

## MYOFASCIAL ISSUES-THE ROOT OF THE PROBLEM

As we stated earlier, imbalances lead to shearing across joints, making one susceptible to injury. How do these imbalances happen? First we need to understand the type of tissue we are discussing. Fascia is a type of tissue that covers muscles and helps connect them to bones and to other muscles. It acts much like a sock does between your foot and your shoe. Now, how does BJJ injure the fascia? An explanation of the injury cycle is in order. Many health care providers have now come to understand that repetitive motion in a muscle can lead to micro-trauma in fascia. If this motion is repeated often enough, then there is a build-up of tension in the muscles and fascia, leading to a chronically tight muscle. This is caused by a build-up of adhesions in the tissues. These areas do not flex and contract as fully or as smoothly as healthy tissue, making them susceptible to injury. Another problem with these adhesions is that they impede blood flow to that area, leading to a “dead” area in the muscle. This dead area will prevent the rest of the area from recovering properly and it will get bigger and bigger over time! Ultimately, it can lead to a torn muscle. Nearly all athletes will be able to recognize when they have this type of injury. They will complain of a really tight muscle that doesn’t ever really relax. It can be described as a tooth ache in a muscle. Typically they will stretch it and stretch it to no avail. There are many ways to break up these adhesions, many that can be done on your own. Before we delve into the protocols used to correct these myofascial issues, we need to learn to identify the areas first. There is a general way to scan your body for problems, and then it can be further broken down by common injuries BJJers get.

### Posture

How do I find out where my imbalances are? I am asked this question often. Usually, a BJJer will have noticed that they are restricted in certain positions, or their body will only go so far in one direction when compared to the other. Rather than relying on the athlete to self-discover all of the imbalances, there is a much easier, more direct method to find them. Posture! All you need is a mirror and the knowledge of what to look for.

Posture is a leading indicator of muscular fatigue and imbalances in the body. Ironically, good BJJ posture is actually the exact opposite of posture that is good for your health! Just take a look around at any BJJ coach, they are typically slumped over and have adopted a “grandfatherly” look. Why is this important? Because if you have muscular imbalances (front versus back muscles, side to side, etc) then you are at risk of torquing a joint. If it is due to fatigue only, then those areas are at risk of muscle strains (pulls). I believe this is the cause of a large percentage of pulled and/or torn muscles such as rotator cuffs, hamstrings, hip flexors, etc. The ironic part of this is that by monitoring your posture and working to correct it, you can prevent a good percentage of injuries. An additional side-effect is that good posture leads to good biomechanics, making your BJJ moves more fluid and much stronger! The opposite is also true, if you roll with poor

posture, then you are going to be weaker in every position. I say work smarter not harder! An example can be seen when posturing in the guard. If your head is looking down, then it is relatively easy for your opponent to pull you down in the guard. If you look up towards the ceiling, then you are much stronger. This same thing applies to all your joints, so if you have bad posture, then even when you do the moves, your body may not be as strong as it can be (and some people think strength is all weight training). Another thing to consider is that the leading contributors to poor posture in the general population are sitting for long periods, talking on a phone cradled on the shoulder, and fatigue. BJJ positions just add to this problem, leaving a person very susceptible to this type of problem. **An explanation of what postures/syndromes are typical in BJJ and/or athletes is needed in order to understand how to correct it.**

### Upper-cross syndrome

Upper-cross syndrome (UCS) is related to the upper body, mainly the upper back, neck and shoulders. It is very common in BJJ and is triggered by the T-rex posture, with your traps up by your ears to protect your neck and your shoulder rounded forward to protect your arms.

This leads to your head being carried in front of your center of gravity. This puts undue stress on the joints in the back of your neck. It is also a major contributor to posterior (back of the neck) pain and tight scalene muscles (in the front of your neck). The scalenes are critical muscles because they surround the nerves that run down your arms. When they are chronically tight, it can lead to all kinds of neurological issues (stingers, thoracic outlet syndrome, etc). Also, they are attached to the clavicle (collar bone) and pull it up towards your ears when tight, decreasing the space for your rotator cuff muscles to pass through. The danger in that alone is obvious as with less room to work, your rotator cuff is in danger of damage!

### Lower Cross syndrome

Lower cross syndrome (LCS) is related to the lower body. Common features of LCS include the stomach sticking out, increased curve in the low back, and the hips rounded forward and down. It is caused by chronically tight hip flexors and improper strength ratios in the core muscles and in the quads versus hamstrings. This leads to tight hamstrings and groins. It is commonly caused by working the guard. Having LCS increases the risk of hamstring, quad, hip flexor and groin strains, and can be a major cause of low back pain! Because a person with LCS's center of gravity is now forward of where it is supposed to be, it can also lead to disk injuries, many of which can be very difficult to recover from. It will also make your sprawls ineffective and can make submissions from the guard difficult, all good reasons to correct it.

Chiropractic care, myofascial work and specific strengthening protocols need to be combined to tackle this type of “pre-injury”. While you may be able to train with this type of thing, it does leave you *more susceptible* to injury. By following a sound nutritional program, you can actually decrease your body’s inflammatory response. This helps to slow the myofascial injury cycle, further decreasing your injury risk.