

# Yoga Injury: Mythology, Cause, Prevention and Treatment

An interview with James G. Bailey, LAc, MATCM, MPH, Dipl Ayu

by Leah Alperin

**Leah:** I think the public perception of yoga is that it's safe, injury free so to speak. From where do yoga injuries arise?

**James:** That perception is largely true, but not complete. Yoga can be a gentle experience, as it should be. But not everyone approaches it that way. Some yogis are more ambitious than others. Still others are vulnerable to injury to begin with because of physiological and constitutional disadvantages or from prior injuries and surgeries in the past. Everyone comes to the practice with different histories, personalities, and at differing ages and physiological abilities – even in the same class attempting the same practice. As a result, no two yoga injuries are the same.

Yoga injuries are what I call the sacred cow of asana practice. No one wants to discuss it, and certainly no one wants one, but in reality, yoga injuries can and do occur quite often. To take an individual who at one time can barely touch her toes, on a yogic journey to a place in the future where she can put her feet behind their head is an emotional, alchemical, physiological and energetic transformation to say the least. It is an intense process. And though it should not be painful to the point of injury, human nature, and particularly the ego, sometimes gets in the way.

The three major contributing factors to injury are ego (aggressiveness, competitiveness, showing off, going beyond ones means), physiological limitations (weakness, imbalances in the pranic body, toxins, excess weight), and lack of knowledge (of core teachings, correct alignment). That said, a good foundation to our practice is essential to injury prevention.

Yoga is also a process of playing at the edge. At the edge of discomfort, the edge of injury, and ideally, at the edge of incredible vitality and self discovery. On that journey there are no accidents. An injury is a part of the growth process for all of us. They are clues as to where we need to grow. They are not random events, they are effects that have very specific causes that should be investigated each time an injury occurs. Ask any teacher if they have ever had an injury and, however minor the injury, every one of them will say yes. An injury can be as much a teacher as our actual teacher. We should listen carefully to them, and respond to them with compassion. They are full of both our wisdom and our shadow.

## Major Types of Injuries

**Leah:** What are some of the major types of injuries encountered in the practice of yoga?

**James:** There are two major types: first are those injuries created by the weight bearing aspect of the practice. Some asanas require us to bear more weight than normally required in life or other athletic activities. Our wrists for example are designed to bear a few pounds of weight normally, and only rarely larger loads. In doing chatarangas, plank positions, side arm balance (particularly with weak or underdeveloped wrists), the wrists bear much of the weight of the upper body, which can amount to up to 2/3's of our total body weight. Such asanas put a tremendous amount of strain on the ligaments and tendons of the wrist, elbow and shoulder joints. Weight bearing injuries can also occur in the lower back for instance during simple sun

salutations or forward bends where the yogi supports the upper body at a 90-degree angle to the legs. In these cases the lumbar and hip area is bearing most of the weight of the upper body. Acutely, or over time, this can potentially cause injury.

The second type is the repetitive nature of the practice, causing repetitive strain injuries. In this case it's not so much about the amount of weight, but the number of times the movement is performed in a given period of time. It may even be a small amount of weight, but by doing the motion many, many times without adequate rest between practices, the connective tissues may become compromised.

Chataranga is a weight bearing asana which is commonly executed many times in a vinyasa practice sometimes resulting in repetitive strain injuries of the wrist, elbow and shoulder. The main questions to ask with regard to injury are how much weight is the body bearing and how many times is it being asked to do the same motion relative to its own comfort zone? Of course, the most serious injuries involve a combination of weight-bearing, repetitive strain and high intensity.

I know from 17 years of my own vinyasa practice and fifteen years of treating people with yoga injuries that the majority of injuries I see are with intermediate to advanced practitioners. Injuries most frequently occur at what I call "developmental crossroads", vulnerable periods when a yoga practitioners increases tapas in the practice, taking it more seriously, going more regularly to class, upping the ante so to speak. Tapas is strong, in a wonderful way, but sometimes to a fault if the body isn't ready.

**Leah:** So, do you feel most injuries fall into the repetitive category?

**James:** Yes. Most of them are repetitive. Compared to other athletic activities, it's very rare in yoga that someone forces an injury. Although, I have seen people fall out of headstand, for example, and injure anything from their big toe to the scalene muscles in their neck.

**Leah:** Is there a difference in how you would treat different injuries?

**James:** Of course. The most important thing to know about treatment is for the yogi to get in quickly for treatment. This is essential. A delay in treatment, and practicing while injured, can cause the injury to become chronic, and more difficult to treat later.

A tear to a muscle will result in slight internal bleeding and sharp pains in the muscle. An injury in the tendon or ligament rarely causes any internal bleeding, because there is so little blood in those tissues, explaining why they are clear or white in color. And because tendons and ligaments are so poorly vascularized, they heal slower and they are more prone to re-injury and chronic pain.

**Leah:** So for example, if there is a tendon injury you do NOT want to stretch it?

**James:** Exactly, the first thing you should do is to leave it alone, rest the injury.

**Leah:** If someone came up to you with a recent injury what would treatment look like?

**James:** Let me preface the question by stating that I am not an orthopedic surgeon, I am a doctor of Oriental Medicine and Ayurveda, and an orthopedic acupuncturist, so I understand my abilities and my limitations. However, I have worked with thousands of yoga students and high profile teachers in the L.A. area, so I feel I have a strong understanding of the practice, how injuries occur and how to treat and manage them.

As for treatment, I first ask them to temporarily stop their practice until we have a clear view of the injury, its severity and appropriate treatment protocols. They have to decide if they are willing to do that. You should see the look on their faces. You would think I just asked them to jump off a tall building. Naturally, most yoga practitioners reject the idea at first, they can't imagine a day going by without practicing. Until reality sinks in.

Continuing to practice with an acute injury, especially if it hurts during the practice, is called ***prajna-paradha***. The Sanskrit term translates as "offense against wisdom". All illnesses are a form of prajna-paradha. The resulting illness or injury occurs because one part of us insists upon an action (and the pleasure it brings that part of us) that is detrimental to the another part of us. In essence, the pleasure of continuing to practice, even while injured, brings us one form of pleasure, but at a price. The result will be worse in the long run. In short, we should always rest an injury.

## Resting an Injury

**Leah:** How long do you ask an injured yogi to stop their practice for?

**James:** It depends on how serious the injury is. If it is a minor injury, and most are, it could be a few days. A moderate injury could be a week and if it's more serious it could be several weeks. Whatever it takes to assure adequate treatment, prevent re-injury, allow inflammation to fade and injured tissues to heal, and for the pain to go away permanently.

If an injury occurs, stop engaging that part of the body until you've sought out the advise of a doctor. I do not think it's wise to "practice through the injury" in attempt to heal it. I've seen too many mistakes among yogis who've tried that. Keep the big picture in mind, what good is continuing to practice in an injured state if in the long run your practice will only suffer more. A good yogi must know when to stop and heal before moving forward.

Only if the injury is very small can you maintain your practice, but try to avoid asanas that make the injury hurt. There are hundreds of asanas to chose from, have fun, but never make it hurt. That only re-injures it and slows the healing process. We also need to understand the different stages of injury and how to return to the practice.

## The Stages of an Injury

**Leah:** What are the stages of injury?

**James:** Yoga injuries are by nature fairly simple soft tissue injuries that can be treated quickly. There are two primary stages: in the acute phase of the injury, the injured tissues (whether muscle, tendon, ligament, myo-facial connective) are attempting to manage the compromised situation by signaling a pain message in order to stop all movement of the effected body part. There may be bleeding, edema (swelling), redness, and an inflammatory response, all necessary to prevent further injury. Pain may also be accomodated by spasm in the case of muscle injury. Here the two most important things to do are ice and rest (immobilization of the effected area). You may also choose to include alternative therapies such as herbs, acupuncture or chiropractic care. If it is serious enough, or if you're experiencing a re-injury of a past surgical procedure, see your orthopedic doctor.

In the second phase of healing an injury, the acute pain (sharp pains) are gone but some dull discomfort may still exist. Here the focus is to rebuild the strength and integrity of the effected tissues. Essentially this is physical therapy, and may include a gradual re-entry to the practice, but carefully and slowly. Here we want to bring prana back into the area that is hurt, to revitalize it.

## **Tone versus Flexibility**

**Leah:** Can you talk about tone versus flexibility?

**James:** Every muscle needs two things to be happy: it needs to be flexible and it needs to be toned. If you compromise either of those two, there is going to be conflict in the muscle. If you lose flexibility you will become stiff and rigid. And there will be a lack of flow or prana in the body. In yoga, there is the tendency towards too much flexibility and not enough toning. If an injury occurs and there is a lack of tone in that area it will generally go into a contracted state. The muscles will seize up to reduce the range of motion and flexibility. It is an evolutionary response.

**Leah:** Do you recommend weight lifting to strengthen and balance the different muscles to create stability?

**James:** Absolutely. I am an advocate of using light weights if necessary to maintain a healthy balance of flexibility and tone in the body. There is no substitute for tone and cardiovascular wellness. I usually recommend low weight and high repetition for treatment and prevention. However, never use weights on an injury until it is in the secondary phase of healing. You'll know if the use of weights is good for the injury if they actually make the pain go away rather than make it worse. In fact, I was able to overcome my own low back injury after waking up and realizing that I had to tone the muscles of my low back.

The common mistake with low back injuries is avoiding use of the low back, which gradually results in atrophy of the muscles of the low back and a vicious cycle of pain and weakness in the area. Most injuries have a powerful emotional component to them that causes people to want to leave them alone. I left mine alone for six years and finally realized why it still hurt - because I had not rebuilt it.

## **On the Edge**

**Leah:** How do you know when to push the edge of your practice or when not to practice? What is the edge you push further, and what is the edge that you hold back?

**James:** I think that is an intuitive call. There are two kinds of pains. When you get to that edge, there is a pain that is a discomfort that you know is a healthy discomfort. Then, there is a discomfort that will pull you back, reflexively. Your body will pull out naturally. To make progress with an asana practice, you have to be comfortable being a warrior. You have to find ease with the heating and opening of the body to make it supple. At times it is a painful process. And some people feel more pain in their practice than others do.

Also, the concept of tapas, heat, and staying warm is vital. For vinyasa teachers it is important to have an intelligent and logical system of warming the muscles and joints. Start with simple postures and work towards advanced ones later. A vinyasa teacher should have the knowledge of how to prevent injuries through proper sequencing. Think of salt water taffy for example. If you want to stretch it you slowly bend it back and forth until it begins to expand, then slowly as it warms and yields it will stretch longer and longer. If you bend it too quickly it will snap into two pieces. The body is the same.

## The Most Common Yoga Injuries

**Leah:** What areas of the body tend to have the most injuries in relation to yoga?

**James:** The six most common areas of injury I have seen are hamstring, wrists, shoulders, the lumbar vertebrae of the low back, the sacro-iliac joint, and the knees.

Hamstring injuries are usually caused by rapid overstretching of the muscle. Some practitioners have an overstated confidence in their hamstrings because it's a big muscle group and they've never injured it before. You definitely do not want to do deep hamstring stretches early on in the practice. Moving into the stretch cold or too quickly often is the cause. Hamstring injury can occur anywhere in the muscle, but often occurs either in the upper belly of the muscle or at one of the upper tendons attaching the muscles to the ischium bone of the pelvis.

Injuries to the wrist, elbow and shoulders are the result of excessive weight bearing asanas, particularly in practitioners with little upper body strength to protect from injury. Wrist injuries are not necessarily carpal tunnel syndromes, but may turn into carpal tunnel-like syndromes if not addressed. A chronic wrist injury that causes the practitioner to use other muscle groups in the wrist and forearm to compensate, can turn into carpal tunnel syndrome or a repetitive strain disorder as the injury becomes older. Carpal tunnel is a long-term, ignored repetitive strain.

Shoulder injuries are usually caused by bearing excessive weight onto underdeveloped muscles, tendons and ligaments around the shoulder joint. The shoulder joint needs to be trained or built up to accommodate that kind of weight. Often you will see in yogis overdeveloped deltoids and triceps, but not a lot of development in the biceps. An imbalance is created around the shoulder joint from an over development of these certain muscle groups and an underdevelopment of others.

In low back injuries or sacro-iliac injuries a destabilization occurs in the lumbar area due to overstretching the sacro-iliac joint which attaches the sacrum to the ilium (pelvis). As the area atrophies it gets weaker and the whole area becomes unstable. At this point the goal is to strengthen not to stretch. Strengthening the low back will stabilize the joint and reduce pain and inflammation. Of course, its never that simple. A low back injury can have dozens of factors too it. Some lower back injuries can be made better by yoga and some can be made worse.

Some of my first yoga injuries were knee injuries caused by twisting the joint excessively. The knee was not made to twist or torque such as in padmasana. It will open but only very slowly and gradually. This happened twice and both times a very loud pop was heard by everyone in the class. Knee injuries are usually tendon and or cartilage injuries. They hurt like a son of a gun and take about 3 to 5 months to recover depending on treatment.

## Yoga Injuries vs. Non-Yoga Related Injuries Brought to the Practice

**Leah:** Is it important to differentiate between injuries caused by yoga and injuries aggravated by yoga?

**James:** Injuries need to be differentiated from those caused by the practice itself and prior injuries that are brought into the yoga practice and re-injured. Some of the injuries created off the mat can be made worse by yoga. These injuries can seemingly appear to be gone for a long time or pain free, then reappear after starting an ambitious yoga practice. There might be stiffness left over from that injury. We think going into

a yoga class will improve that stiffness. Depending on how we approach it, the type of practice, and how fast we push ourselves, we can make it better or worse. Old injuries need to be tended to very careful, very slowly, and very gently.

**Leah:** And the gage for that is listening to your body?

**James:** Yes, respect all of your past injuries. They may not have been fully rehabilitated and may be vulnerable to over stretching or sudden increases in weight bearing. Move slowly without pushing that part of the body that is injured. For instance, you may have an old hamstring injury from soccer ten years ago that doesn't hurt anymore, but your injured leg is not as open or flexible as the other leg. So, when you are doing a stretch on the injured side, even if it doesn't hurt, you need to relax into it. Test the waters so to speak at the beginning of each practice. You may not be able to go as far or as deep on that one side as you will on the healthy side. It may take some months to catch up with the other side and it may never catch up at all, and that's ok. We can't change all of our past samskaras. But hopefully we can make them less of an obstacle in our lives.

**Leah:** Can you speak about injuries created from the practice?

**James:** Most injuries that come directly from yoga are a direct result of ones ego. Many students push themselves too hard, trying to develop faster than the body is capable. The intention is always good, but the process of growing in the practice is underestimated due to their impatience. This will inevitably lead to injury. Its not a matter of if, but when.

**Leah:** What's an example?

**James:** For the sake of example, here's a typical case: a yogi that has not worked to develop the strength of the upper body and yet is very flexible. This is common among yoginis, but men as well. Their flexibility rewards their ego, so they begin to practice more frequently and sometimes in an aggressive, strong form. They push too much and go into even the simplest postures like upward dog intensely and force the hips down to look good. They struggle with strength and stamina but are very open in the joints. And, since we all like to do those asanas that we are good at, this type of practitioner is vulnerable to a destabilization of some joints, such as the low back and sacro-iliac joint, and inflammation in others, such as the wrists, elbows and shoulders.

Another type of practitioner profile likes to go into deep twists beyond the point of reasonable stability to the structural area, or into deep forward bends with a rounded back, forcing the head down. Once you get into the habit of rounding the lumbar spine, you are forcing the space in between the discs to increase. That may cause a bulging in the lumbar disc. This is remedied by lengthening the spine (never rounding it forcefully), and rebuilding the strength and stability in the region.

## **Injury Prevention**

**Leah:** What are some of the main steps for injury prevention?

**James:** For yogis, listen to your body. Know where you are. If you have a prior injury, tell the teacher. For teachers, check in with the students. Find out what the injuries are in the room. Take them seriously. Know the modifications for those types of injuries. Notice if someone in the room appears to be straining or pushing themselves too hard. Be aware if a student is one or two moves ahead of everyone else in the

room; tap them on the shoulder and ask them to slow down and join the rest of the group. Those are the kind of people that injure themselves easily. This also creates a competitive atmosphere in the room that affects the people practicing in the vicinity of that person, sometimes causing others to injure themselves.

**Leah:** What advice would you give to teachers dealing with injury?

**James:** Probably the most important thing you can do as a teacher is to take it seriously. Neither write it off as the student's fault, nor take all the blame as yours. There are a thousand circumstances that create every injury. And like I said, usually the most important cause is the student's ego - unless you forcefully adjusted them.

A student may come up to you, for example, and say that she has been coming to your class recently and her back is starting to hurt or her wrists are starting to hurt. With compassion, remember that you can not be responsible for everyone's injuries, but you can be a guide for her. Know healers in your community who can work with these kinds of injuries. An orthopedic acupuncturist, a chiropractor or an MD who is sensitive to the needs of yoga practitioners. If you have alternative doctors in your class get to know them. They will know the practice more than most doctors. Have a good referral list. If the injury is minor, make sure to tell them to take a rest from the practice for a few days and to ice the injury. It is always a difficult thing for a teacher to tell the student to stay away from class. Let them know that when she returns you will work with her to see if the source of the injury is in her alignment or approach to the practice. Maintain her trust by staying confidently and compassionately on her side!

**Leah:** Do you feel that most of prevention is proper alignment, especially if a student is doing a repetitive motion like chataranga all the time?

**James:** Proper alignment is certainly important in prevention of injuries. Alignment of the physical body, the energetic body and the mind. There is a reason why these postures have been taught so specifically, integrating the gross physical body with the breath, and with sharp awareness of our body's energies. At some point however, if we overdo our practice we can injure ourselves even if our alignment is perfect. So alignment isn't everything. I think a multidimensional alignment is most important to creating a healthy practice, but ego and past samskaras are most involved in creating injury.

However, if you see someone in the class who does not have good alignment, or seems to practice in the wrong spirit, discuss it with them after class (or give them a private), and if necessary you might suggest they take some Iyengar classes concurrently with your class.

## **First Aid for Acute Yoga Injury**

**Leah:** Can you talk more about what to do when an injury occurs?

**James:** In terms of resting the injured site, again, if it is minor have them rest for a few days. If it is moderate have them rest for a week. Tell them to see a health care practitioner, preferably someone who has a yoga practice or is alternative. For small to moderate injuries resting with ice is often enough. Herbal therapies are helpful.

As for icing, most yogis do not ice, and most don't ice long enough. They think icing is only for sports. Real yogis don't injure and they definitely don't have need for icing. This is an incorrect view. I think every serious yogi should have an ice pack in the freezer available. Here's the trick: make sure you ice long enough

that it creates numbness in the injured area. There are three stages to icing based on what one feels: cold, burning, and numbness. Wrap the ice pack in a thin tee shirt – one layer only. Put the ice pack onto that part of that body or lie on it. Apply it till fully numb - to the point that you can touch the skin on that area and not feel anything. That usually takes between 20 and 30 minutes. That means you have iced deep enough that the excess heat is being drained out. Do this 2 to 3 times daily until the pain is gone (usually just a few days or so in most simple injuries). Again, try not to use that part of the body as much as possible.

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