

Muscle Spasms in the Lower Back

Dr. Darin “Dutch” Workman

This is an excerpt from the Percussionists’ Guide to Injury Treatment and Prevention by Dr. Darin “Dutch” Workman, used by permission from Routledge, Taylor & Francis.

SYMPTOMS: Knife-like pain and/or grabbing in the lower back muscles. Worse when walking up stairs or hills. Very tender to the touch if severe. No bruise or increased temperature.

NAME OF INJURY: Muscle Spasms (Lower Back)

DESCRIPTION: Muscle overuse causes muscle depletion, constant contraction, and cramps.

CAUSE: Doing too much too soon, and/or too often. Overuse or improper use of the lower back; for example: large increase in marching, poor shoes, improper walking form and/or inefficient bass drum technique.

TREATMENT: Immediate relief: Rest, ice to the area of pain, and resist movements that hurt the area. Aspirin or other over the counter pain relievers have been shown to help decrease the pain. Massage to the tight areas and trigger points will reduce the pain and spasm.

PREVENTION:

- **Technique:** Change your seat height (usually the drummer is sitting too high, causing the legs to constantly hold the weight of the body), shoes, or sitting positions to decrease stress to the body. Drink plenty of water

to flush out the muscles. Take time out to rest each session, and pick one day a week and don’t play—let the body rejuvenate.

Proper lifting techniques also help prevent this injury.

- **Stretches:** Some mild massage to the sore muscles followed by gentle stretching. Allow pain to be your guide.

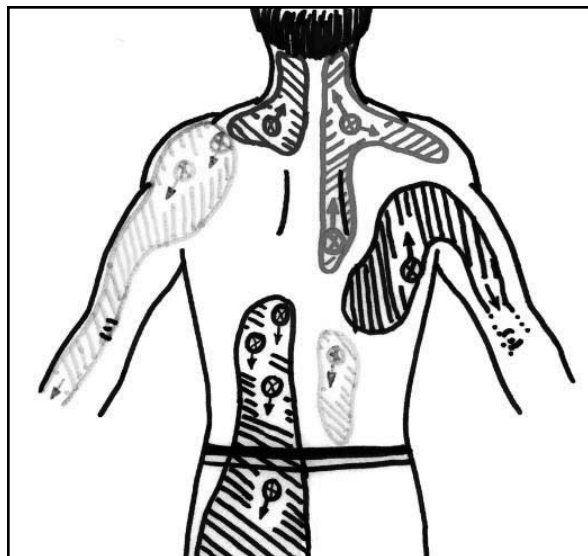
Change positions when you begin feeling tight.

- **Exercises:**

Repeat the exercises that caused the pain, but at a lower intensity for shorter periods of time (about half as long). Gradually increase the time and intensity over a period of weeks stopping when the pain begins. In this way you will strengthen the injured muscles and prevent repeated injury in the future.

IF NO RELIEF: If no improvement within 1-2 weeks, consult your doctor.

PROGNOSIS: This problem should never become big, because it is easy to treat and



Low back pain is commonly caused by pockets of lactic acid (called trigger points) within the muscle (“X” in the illustration). They are tender when pressed on, and often send pain sensation to other “referred” areas (shaded by directional lines).

heals well. However, if left alone, it can become chronic (requiring extensive treatment) and possibly lead to more serious injuries. This injury will decrease your endurance, coordination, and power.

OTHER POSSIBILITIES: Contusion or bruise (usually caused by a direct hit to the painful area, and accompanied by a red or purple mark on the skin).

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Stretches

PHILOSOPHY: Stretching is not something you do to the body; it is something you allow the body to do. All stretches must be done by relaxing and allowing the muscles to stretch. If you try to force the muscles to stretch, their immediate reaction is to protect themselves from tearing by pulling back. This can quickly turn into a tug-of-war of you against your muscles and nothing good can happen. This is why many people stretch and stretch without any positive results, and sometimes even injure themselves.

GENERAL RULES FOR STRETCHING: Stretches are most affective when the body is warmed up first. This means you should do some mild exercise of the area to be stretched prior to beginning.

For example, if you are stretching the legs, do some walking or running until the

muscles get warm and loose (usually just before you begin to perspire). With the hands, try some basic rudiments—singles and doubles are best. If you are paying attention to the body, you will notice the area warming up as the blood is pumped into it. Not as effective, but still good, is taking a shower or sitting in hot water prior to stretching.

DO NOT:

- Pop your knuckles.
- Stretch when that part of the body is cold.
- Use bouncing or jerking motions while stretching.
- Force the stretch to the point you cannot let the area relax.

All stretches must be done by relaxing and allowing the muscles to stretch. If you try to force the muscles to stretch, their immediate reaction is to protect themselves from tearing by pulling back. If you have an injured back and go at these exercises aggressively, it will do you no good.

Basic Stretches for the Injured Lower Back

The stretches on the following pages must be done slowly, correctly, and consistently. If you have an injured back and go at these exercises aggressively, it will do you no good. If your pain increases the day after stretching, you are doing them too aggressively. For the injured lower back, these should be a daily routine to avoid pain.

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1) The back flattener: This stretch has two parts. First, allow your lower back muscles that keep the arch up to completely relax. At the same time, surrounding muscles must straighten the back enough to lay it flat on the floor, taking pressure off of the lower spine. More important, it trains the lower back muscles to release tension that compresses the spine.



To start, lie flat on the floor in a relaxed position taking a few minutes to allow the muscles to let go.



Allow the lower back to drop to the floor while using the surrounding muscles to flatten it. Hold that position for 20-30 seconds.



Return to original position, relax for 30 seconds, and repeat steps 5-10 times.

2) Knee to chest stretch: During this stretch, try to relax and convince the knee to get closer to the chest. If it is forced or pulled, it will fight you back to protect the lower back.



Begin in a relaxed position on your back with arms around one knee, and the other leg slightly bent.



Slowly bring the knee to your chest while relaxing the lower back muscles. When you feel the deep low back stretch, hold for 20 seconds.



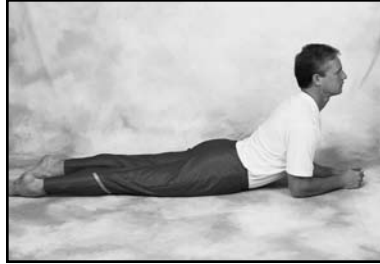
With both feet on the floor, relax the lower back and legs for 30 seconds. Repeat the stretch 5-10 times with each leg.

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3) Raise and pull stretch: During this stretch, you must think of pulling just your upper body up and forward. Pretend your legs are paralyzed, and let the pelvis drag on the floor. This pulls the lower vertebra directly apart, taking pressure off of the spinal discs.



Start by lying flat on the ground as shown above with the body fully relaxed.



Raise only the upper body up and forward, leaving the hips and legs relaxed on the floor. Lock your elbows into your sides and relax in that position 30 seconds.



Above is shown the same routine with the arms fully extended for a more aggressive stretch. Return to the original position. Repeat 5-10 times.

4) “Crunch” sit-ups: This is both an exercise for the abdomen and a stretch for the lower back. As you concentrate on bringing the lower ribs closer to the belly button, it will work the abdomen muscles while forcing the lower back to relax to aid the movement.



Start by lying in the position shown above, locking hands between the head and neck.



Bring the lower ribs to the pelvis while relaxing the lower back muscles. Do not pull on the neck to accomplish this; you must use only the abdomen. The hands are only to support.



Hold at the top for one second, and return to the original position and repeat without hesitation. Do 3 sets of 15 to 30 or until you feel the abdominal muscles being worked.

Darin “Dutch” Workman is a doctor of chiropractic practicing in Kingwood (Houston), Texas. He works with performing and sports related injuries, treating professional musicians and athletes worldwide. He has also received his Bachelor of Human Biology degree and is a Certified Chiropractic Sports Physician. He is the author of *The Percussionists’ Guide to Injury Treatment and Prevention* (2006, Routledge - Taylor & Francis), and has authored numerous injury and prevention articles and workshops worldwide over the years. He is currently writing a book on drumming ergonomics. Dr. Workman is the chairman of the Percussive Arts Society Health and Wellness committee (since 1997) and is a member of the Performing Arts Medical Association (PAMA). As a drummer/percussionist of over thirty-two years, he continues to be an active in performing and teaching. He can be reached by e-mail at: docworkman@juno.com.