

Courtesy of Equi-Tape

Stick It to Them

Kinesiology tape is no longer just for humans. The athletic tape is now making a difference in the lives of horses, too.

By Kelsey Pecsek

Kinesiology tape has been available to humans for many years, but the modality is now available for horses, as well. Dr. Beverly Gordon, creator of Equi-Tape, is among the many practitioners using the tape to benefit equines worldwide.

We've all seen the folks at the gym who are training for the next big race or fitness competition, or at least caught a glimpse of professional athletes on TV. Despite the sweat glistening over their chiseled muscles, our eyes are drawn to the sports tape around their shoulders, elbows or knees. Something about the intensity of it all is evidence that they mean business.

But that tape has an important purpose. It's known as kinesiology tape, and it has been around for nearly half a century. Applied in strategic configurations, called protocols, to particular parts of an athlete's body, the tape can reduce inflammation, optimize muscle function, relieve muscle fatigue, stabilize injuries, reduce pain, and provide support to joints, ligaments and tendons. Thanks to the recent development of equine kinesiology tape, all of those perks are now also available to horses.

What is it?

The original kinesiology tape and the Kinesio Taping Method for humans were developed in the 1970s by Japanese chiropractor Dr. Kenzo Kase. According to the Kinesio website, the product was created in an effort "to fill a void in the treatment options available at that time." The lightweight, elastic tape is uniquely designed to mimic the tension of the skin for health-related and athletic use without restricting the wearer's range of motion.

"Elastic kinesiology tape stretches, unlike a lot of other medical or athletic tapes," said Dr. Beverly Gordon, developer and founder of Equi-Tape. "It's used for both healing and training, and because it stretches, you can use it to stabilize a joint like a fetlock and still have full range of motion."

Although Kase's kinesiology tape has been around for decades, it took many years for

the product to gain traction among athletes and healthcare professionals. Its breakout, especially in the United States, came when Olympic athletes were seen wearing the tape on TV.

"In the beginning, Kerri Walsh was one of the most popular Olympians to use it. She is a beach volleyball player, and because they wear bikinis, it was easy to see the tape on her shoulder," Gordon said of Walsh, who competed in the 2008 Beijing Olympics. "Because of its success, it has just continued to grow. Olympic athletes chose to use it, so it was given more credibility and it started to become very popular."

"I think it was a natural transition [to horses], seeing how beneficial kinesiology taping has been for human athletes," said Melissa Aden, a certified Kinesio Taping practitioner and Kinesio Equine instructor. "Just like massage, chiropractic and acupuncture were

seen as beneficial therapies for people, and then used on horses.”

Gordon, a human chiropractor who used kinesiology tape on her patients before it became popular, was at the forefront of research to transition the tape to the equine world. With a background in biomechanics and a new equine company called The Horse In Motion, she conducted research for existing human kinesiology tape companies, but found there were deficits.

“I started to realize the tape and the taping protocols for humans, as much as it was successful for humans, kind of fell short in the equine world,” Gordon said. “It was only a matter of time before such a successful modality like elastic kinesiology taping crossed over into horses, but the human tape and methods were just not adequate.”

Gordon continued her research privately and founded Equi-Tape, the first equine-specific kinesiology tape to hit the market, and the Equi-Taping Method, which is a set of protocols unique to equine anatomy and physiology. Since then, many human kinesiology tape companies have also come out with a product designed specially for horses.

How does it work?

While taping horses required some methodology changes, the science behind human and equine kinesiology tape and how it works is basically the same.

“Elastic therapeutic tape is utilized to influence skin, fascia, muscle, joints, and tendons and ligaments. By influence, I mean lengthening or shortening a muscle, lifting skin, providing awareness to joints, ligaments and tendons, and mobilizing fascia, a thin layer of connective tissue found throughout the body,” Aden said.

The major difference between human and equine use is the amount of hair covering a horse’s body; however, since the hair/skin connection in horses is so sensitive, the tape still works as intended. When applied correctly, the tension and stretch in equine kinesiology tape creates a space between tissue layers, which leads to improved circulation and decreased pain.



Courtesy of Equi-Tape

When elastic kinesiology tape proved useful in human athletes, it was only a matter of time until the modality was used on horses for its therapeutic and athletic benefits.

While it was clear to Gordon that kinesiology tape would be beneficial to horses, she realized horses’ unique anatomy required new taping protocols. This particular protocol supports the fetlock and suspensory ligament, while giving relief to supporting joint structures to help aid in the recovery of a tear in the deep digital flexor tendon.



Courtesy of Equi-Tape

Figure 1



Courtesy of Equi-Tape

(above) Gordon applied Equi-Tape to this hematoma on Feb. 15 after her patient fell from a horse while show jumping.

(right) Six days later, on Feb. 21, Gordon removed the tape to apply a different taping. The lines where the kinesiology tape lifted the skin are clearly visible.



Courtesy of Equi-Tape

“Inflamed muscles put pressure on pain receptors in the skin that send signals to the brain, resulting in a pain response like muscle spasms, lameness and reduced range of motion,” Aden continued. “Kinesiology tape lifts the horse’s hair follicles, which are deeply imbedded in the skin, and therefore [lifts] the skin. This skin lift allows for increased blood flow beneath the tape, and it relieves pressure off of pain receptors by decompress-

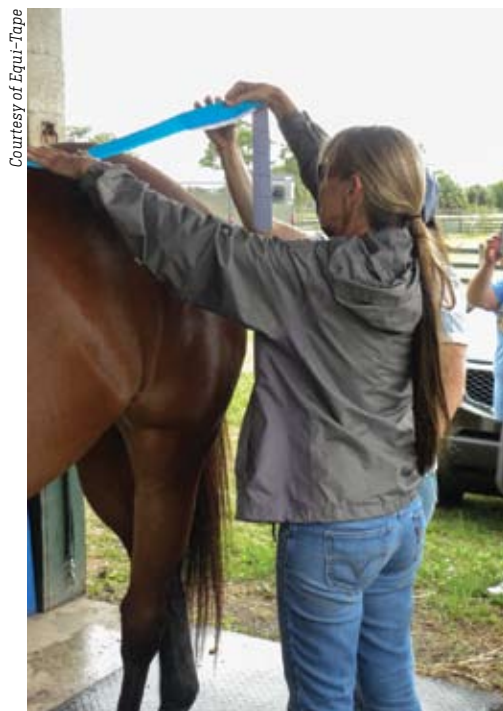
ing the tissue.”

Skin discoloration and bruising is difficult to see under a horse’s hair, but it is easy to see in humans. Because kinesiology tape decompresses the tissue to allow for the movement of blood, lymph and other fluids, the positive effects of applying the tape to a human bruise can be clearly seen. (Figure 1)

The same process occurs in horses, but the easiest observation horse owners can make



Similarly to the human hematoma in Figure 1, inflammation and swelling of the lower leg on a horse is evidence of a build up of fluid. This latticework taping lifts the skin on the leg to open channels for increased circulation and removal of accumulated toxins from the area to aid in quicker recovery.



Many companies that produce equine kinesiology tape offer educational clinics and seminars so riders, trainers and owners can have optimal success when using the tape on their horses at home.



Several equine kinesiology tape designs feature a wave pattern that helps dissipate heat generated by muscle movement.

is a decrease in swelling and a reduction in common pain responses. According to Aden, equine kinesiology tape has proven helpful in the treatment of many of her patients' performance injuries, such as hock inflammation or arthritis, suspensory tears, stifle dysfunction and back issues.

While a horse can stand in its stall and wear a therapeutic taping, which is removed for activity, there are other tapings that can be used both under saddle and at rest. The elasticity of equine kinesiology tape allows for a full range of motion so it doesn't interfere with a horse's ability to perform. Several products also feature a wave pattern on the back of the tape to allow for the heat created from muscle movement to dissipate.

"We can use it to decrease the damaging effects of exercise," Gordon explained. "The tape can help get rid of the toxic byproducts that were built up from the exercise, like lactic acid and pyruvic acid, potassium and magnesium, all of which can sit in the muscle afterward and are damaging."

Several associations allow horses wearing equine kinesiology tape to compete; however, others, such as the Fédération Equestre Internationale (FEI), do not allow its use outside of the stable area. There are currently no rules prohibiting the use of kinesiology tape on the grounds or in the show pen at major Western performance horse events sanctioned by the American Quarter Horse Association, American Paint Horse Association, National Cutting Horse Association, National Reining Horse

Association or National Reined Cow Horse Association; however, several associations encouraged competitors to consult with event officials prior to individual shows for clarification or updates.

When choosing a brand of equine kinesiology tape, it is important for horse owners to consider the product's thickness, which should be similar to horses' skin, and the elasticity. Several companies offer tapes in a variety of colors, which may aid in the healing process according to some color therapy research. Most importantly, though, is the strength of the adhesive. "The tape is fabulous, but if it doesn't stick, it doesn't work," Gordon said.

Some products for horses warn against use on humans due to the strength of the adhesives, while others can be used on riders in conjunction with their equine partners. It's important to obtain that information before trying a horse product on a person, as various adhesives can cause reactions and irritation to human skin.

While several tapes come with short brochures or tutorials on simple protocols users can do on their horses at home, Gordon and Aden both recommend seeking help from a professional practitioner or attending a seminar to learn the skills needed to correctly apply equine kinesiology tape. Proper training and application can ensure the most success with the product.

Getting coordinated

Historically, kinesiology tape has been used to encourage the healing process and provide support during performance; however, its ability to influence proprioception is opening the door to new possibilities in the equine world.

"Proprioception is just the body's way of knowing where it is in time and space," said equine sports massage therapist and certified Equi-Taping practitioner Jeff Moore, who owns and operates Equine Rehab & Therapy in Hillsboro, Oregon. "In order for you to take a step, your body has to first figure out where that leg is and where your balance is. Then the brain can send the signal down to your leg that you first need to shift your weight over to the other leg, then you need

Brianna Crenshaw



Because Western performance horse disciplines tend to be high impact and require extreme athleticism, kinesiology tape is commonly used for preventative support, like this fetlock taping. The taping protocol used on the horse's shoulder helps the muscles in the forearm function efficiently in the turnaround.



Derek Dowsett

The kinetic taping methods Jeff Moore uses can be helpful to performance horses during training or showing. This barrel horse, for example, has a neck taping that helps lift the base of the neck and withers, as well as a rear taping that helps engage the hind end with the abdominal muscles. These protocols emphasize forward motion.

to pick your leg up and put it forward. It has to fire those muscles in the right order to get you to take a step forward and not fall on your face.”

In order for a horse to compete at its best, its brain must fire its muscles in the correct sequence. That coordination “is the difference between a Secretariat and a \$1,500 claimer,” Moore explained. “They’re all firing the same muscles, they’re just not quite doing it the same way.”

Using what he calls kinetic taping protocols, which are intended to modify movement, Moore has found equine kinesiology tape is beneficial in facilitating muscles to fire in a more efficient manner. In doing so, he is able to work with trainers to maximize horses’ potential in the show pen through their training programs.

“It’s definitely not a magic bullet that’s going to take a lower-level horse and make it an NFR [National Finals Rodeo] horse,” Moore admitted. “But from a trainer’s point of view, part of what you do is shaping the horse’s body in a way that they can do what you’re asking them to do. A good trainer can do that consistently, but they’re only on the horse for a maximum of 45 minutes or an hour a day. The other 23 hours a day, the horses’ old default postural patterns take over and they’re James Dean hanging out against the wall.”

Moore’s kinetic protocols aim to improve a horse’s movement by creating more effective muscle memory. Muscle memory, in large

part, is the result of the myelination of nerve pathways. In layman’s terms, the continued use of the correct pathway develops into the new default, so the brain will fire faster to the nerves in that particular sequence.

Since each horse and rider is unique, Moore’s preferred practice is to hold a private session where he can assess the team and develop a set of custom protocols to improve on the horse and rider’s individual issues. He then educates the rider, trainer or horse owner on the method for applying the protocols so they can be used as often as necessary without a practitioner’s guidance.

“I tape both people and horses in my practice. In an event, it’s the two of you working together. If you can help the rider be more efficient on the horse and also help the horse be more efficient, it just makes the team way better,” Moore explained, adding that he also utilizes generic tapings. “Proprioception’s an interesting thing because your body compensates for certain things and it becomes your norm. If you have a fetlock or a knee or a hock or a stifle that you’re [subconsciously] protecting and all of a sudden you have support for it, that makes a big difference in your run.”

To get an idea of how asymmetrical a rider is, Moore suggests the person stand on two scales with one foot on each. If done in front of a grid or mirror, he or she can see where the body is uneven, while the scales will show how unevenly weight is distributed on each side of the body. This can help riders



Courtesy of Equi-Tape

While Moore commonly sees issues in the hocks of performance horses like cutters, reiners and reined cow horses, he finds that the problem often stems from lumbosacral, or lower back, issues. This sacroiliac (SI) joint taping can help relieve the back pain that causes the offload of force on a horse’s hocks.

determine if kinesiology tape may be beneficial for them, as well as their horses.

In the end, Moore thinks it is most important for people to give kinesiology tape a chance on their horses and themselves. The positive effects of correctly applied tapings can be felt almost instantly, so experiencing the modality is the best way to understand its benefits.

“There’s a disconnect in the understanding of it. You understand that injecting something in a joint makes it feel better. It’s a little bit difficult for most people to get their brain around a couple bits of tape making any kind of appreciable difference,” he said. “It’s one of those things you just have to experience.” ★