

# **Equine Massage 101**

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Your horse is yawning profusely, licking, chewing, and gradually lowering her head. Her eyes slowly glaze over, as her lower lip becomes slack. Is this the effect of drugs? No, this apparent sedation is the effect of skilled bodywork. It's a result of the relaxation response induced by nothing more invasive than the human hand.

How can something as simple as rubbing muscles cause a horse to transform from a hypervigilant animal of prey to a relaxed, trusting partner? The answer is intriguing because it unfolds not only inside the muscle cells, but also within the brain. There is actually a shift in the nervous system from the fight or flight response to the relaxation response. One functions exclusively in high gear, whereas the other takes care of basic needs like digestion, circulation, and rest. The muscular effects of massage are well documented in both horses and humans. The psychological effects are equally well documented in humans, but less so in horses. Yet, unequivocally, one psychological benefit of equine massage is trust. You can improve your relationship with your horse by learning to do simple massage techniques.

## **Informed Touch**

Touch is a form of communication. A nursing mare will interact with her foal primarily through touch. Touch is merely an extension of body language. It can convey an entire range of concepts. In an emergency, it can mean, "You need to move, now!" When things are fine, it can mean, "Everything is fine; be still, relax." When you learn to use your hands to intentionally release areas of painful muscle contraction, you give comfort.

Informed touch means knowing how to provide relief by understanding some of the basic principles of massage. In general, problems crop up where circulation is impaired. Pain, spasms, and tight muscles all are signs of impaired circulation. The goal of any massage is first and foremost to improve circulation.

## **The Secret Life of Muscle Cells**

The basic needs of muscle cells are as simple as the needs of a baby. Nutrients are needed for growth and energy. Wastes must be eliminated for a clean internal environment. Oxygen is crucial since it is involved in all of these processes.

There are three simple steps to finding problem areas. Look first where there is less blood supply to the muscles, for example where muscles attach to bone via white tendons. (Tendons are white because they are less vascular--have less of a blood supply.) Second, check the belly (main part) of the muscle for hard knots. Third, look where muscles overlap, as they tend to adhere during times of dehydration.

Each muscle cell is a miniature powerhouse that produces energy for motion. In the same way an engine requires an exact fuel/oxygen mixture to fire properly, muscle cells need nutrients and oxygen in the right mix to operate efficiently. Not only is oxygen necessary for energy production, but also for waste elimination. Just like an engine, the byproduct of energy production is waste. In the case of muscle cells, we are talking about molecules that are left over after normal metabolic processes, such

as generating energy. The byproduct of energy production most of us are familiar with is carbon dioxide. All mammals exhale carbon dioxide with every breath. Another commonly known byproduct of energy production is lactic acid.

Why would there be a lack of adequate oxygen in the first place? For horses in hard training, heavy exertion uses up most of the available oxygen supplies for energy production. For horses in a competition setting, the relative tension of the rider can induce stress. A stressed horse takes quick, shallow breaths. That reduces oxygen to the muscles.

Additionally, some horses don't drink much when they are away from home, or they sweat profusely in the trailer before the competition. Many competitions are scheduled during the hottest hours of the day, so dehydration is a major cause of oxygen deficiency in these athletes. (When there is inadequate liquid in the body, the circulation of oxygen is less efficient.)

## **Reintroducing The Breath of Life**

Delivering oxygen to sore muscles must be done systematically to be effective. Think of a massage as having a format similar to a training session.

First, you warm up. Then you do the heavy work. Last, you cool down. It's important to warm up the muscle because if you just start digging around, it might be more painful than pleasurable. Horses are happy to express their opinion of pain, and the result might be that you get kicked. Muscles, like horses themselves, prefer to be directed into relaxing; they do not respond well to force.

The "workout" phase of massage can consist of deeper pressure using a variety of methods.

Massage has been around for about 4,000 years, so there are many types of massage to choose from.

The "cool down" phase of massage is important to prevent residual soreness afterward.

## **Physiological Intentions**

***Effleurage*** is a good choice for a warm up stroke. It's a long, flowing stroke that works like a manual pump to jump-start sluggish circulation. Using the entire flat of your hand, stroke in the direction of the hairs to stimulate movement of fluids, including lymph and blood. As in any warm-up, start slowly and lightly, gradually going deeper. Be conscious of how much pressure you use by noting your horse's response. Needless to say, laid-back ears mean "Back off." This does not mean stop. Generally, resistance is a clue that the horse is sore and is in need of having her tissues flushed of metabolic wastes. You change the oil filter in your truck every 3,000 miles, why take less care with your horse's combustion engine?

***Compression*** is the most unfamiliar stroke for newcomers to massage. It involves a rhythmic pumping of the muscle belly. Hold each compression for at least five seconds or so to give the cells time to respond. This milks the wastes out of the muscle manually. Compression is also an interesting way to stretch muscles. Most people think of stretching as pulling the two ends of the muscle away from each other. Yet, it can be less invasive and equally as effective to bend the muscle perpendicular to its fibers. The long muscles that run parallel to the spine can be effectively loosened in this way. Use hand compressions by pressing with the lower part of the palm, perpendicular to the spine, about four inches away from the bone. To stretch, hold these compressions for at least 90 seconds. Two-fisted compressions are for larger muscle groups such as the hind end. They can also be done with one hand over the other to increase the force if you need to get to a deeper muscle

underneath the superficial layer. Most areas have at least three layers of muscle. Think in terms of releasing one layer at a time from superficial to deep.

**Cross fiber friction** is used to break up adhesions between muscle fibers, or between a muscle and tendon. Generally, it's done where the tendon attaching muscle to bone is broad and short rather than long and skinny. Without an in-depth knowledge of anatomy, you can still gain a feel for these areas by touching "bony landmarks" you probably already know about from learning equine conformation. You can easily find the withers, the spine, the point of the hip, and the croup, for example. The withers are often a good place to practice at first because it's easy to feel the difference between the bone and the fibers of the trapezius muscles, which run more or less perpendicular to the spine. But go lightly at first as this area can be sensitive, and be gentle at least until you get a feel for how much pressure your horse can take.

Using your thumb, apply pressure deep through the overlying skin until you feel you are pressing the tissue of the next layer into the bone. You then move the tissue--not the skin--in the direction of the tail against the spine. Each frictional move is only about a half-inch long. Let go and reapply the same kind of pressure another half-inch further down. Move in a rhythmic way quickly down the spine. It's sort of an inch-worm action in one direction only, breaking up pockets of waste as you go. This is definitely a move to use in the "workout" phase of the massage, and it's important to use long strokes afterward to avoid residual soreness.

**Digital compression** uses the digits, or fingers, with either the thumbs braced against each other or the first two fingers braced to apply a small area of compression directly to a specific knot. These compressions can be held for 20-30 seconds in sets of three. Between sets, release the pressure for 10 seconds or so, and lightly hold your spot so you don't lose it. Remember as you do this that the most effective part of the pressure is actually the release. That is when blood flow enters the area, bringing much-needed oxygen to carry off wastes.

## **Where to Rub**

How do you know where to find these trigger points? It's a matter of learning to develop a feel for differences in the texture of the muscle. Muscle should bounce back when pressed, not feel hard. Massage is a very experiential type of learning. The best way to develop your ability to feel knots is to grab your own shoulder and find the sensitive, tender trigger points on yourself, and you will gradually learn to locate them easily on your horse.

In the beginning, just choose three or four trigger points to work on before moving to the other side of the animal. Keep it simple, but practice frequently. At this point in the massage, you begin closing up the area with some of the same strokes you used earlier. The same strokes are used for the "cool down" phase as for the "warm up" phase, only in reverse order of pressure. Close up the area using gradually lighter compressions or effleurage to move what you have loosened up out of the muscles.

Ideally, you want to work with your horse in a confined space, such as in a familiar stall. Your horse will need some room to move around, but you should leave a halter with a lead rope attached and draped over your horse's neck for easy access if needed. This is a cooperative effort. Massage, like riding, needs to be a form of mutual communication to make it effective. You cannot force a horse to relax under saddle, nor can you force a horse to receive a massage.

When learning, it's easier to do a short session every day or two and focus on getting the techniques down. Maybe just work each side of your horse's back or shoulders in the beginning. When massaging the hindquarters, make a soft fist with the hand closest to the horse's tail and lightly touch the muscles of the hind leg. This way, you can feel for movement before you can see it, in case your

horse goes to kick because you have been too abrupt in your pressure. Other precautions to take are for the horse's safety. Avoid putting pressure in the area of the kidneys around the loins. Avoid direct pressure on bones or behind the jaw where lymph nodes are tucked into the space where the neck meets the jaw.

A word about body mechanics will keep you from tiring prematurely. Whenever possible keep your joints straight, but soft (not locked). Stand far enough away to use your body weight effectively. Make the force go through your skeleton rather than your muscles whenever possible. Choose a position that works for you depending on the size of the horse and your own height. Don't compromise your own body by working in positions that are uncomfortable, because any tension you feel will be immediately be transferred to your horse and your touch will be ineffective.

### **Take-Home Message**

Touch between human and horse is a great communication tool. Learn to converse fluently with your horse using this subtle form of communication that can lay a foundation of trust for years to come.