Other, longer muscles originate in the lower leg with a long tendon which passes the entire distance to the toes. These muscles tend to have larger bellies and inherently greater strength. Because they originate in the leg vs. the foot itself, these longer muscles are known as "extrinsic" foot muscles.

When the 26 bones of the foot develop a structural misalignment, it can alter the tension and strength within the intrinsic and extrinsic foot muscles. Often times this alteration of the biomechanics can lead to a reduction in strength of those smaller, intrinsic muscles.

Hammer toes develop when there is a predominant imbalance between the stronger extrinsic and weakened intrinsic foot muscles. This imbalance is often secondary to an underlying structural tarsal misalignment problem.



A foot surgeon will often want to recommend surgery to detach and change the attachment of some of the involved muscles and tendons controlling the toes. In some cases, they may elect to perform a bony shortening or removal of a toe segment. The challenge with these procedures is that they do nothing to improve the original underlying biomechanical problem (the structural misalignment) that caused the muscular imbalances and resulting toe flexion deformities to develop in the first place.

There is typically a structural misalignment involving the hindfoot, mid-foot, as well as the fore-foot. This means that a hammer toe problem is a full-foot condition, and must be treated as such.

Our foot patients appreciate having their feet adjusted. Properly aligned and functioning feet will benefit your entire body. Chiropractic foot adjustments will improve a foot dysfunction, and it will also create a stable foundation for a healthy spine.