Eliminate EXTERNAL OBLIQUE TIGHTNESS

This common often overlooked problem that can cause performance issues has a simple solution.

BY JO-ANN WILSON WITH JOCELYN PIERCE

Do you find yourself needing to use one leg more than the other to help keep your horse straight? Or maybe he's reluctant to move one or both legs forward or has started knocking down rails. What's going on? While there are many factors that could explain these symptoms, a very common issue that affects horses across all disciplines is a tight external oblique muscle.

A horse's external oblique is a broad, triangular-shaped muscle located over the lower abdominal area of the horse that connects from behind the fourth rib to the point of the hip. There are two external obliques, one on each side of the horse. Its functions are to bend or flex the trunk laterally and compress the abdomen. But when this muscle is tight, it can have major

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ABOUT JO-ANN WILSON

***Jo-Ann Wilson** is a licensed massage therapist, clinician, author, teacher and researcher whose work includes serving horses and riders of all levels and disciplines for over 30 years. She was a longstanding associate and partner of the late Jack Meagher, pioneer of Sportsmassage, and is the director of Wilson Meagher Sports Therapy, which offers clinical and educational programs in the Wilson Meagher Method of Equine Sportsmassage.*

She has served as the sports therapist for the U.S. and Canadian Eventing teams at multiple Olympic, World Equestrian and Pan American Games.

Wilson also offers online video training on her website and YouTube channel, as well as live workshops. For more information, go to sportsmassageinc.com.

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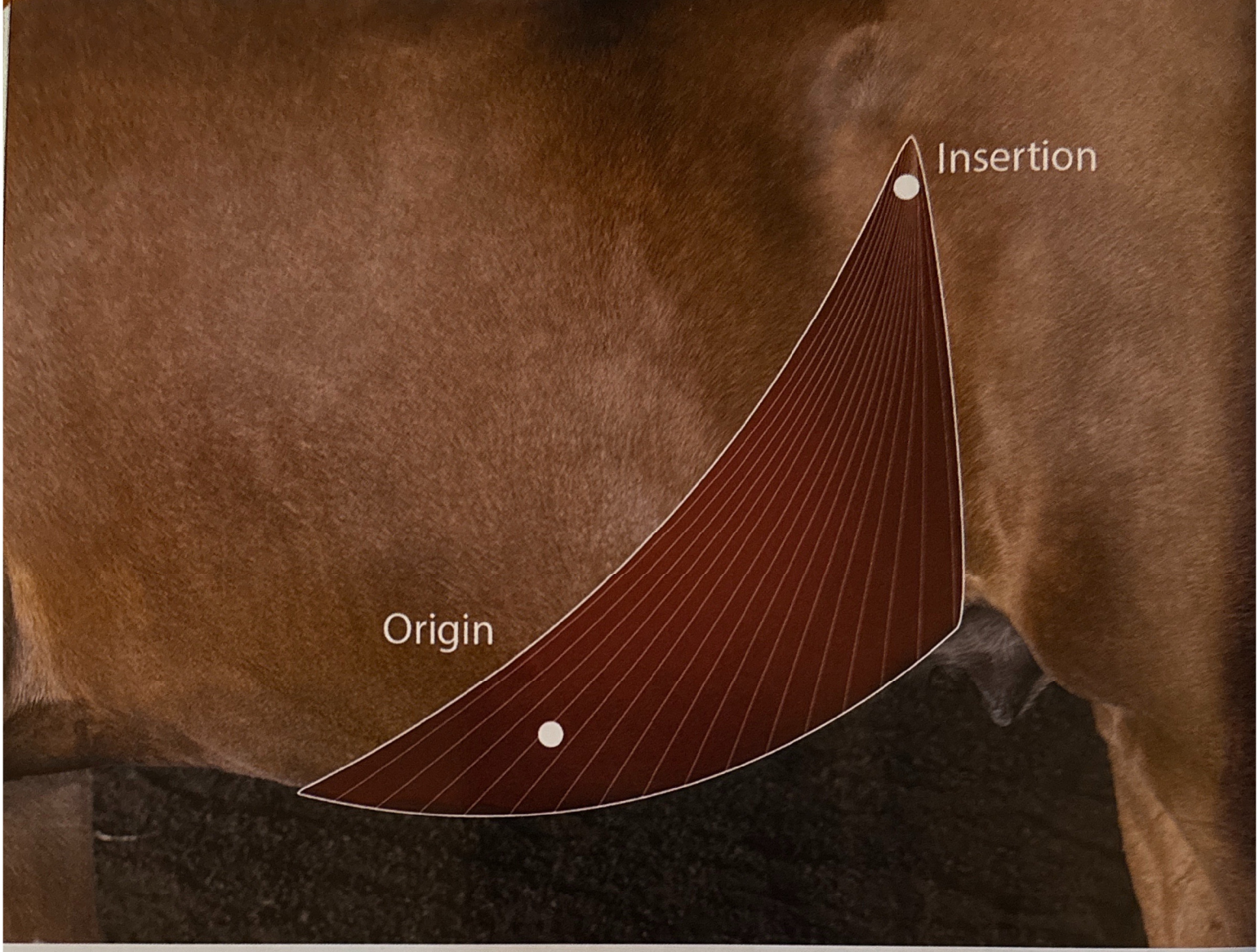

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▲ The external oblique is a broad, triangular-shaped muscle located over the lower abdominal area of the horse that connects from behind the fourth rib to the point of the hip.

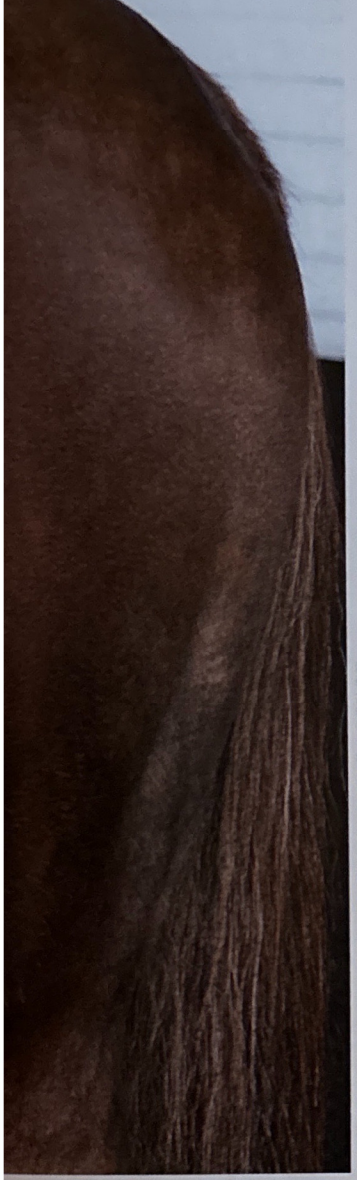
◀ Dressage rider Rebecca Reed saw a big improvement in Simply Sinatra after his external oblique tightness was addressed with a Sportsmassage technique.

implications for your horse. Fortunately, tightness can easily be relieved by using a basic Sportsmassage technique.

Signs of Tightness

As a Sportsmassage practitioner, I often point out that the most overlooked factor in diminished performance is simple muscle tightness. To understand how tightness develops, knowing how muscles work is important. Every muscle has two ends, and each end is connected to a different bone by a tendon. One end is the anchor, which stabilizes the muscle to the bone. The other end is the insertion, where the motion occurs. The middle part of the muscle, which lies between the two ends, is called the belly. The belly is the power or action of the entire muscle and creates overall movement.

Muscles are made up of many thread-like fibers that run



COURTESY JO-ANN WILSON. PHOTO BY SHANE HOFELDT

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parallel to each other. A muscle is loose and functioning properly when the fibers have equal and appropriate spaces between them and do not lie very close or touch one another. When the fibers are close together without much space between them, the muscle is in a shortened state and is tight.

When the muscle is tight, less blood can circulate through the limited space between the fibers. Since blood carries oxygen, the diminished blood flow affects the level of oxygen available to the muscle tissue. Oxygen provides the fuel and energy to the muscle necessary for the required exercise. As the physical exercise increases, the body's demand for more oxygen increases. Diminished oxygen creates fatigue and discomfort in the muscles when they are being used. It is similar to stepping on a hose. The less space in the hose, the less water can flow through.

When muscles are functioning properly, they contract (shorten) and release (lengthen) in synchrony. Muscle tightness affects the release process of the muscle. When a muscle is tight it resists letting go, or releasing, to accomplish the required motion. The tighter the muscle, the greater the resistance. And the greater the resistance, the harder it is for the horse to move and perform.

Olympic eventer Lauren Nicholson and dressage trainer and rider Rebecca Reed have experienced this issue firsthand.

For Rebecca, she noticed her 13-year-old Oldenburg gelding Simply Sinatra, currently competing in Prix. St. Georges, was having trouble bending, particularly in the left half-pass.

▲ For eventer Lauren Nicholson's Vermiculus, his tight obliques led to him compensate in other areas to keep his balance. This resulted in atrophy of certain muscles that he wasn't using correctly.

For Lauren's 2022 FEI World Championships team silver medalist partner Vermiculus, a 16-year-old Anglo-Arabian, his tight obliques led to him compensate in other areas to keep his balance. This resulted in atrophy of certain muscles that he wasn't using correctly. "He's little and everything is quite close together, so when his obliques were out of whack, everything went out of whack," explained Lauren.

A horse with a tight external oblique will not be straight in his body. If the muscle is tight on one side, the rider will need to use more leg on the side of the tightness. For example, if a horse has a tight left external oblique, he will shift his haunches to the left and will not be able to release the haunches to the right to straighten his body, requiring the rider to use more left leg to

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▲ To assess your horse's motion, have a handler walk him in a straight line about 50–75 feet away from you. Here, the horse is not straight and is shifting and holding his haunches to the left, suggesting his left external oblique is tight.

keep him straight. Many riders accept this as natural crookedness. The horse will also not back up straight, and he may fall in or out on a circle depending on the affected side.

If both the right and left external obliques are tight, the horse will be quite resistant and have a harder time going forward in all movements and especially in collected work. Jumping horses may also knock down rails.

Causes of Tightness

There are several reasons for tight external obliques. Some of the most common are:

- repetition of lateral work
- cow kicking at flies
- repeatedly kicking in the stall or trailer

Tight external obliques can also be caused by veterinary issues, such as:

- hindgut or gastrointestinal issues
- problems with the sacroiliac area
- lower lumbar vertebral issues

Gait Analysis and Assessment

To assess your horse's motion, have a handler walk him in a straight line about 50–75 feet directly away from you and then turn around and walk back in a straight line. Make sure to do the assessment on soft but firm footing that is flat and even. The walk is the best gait to assess muscle tightness because the slower the horse moves, the more muscle he has to use, and the easier it will be for you to see any resistance in motion. If the horse has external oblique tightness, you should be able to see that he is not straight and is shifting his haunches in one direction. So if he's putting his hips to the left, it suggests that his left external oblique is tight.

▲ After the correct application of the Sportsmassage technique, the horse will immediately be straight in his body, as seen here.

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▶ To locate the external oblique, feel for the bony landmark of the point of the hip, then drop your thumb down on a diagonal in front of the point of the hip about 1 inch. You can also think about the hip as the face of clock. On the left side, it can be felt at 7:00–8:00.

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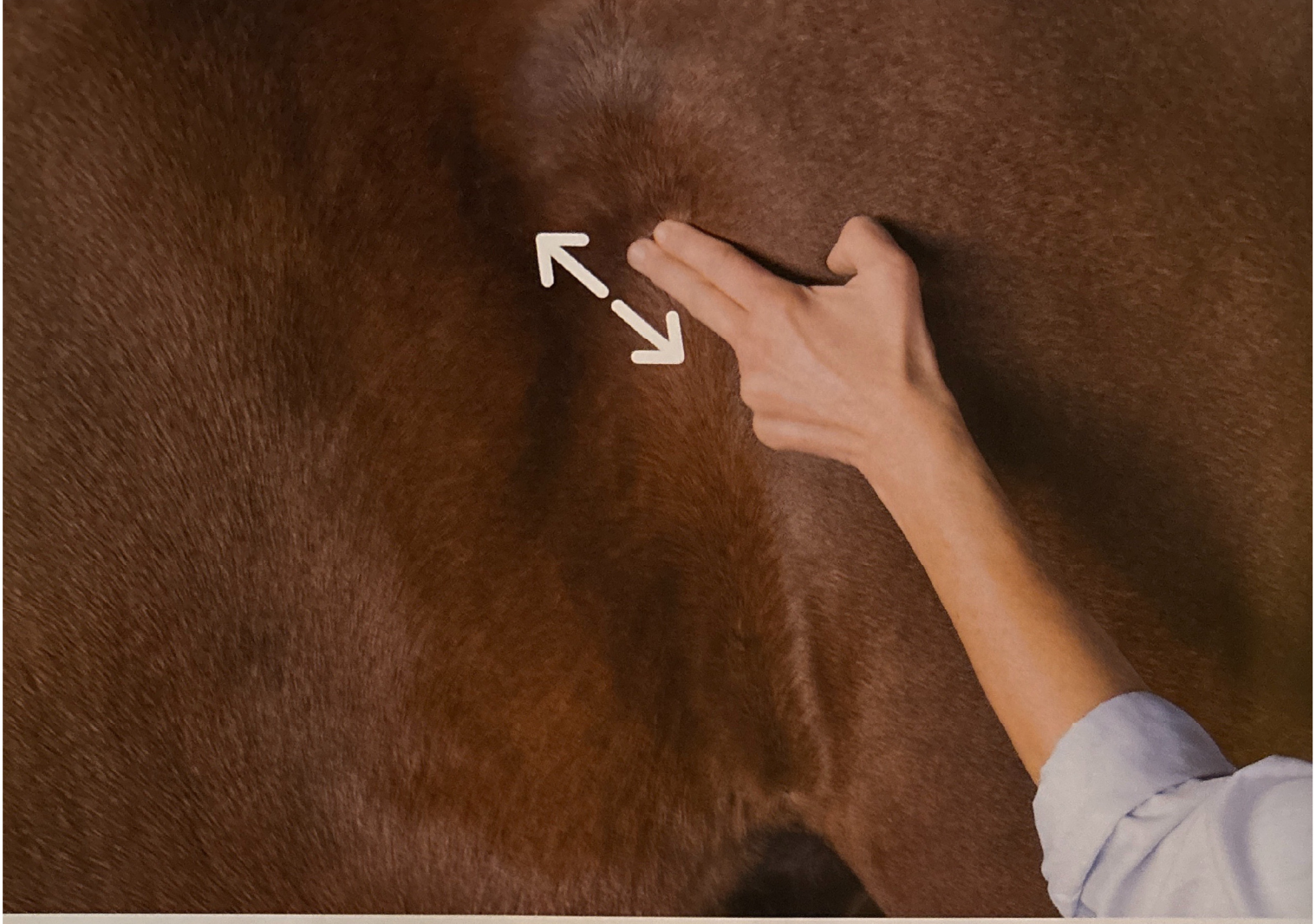

▲ Use moderate pressure with two fingers to cross the fibers diagonally back and forth on the tissue, without taking your fingers off, as if you were going across the grain of a piece of wood.

COURTESY JO-ANN WILSON. PHOTO BY SHANE HOFELDT

Relieve Tightness with Cross-Fiber Friction

Eliminating tightness in this muscle is very easy by using cross-fiber friction. This helps to mechanically break up a spasm or knot by separating the muscle fibers that are stuck together. The entire muscle then becomes more pliable and functional, helping to increase the range of motion and improve specific performance problems.

To locate the external oblique, feel for the bony landmark of the point of the hip, then drop your thumb down on a diagonal in front of the point of the hip about 1 inch. This is where the tendon fibers and muscle fibers meet, at the insertion. Another way to locate it is to imagine the point of the hip is the face of a clock. The insertion can be felt at 7:00–8:00 on the left side, and 4:00–5:00 on the right side. If this muscle is tight, you should feel a small piece of tissue close to the bone that feels like a thick chord or guitar string. If it is not tight, the tissue will feel soft and rebound into your hand.

Next, I'll explain the cross-fiber friction technique, but if at any time when applying the technique, the horse threatens to kick, moves away, pins his ears or obviously doesn't like it—stop immediately.

Start the technique by using moderate pressure at the insertion with a thumb or two fingers. Cross the fibers diagonally back and forth on the thick chord as if you were going across the grain of a piece of wood. To do this, move your fingers back and forth across the tissue without taking your fingers off of them. Use the cross-fiber friction technique for no more than 10 seconds. Stop and feel the tissue to determine if the chord has softened or changed. If it feels softened or changed, do not repeat the technique. If it still feels tight, repeat cross-fiber friction one more time for no more than 10 seconds.

> *Eliminating tightness in this muscle is very easy by using cross-fiber friction.*

Once the technique has been completed, it is best to ride or longe the horse afterward. Exercise may enhance the treatment because it further lengthens the muscle. If you've relieved the tightness, you will see new or improved range of motion. The change is immediate. Canter the horse in a connected long and low frame two times in both directions around an arena—as long as horse and rider are safe to do so. The canter is the most concerted exercise in lengthening all of the horse's muscle

groups. That is why the trot always feels better after the canter. You may choose to trot or longe the horse if cantering is not an option. If you cannot ride the horse following the technique, then ride him when you are able—there is always another day.

> *Exercise may enhance the treatment because it further lengthens the muscle.*

Both Rebecca and Lauren saw marked changes in their horses after their external obliques were loosened. After the Sportsmassage technique was used on Simply Sinatra, everything became much easier right away. This allowed his right hind to come underneath and cross over to the left. "The [half-pass] was easier, it flowed much better, the connection was better, everything was better," said Rebecca. Lauren agreed that the effect was instantaneous, but also had benefits over time. "The other muscle groups aren't compensating and they can develop properly and they get better long-term, too."

If your horse continues to have this problem in motion, seek a veterinarian assessment to help address the cause. PH

Practical Horseman thanks Kristina Watkins of Firefly Farm in Reddick, Florida, for use of her farm and horse for the demonstration.

Jo-Ann Wilson recently wrote and released her book, "Keeping Horses At Their Best: A Hands-On Guide to Equine Sportsmassage." Parts of this article were adapted from her book. To purchase a copy, go to sportsmassageinc.com/Purchase-Book.htm.