

Relieving Back TIGHTNESS

You can address some types of back pain in your horse with a safe, simple sportsmassage technique.

By Jo-Ann Wilson with Sandra Cooke ■ Photos by Jim Leiby

How do you feel and behave when you get out of bed in the morning with tight or painful back muscles? Chances are you move stiffly or tentatively and your range of motion is restricted. Until you get relief, you don't have your usual enthusiasm for normal tasks.

It's much the same for your horse when his back muscles are stiff or hurting. He may

- flinch or sink away when you're saddling him;
- travel with his head elevated and/or his back hollowed;
- canter less freely than usual;
- experience a decrease in coordinated power;
- trail his hind end rather than stepping under himself;
- jump flat rather than with a rounded bascule;
- drift sideways, either on the flat or over jumps;
- resist lateral work.

One thing your horse will not do as a response to back pain or tightness, by the way, is buck. He needs to round or flex his back to buck, whereas his normal reaction to pain and tightness in his back is to move away from the discomfort by hollowing.

What's Hurting

The muscles whose tightness is frequently a cause of these signs are the *longissimus dorsi*—the longest and largest muscles in your horse's body and a powerful extensor of his spine—and the *longissimus costarum*, which lie below the *longissimus dorsi* across the ribs on each side and are important in lateral flexion of the spine and in breathing (see photos page 66 for the location of these muscles).

As part of understanding how tightness develops in these and other muscles, let's



A horse whose back is tight or sore tends to brace with his head and hollow his back behind the saddle, as Tasha Zubrisky's horse is demonstrating here. His hind legs are trailing at the canter instead of stepping correctly up under his center of gravity.

take a quick look at how muscles work. Every muscle has two ends, each connected to bone by a tendon. One end is the anchor and the bone to which it is connected doesn't move. The other end is connected to a bone that moves when the muscle is used. The middle part of the muscle, which does the work of moving the bone, is called the belly. It's composed



A comfortable horse's good working canter: His frame is round, his expression is happy, his neck is relaxed and flexed and his hind legs are coming well underneath him.

of hundreds of tiny fibers, each of which has its own blood supply. When a muscle is working normally, it tightens, then immediately relaxes or releases. Muscle tightness occurs when the muscle doesn't release as it should. When a muscle becomes chronically tight, the fibers lie closer together. This constricts the flow of blood through the muscle belly, somewhat like stepping on a garden hose reduces the flow of water. The muscle operates less effectively when it's tight, and it may be painful.

All muscles work in pairs of opposites: As one muscle contracts, its opposite releases. When a muscle is tight, the release process of the muscle is affected. The back muscles extend the horse's

spine, and tight back muscles can't release to allow for the spinal flexion your horse needs to, for instance, round himself for a bascule over a fence or a nice collected canter. Tightness in the *longissimus costarum* will also affect your horse's ability to bend around your inside leg.

What Causes It

Back muscle tightness can result from a number of factors. Some of the most common are

- the strain and exertion of repetitive schooling, such as working much more on one canter lead than the other;
- footing that is very deep or too hard;
- an ill-fitting or out-of-balance saddle;
- a very imbalanced rider (whose horse

will attempt to compensate for her one-sidedness);

- poor saddle placement (for instance, too far up on the withers, which drives the cantle into the back muscles);
- too many pads under a correctly fitted saddle. Contrary to some riders' belief, this does not reduce pressure on the horse's back but is more like cramming two pairs of socks inside your shoes.

Tight back muscles can also signal a deeper problem such as hock or ankle issues, weak stifles or ligament problems. How can you know whether you're dealing with simple muscle tightness or with something more serious? If your horse's discomfort is not relieved after you have done the massage and exercise sequence



Here is one of the two muscles we'll focus on: the *longissimus dorsi*, which both extends the horse's back and flexes his spine laterally.



ABOVE: The *longissimus costarum*, just below the *longissimus dorsi*, extends across the horse's ribs. This muscle assists in extending the spine and in flexing it laterally.

I'll describe on the next two pages a couple of times, you need to involve your veterinarian. (As a general rule of thumb, in my 20 years of practice as a massage therapist, if I find persistent tightness in the forward area of a horse's back, it may indicate a deeper problem in his front end; if

the muscles remain tight in the area near his haunches even after massage, there may be a bigger problem in his hind end.)

Palpating for Tightness

When the training or performance problems I've described suggest your

horse may have tightness in his back muscles, you can use palpation—simple hand pressure on the muscles—to get more information.

You'll palpate the *longissimus dorsi* and *longissimus costarum* muscles on both sides of your horse's spine. Whichever side you're working on, position your horse so that the hind foot on that side is slightly to the rear of the foot on the opposite side. This configures his muscles to give you the best feel for what's going on.

Starting near his withers where the *longissimus dorsi* begins, place the palm or heel of your hand on the muscle, push in gently, then release. Keep your elbow bent during this motion, which needs to be soft, yet firm. Work your way down the muscle, moving slowly and calmly. If the tissue rebounds as you release the pressure and fills your hand, the muscle is not tight. On the other hand, if the tissue feels unyielding like a board and does not rebound from pressure, the muscle is tight. When you palpate tight muscle tissue, your horse may move away from you because his instinct is to move away from pain. If the tightness is severe, he may hollow his back when you palpate an especially tight area.

Common palpation errors to avoid:

- running a hard object (such as a hoof pick or ball-point pen) down the length

Saddle Check



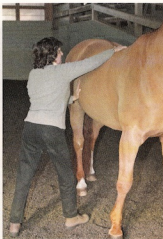
To check whether your saddle is symmetrical, hold it like this so that you can look straight down the gullet.



This saddle shows an imbalance between the right and left panels, an asymmetry that can contribute to a tight back. (Consult a saddle fitter to correct this type of problem.)



Palpate the muscle using the heel and palm of your hand softly yet firmly, feeling for whether the muscle tissue has "give" and springs back from pressure or remains inflexible and boardlike.



To massage effectively, stand on a diagonal to the horse as I'm doing here. When working with my right hand I position my left leg behind me so that I can push into my right hand.

of his back;

- grabbing at the muscle with your fingers;
- jabbing or poking at the muscle with your fingertips.

All of these incorrect palpations stimulate sensitive nerve endings on your horse's skin surface, causing him to flinch away whether the muscle tissue is tight or not.

After palpating the *longissimus dorsi*, follow the same procedure with the *longissimus costarum*.

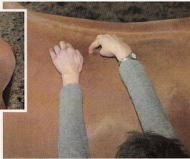
Massaging for Relief

If palpation suggests that one or both sets of these back muscles are tight, you can safely use a basic Wilson-Meagher Sports-massage technique—compression—as a possible way of alleviating the problem. This is a technique anyone can use without extensive training.

Compressions are a way to gently spread the constricted muscle fibers, increasing the space between them for improved blood flow and gradually loosening the muscle. You perform them with an open hand, using the heel and palm for pressure while your fingers



Poking or grabbing the muscle with your fingers stimulates the horse's superficial nerve endings, causing him to flinch whether the muscle is tight or not.

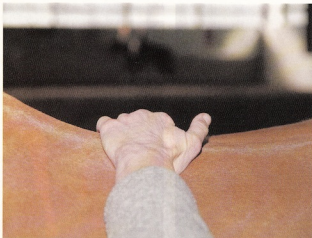


remain soft and extended but are not pressed into the muscle.

Begin with the *longissimus dorsi* at the forward-most point where it's accessible, just behind the withers. Position yourself for stability as I'm showing in the photo at the top right of this page, so that your energy is directed from your foot up through your trunk and arm to your massaging hand. Place the heel of your hand on the muscle and press straight in and deep; your horse's skeleton becomes the

backdrop that enables the compression to spread the muscle fibers.

Using moderate pressure, apply about seven compressions every five seconds in a rhythmical pumping action, gradually working your way down the length of the muscle. Repeat the seven-compression sequence a few times in one spot, then move down. When you reach the point where the *longissimus dorsi* and the gluteal muscles of the hind end come together, keep going! The back muscles and the



When using the compression technique on the *longissimus dorsi*, I press directly in toward the bone, beginning just behind the withers and continuing along the entire length of the muscle.



Here I'm using the heel of my hand to perform compression massage on the *longissimus costarum*. This technique gently separates the constricted muscle fibers to increase blood flow and to relieve tightness.

muscles of the haunches work together and massaging both will do a more thorough job. Repeat the compressions on the *longissimus costarum*, then move to the other side. Check that your stance is correct and start again. Altogether, the massage will

take you about 20 minutes.

Follow Up With Canter

To maximize the benefits of massaging his back muscles, ride your horse after you're done and be sure to include several

minutes of canter work in a stretchy but connected frame (not flopping on the forehand) in both directions. This kind of canter encourages your horse's back muscles to lengthen and loosen. It's the equine equivalent of the familiar back-stretching exercise you may use for yourself on those mornings when your back feels tight: bringing a knee to your chest. To see photos of this, go to www.PracticalHorsemanMag.com.

If your horse's problem is simple back-muscle tightness, you should see some improvement after the first massage/exercise session. You may need to repeat this another time or two for the most benefit.

The compression technique is useful when your horse shows signs of back-muscle tightness, and if you do it on a regular basis when no symptoms are present, it may prevent tightness from occurring. If the issue(s) that prompted you to try massage continue to be noticeable, of course, it's time to contact your veterinarian. **D**

Clinician, author, researcher and teacher, Jo-Ann Wilson is a nationally certified and licensed massage therapist. Jo-Ann recently produced an educational DVD, A Course in Equine Sportsmassage, (available at www.HorseBooksEtc.com) and has been selected to present educational seminars titled "Sportsmassage for the World's Largest Athlete" at the 2010 Alltech FEI World Equestrian Games in Kentucky. She was sports therapist for both horses and riders of the US Eventing Team at the 2000 Olympic Games, and her current practice includes horses of all disciplines and levels. She is director of Wilson and Meagher Sportstherapy, a program that trains professional therapists in equine sportsmassage and offers workshops for horse owners; www.sportsmassageinc.com.

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