

I Feel the Pain You Feel

Dr. Darin "Dutch" Workman

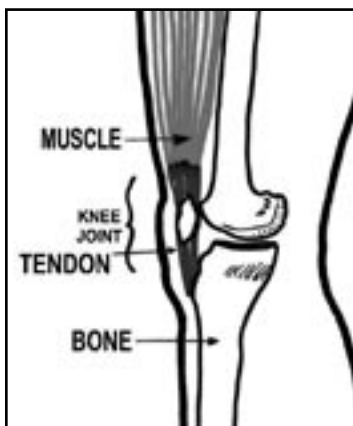
Part One of a two part series on drummer/percussionist injuries. Dr. Workman will address bursae and nerve injuries and how to do a basic massage in the March 2005 issue of 'Bandmasters Review.'

While treating drummers and percussionists over the past fifteen years, I have noticed some trends in the injuries they get. In addition, I developed a survey on drummer/percussionist injuries, and have kept an eye on the results for the last 6 years. I have found that the majority of injuries fall into the category of *soft tissue damage*. Being a drummer of over 30 years now, that didn't surprise me.

You see, I too have had my share of aches and pains from playing before, during, and after becoming a doctor. The treatment for most of these injuries can hurt plenty, and I jokingly tell my patients "I feel your pain". Well, it's true in this case.

Soft tissue injuries have to do with damage to the *muscles, tendons, ligaments, and bursae*.

In our case, these come on over long periods of abusing our bodies. Let's face it, rarely do we experience broken bones, dislocated joints, concussions, and traumatic injuries of that sort from playing. We leave those to the football players.



Muscles attach to tendons, and then tendons attach to bones. Often, when a muscle is injured, the tendon is also affected, and visa versa.

Since most drummer/percussionist injuries deal with soft tissue, we will discuss in more depth the most common soft tissues involved, and then shine a little light on how they are commonly treated.

Muscle Injuries

Common injuries in this category:

Muscle spasms – Knife like pain anywhere in the body in a muscle belly.

Fibromyalgia – Pain to move, touch or stretch, etc. anywhere in the muscles of the body.

Piriformis

syndrome – Tight painful, restricted movement in hip and/or buttock possibly going down the same side leg.

Torticollis – Painful restricted movement in the neck that may travel down the arm.

MUSCLE SPASM:
When a muscle goes into sudden, involuntary contraction.

TENDONITIS:
When a tendon gets injured by tearing, fraying, or irritation.

BURSITIS:
When a bursa gets over worked, begins to break down, or gets inflamed.

NERVE IMPINGEMENT:
When something puts pressure on a nerve causing a decrease in its ability to function.

Tension headaches

– Headaches that increase with pressure on various muscles.

Muscles are usually the first soft tissue to be injured, because they provide the force that moves the body. They do the work.

When the muscle works, it uses up energy. When too much energy is depleted, the muscle becomes fatigued. You know you have

fatigued an area when it shakes as you try to hold it still. It will also become weaker and less coordinated.

A muscles usual response to fatigue (overuse), or injury is to tighten up and go into spasm (constant contraction of the fibers). It does this to act much the same as a splint, and reduce movement of the area in order to protect it from further damage. This process actually protects you from you.

However, this "splint" effect causes pressure around the blood vessels, which reduces the flow of nutrition to the injured area.

I Feel the Pain You Feel

Since blood is necessary to heal injury, the healing process is slowed in the proportion to the reduced circulation.

Muscles are one of the fastest soft tissues to heal quickly because they have a great amount of blood circulation. More blood circulation to an area generally means faster and better healing because there are more materials to work with. Greater amounts of damage means a bigger repair job, and a bigger job requires more materials and time.

They will usually heal fully four to six weeks following a typical injury (you feel better much sooner than that). However, the amount of damage done to the area, and the amount of time the injury has been there will play an important role in how fast and how well it will heal.

In addition, the longer an injury has been there, the more difficult it is to reverse it. With time, scar tissue begins to form, and fibrous tissue develops between the muscle fibers that are stuck in contraction. Basically, if something in the body is not moving, the body glues it in that position with tissue.

In order to heal the injury, the fibrous tissue (adhesions) need to be broken in order to once again allow proper movement of the muscle with massage. As you could imagine, this is usually a painful process to varying degrees, but it must be done for full healing.

Tendon Injuries

Common injuries in this category:

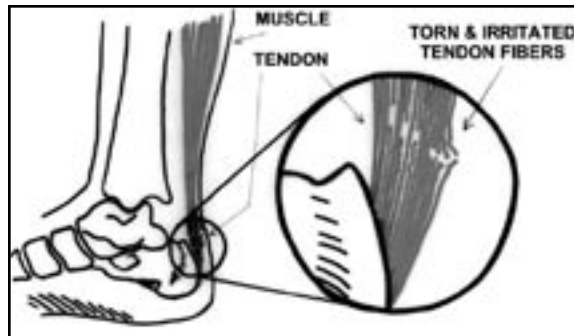
Stenosing Tenosynovitis – Pain on thumb side of the wrist and forearm.

Pollicis tendonitis – Pain and swelling when moving the thumb.

Lateral epicondylitis (tennis elbow) – pain on the outside of the elbow.

Achilles' tendonitis – Needle type pain on the back upper heel.

Tendons and ligaments are not as flexible as muscles, and they heal slower. Constant pressure



The muscles of the lower leg combine into one common tendon, and attach to the heel. One large injury, or repetitive misuse causes pain, swelling and/or tearing of the tendon fibers. This is called Achilles tendonitis (circled area shows the location of a pain.)

and force on the tendon is a common cause of tendonitis. Tendonitis simply means that the constant pull on the tendons can cause them to develop small tears in the fibers. When this happens, the tendon gets irritated, swollen and painful.

This can occur anywhere tendons exist in the body.

Irritation to an area leads to muscles tightening involuntarily (spasm) to protect the area. However, muscle spasm puts stress on the tendons that attach the muscle to the bone because the tight muscle is less elastic causing more pull on the tendon. This irritates the tendon.

Allow me to illustrate: If you were bungee jumping, the cord would represent the muscle, and where it attaches to your leg would be the tendon. Imagine if you jumped off of a bridge and came to the end of the bungee but it didn't stretch—see what I mean about pulling on the tendon?

Since we use our hands and feet so much in playing drums/percussion, the muscles that operate those areas tend to put more pressure and wear on the tendons around the wrist hands and feet. It is very common for players to have tendonitis that

I Feel the Pain You Feel

develops from overuse of an area with chronically tight muscles.

Tendons typically take around 12 weeks to heal. During this process, the initial action should be to take the pressure off of the tendon by loosening up the attached muscle. If the injury is minor, the player can see if the injury will relieve by trying some basic massage techniques on the injured area, but this is done best with moderate to deep massage of the muscle by a massage therapist experienced with musician and athletic injuries.

Usually this is a painful process, and the person rendering the treatment should have the experience necessary to know where to work, and how much pressure to apply. In addition, the longer the injury has been there the longer it will need to be treated in order to heal. Most people do not have the patience necessary to take the process from start to finish.

Once the pressure is off of the tendons, they will need time to rest with minimal or no playing. In a severe case, after about 2-4 weeks of total rest you can begin playing at about 50% of normal intensity and time. If the injury begins to hurt during the playing, back off and try it again the next day.

With each day, you should be able to play longer and with more intensity. Gradually, you will reach your maximum level. It is important that you do play with pain because it will take longer to heal, and further damage may occur.

Ligament Injuries

Common injuries in this category:

Facet syndrome – Lower back pain worse when bending backwards.

Coccydynia – Extreme pain at the bottom of the tailbone (coccyx) worse when sitting.

Ligaments surround joints attaching bone to bone while allowing movement. They are strong fibrous tissues that are pliable, and some believe that they are slightly elastic. They keep the joints snug in their movement rather than loose and shifting. Muscles

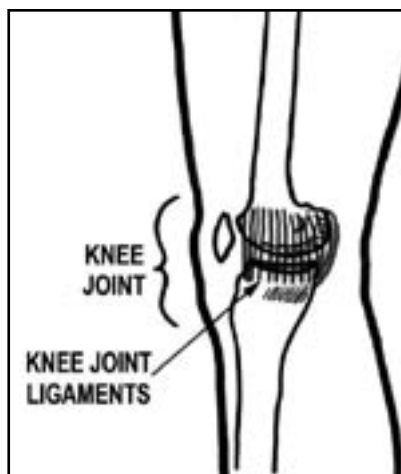
protect the joint the most. They prevent the joint from going too far in its movement, and they tighten to secure it when moving or stable.

The ligaments play an important role in keeping the bones lined up at the joint. When a ligament is injured or weakened to any degree, the joint is more susceptible to injury.

Generally, ligaments take longer to heal than muscles. However, due to their location and function, they are less apt

to get injured from overuse or improper use than muscles or tendons.

They are usually injured when a joint is moved beyond its normal range, or when the muscles supporting the joint are weak and force the ligaments to do more than their share of securing the joint. By far, this happens most when muscles are fatigued and the ligament takes the full force of the movement causing small tears to varying degrees. You know when this happens because it hurts immediately.



Ligaments stabilize two bones that meet to form a joint. They keep the joint snug unless they are injured in some way.

I Feel the Pain You Feel

Rarely does a drummer/percussionist encounter a situation that puts enough stress to a joint to force it further than its normal range. This is usually a sudden, unexpected move mostly encountered during moving equipment or marching and such.

Tearing of ligament tissues sends an alert to the brain, and the body responds by causing the muscles around the area to contract in an effort to stop movement of the joint. Further movement of the joint could cause more stress on an already damaged ligament. Every damaged fiber is one less to add stability and strength to the area, making the soft tissue more at risk for injury.

Ligaments typically take around 12 weeks to heal. During this process, the joint should be stabilized (usually with a brace of some sort) in order to keep the ligaments from being moved and further damaged.

The player can help increase the circulation and restore strength to the muscles that protect the joint by trying some basic massage techniques as mentioned above. Rarely is a ligament injured without a surrounding muscle also being injured.

After the ligaments begin to heal in the first week or two, you can begin using the joint (playing) at about 50% of normal intensity and time. If the

injury begins to hurt during the playing, back off and try it again the next day. You should find that each day you can play longer and with more intensity.

It is important that you do not push the ligament to do more than it can do, or further damage will occur. Gradually, you will reach your maximum level. If you push the playing even though it hurts, the healing will take longer and your chances of full recovery without residual pain will be greatly decreased.

Dr. Darin "Dutch" Workman is a doctor of chiropractic practicing in Kingwood, Texas (Houston area). He works with performing and sports related injuries. He has also received his Bachelor of Human Biology degree and is a Certified Chiropractic Sports Physician. Dr. Workman has authored numerous injury and prevention articles over the years and is currently finishing a book on ergonomics, including the prevention and treatment of drumming injuries. He is the chairman of the Percussive Arts Society Health and Wellness Committee, and is a member of the Performing Arts Medical Association. For additional information, Dr. Workman can be reached at docworkman@juno.com.

How are soft tissue injuries commonly treated?

Rest, Ice, Compression, Elevation (RICE). The ice should be applied for 15 minutes (never more) directly to the skin over the injured area, followed by 15 minutes with no ice. This can be repeated 3 times per day for the first 1-2 days. The amount of activity allowed, and the length of time before doing full activity is dictated by the pain. When you feel pain, you should back off and start again when the pain subsides.

Begin using the injured area (playing) at about 50% of normal intensity and time. If the injury begins to hurt during the playing, back off and try it again the next day. You should find that each day you can play longer and with more intensity and less pain. If this doesn't occur, see your doctor.

Find out the movements or behaviors that caused the injury in the first place, or it will continue to happen over and over.

Any movement you do while playing that causes you pain indicates that you are doing something wrong. Evaluate your technique, and correct it so that it doesn't hurt anymore.

A good instructor can help.