CAN MASSAGE HELP HORSES?

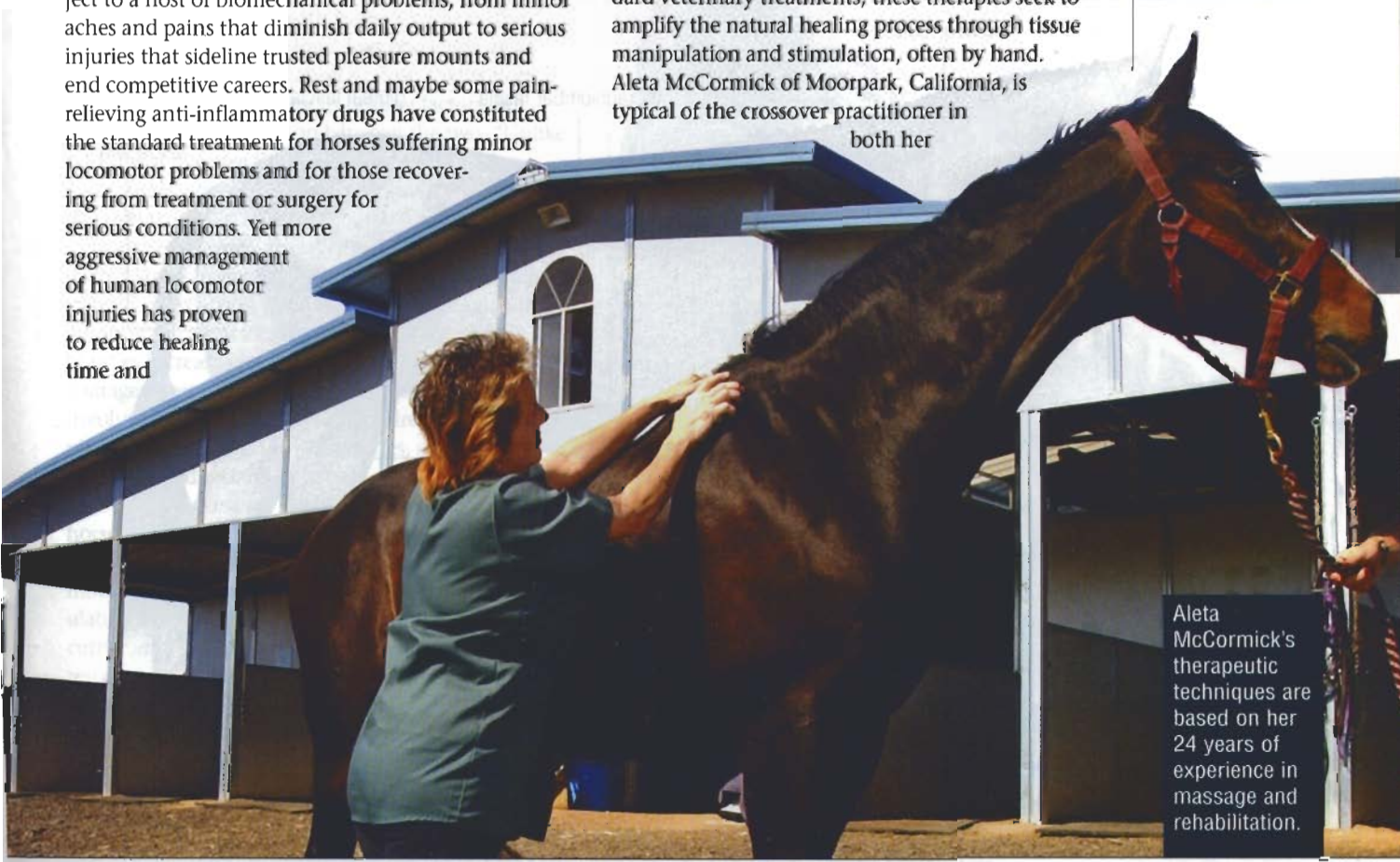
A California bodyworker seeks hands-on and scientific proof that deep-tissue manipulation can improve the locomotor well-being of her equine clients.

By Gretchen Ditto

Photos by Joseph A. Garcia

In the ideal world, all horses would move freely, comfortably and efficiently. Their bodies would develop in balance and symmetry and remain that way throughout their working lives. They'd all be perfectly operating performance or pleasure machines from early training into retirement. In reality, of course, horses' bodies, like our own, are subject to a host of biomechanical problems, from minor aches and pains that diminish daily output to serious injuries that sideline trusted pleasure mounts and end competitive careers. Rest and maybe some pain-relieving anti-inflammatory drugs have constituted the standard treatment for horses suffering minor locomotor problems and for those recovering from treatment or surgery for serious conditions. Yet more aggressive management of human locomotor injuries has proven to reduce healing time and improve the quality of tissue repair, which begs the question: Why not treat horse injuries the same way?

The crossover possibilities have inspired human therapists with equine interests to apply their skills to horses and attracted owners hoping to keep their animals injury free and promote better healing when injuries do occur. Often applied as adjuncts to standard veterinary treatments, these therapies seek to amplify the natural healing process through tissue manipulation and stimulation, often by hand. Aleta McCormick of Moorpark, California, is typical of the crossover practitioner in both her



Aleta McCormick's therapeutic techniques are based on her 24 years of experience in massage and rehabilitation.

FASCIA

In McCormick's equine program, massage is used to locate and release restrictions in muscle function caused by old injuries or chronic strain. Called myofascial release, her technique is similar to Rolfing, a style of human bodywork that aligns the major body segments through manipulation of the connective tissue (fascia) that envelops and anchors all anatomical structures, including muscle bundles.

TERRY GLEASON

background and personal involvement with horses. A horse owner herself, McCormick moved into the world of equine massage after 15 years of training and practice in human massage therapy and has been working with a variety of California performance horses for the past eight years. She was trained as a physical therapy technician for a chiropractic practice and certified as a massage therapist through the Massage School of Santa Monica, where she now also teaches courses. In addition to ongoing study of various bodywork techniques, McCormick also has been influenced by lessons learned from her own training as a long-distance runner.

McCormick used hands-on experimentation to adapt bodywork techniques to her equine clients and particularly enjoyed working with lame horses whose "clean" radiographs showed no skeletal reason for their problems. By experimenting with various massage techniques and training programs for these "problem horses," including two aging, top-level jumpers who just wouldn't stay sound, no matter what, she developed an effective rehabilitative and preventive strategy. "My goal," she says, "is to correct problem areas over the long term. When I started developing a bodywork technique for horses, I was searching for a treatment that would last, not just a temporary fix."

In addition to bodywork, McCormick's "research" subjects followed exercise programs that worked different muscle groups rather than focusing solely on sport-specific training. Varied exercise challenges contribute to locomotor health. "Cross-training keeps up the fitness level," says McCormick, "and it also helps bring more movement to joints and muscles we physically can't reach. The right kind of movement acts almost like internal massage by warming up and softening some of the body parts that a bodyworker can't warm up manually."

McCormick's exercise programs include a combination of flatwork, galloping, jumping small fences and hacking on the trail. Scheduled rest is also a critical part of the program. "I cannot stress enough the importance of downtime to allow muscles to recuperate and repair," she says. "So many injuries are caused when people overlook downtime and treat their horses like machines."

What's the system?

But massage is the center of McCormick's equine program. The hands-on sessions locate and release restrictions in muscle function caused by old injuries or chronic strain. Her technique, called myofascial release, is similar to Rolfing, a style of human bodywork that aligns the major body segments through manip-

MAJOR REGIONS OF DEEP FASCIA

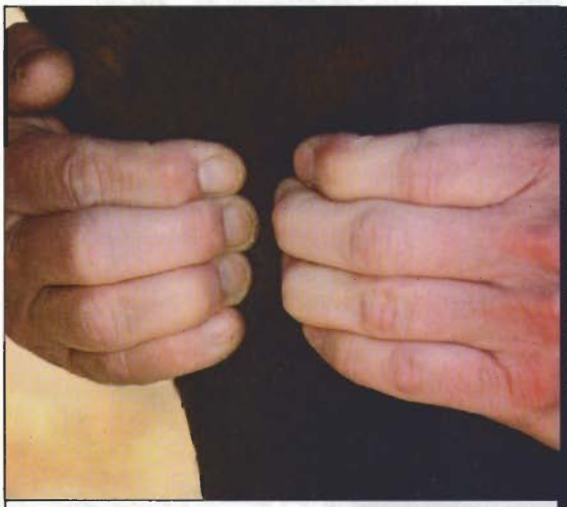
ulation of the fascia. Fascia is the connective tissue that envelops and anchors all anatomical structures, including muscle bundles (the prefix "myo" = "muscle"). "If you have ever pulled the skin off a chicken breast and seen that thin, filmy layer of tissue underneath," explains McCormick, "you have a general idea of the way the fascia surrounds the muscles." Equine fascia is quite thick, forming strong "sleeves" around the muscles. When it's healthy, this connective tissue is pliable and well lubricated, allowing the muscle bundles to move easily and slide over each other.

Unrestricted muscle action is self-perpetuating: Fluid movement stimulates the conditions that support further fluid movement. But when injury or underuse of the muscles restricts motion, the connective tissues constrict and lose elasticity, reducing the horse's overall flexibility, range of motion and comfort. The guarded postures and restricted movement following locomotor injury are important to healing, with pain serving as the reminder to ease off and give the injury time to mend. Yet the limp or body imbalance can persist to become a chronic condition in which the connective tissues stay contracted and tightened in the protective position. For full recovery from everyday aches and major injuries alike, the myofascial connections have to "learn" to let go.

That's where the hands-on intervention of bodyworkers can help. Like Swedish massage, the most common method used with human subjects, the myofascial-release technique does encourage relaxation and increase circulation to flush toxins from damaged tissues and bring in healing factors, but there's a critical distinction between the two. "Unlike traditional massage," McCormick explains, "deep-tissue work involves going layer by layer, working through to deeper muscles."

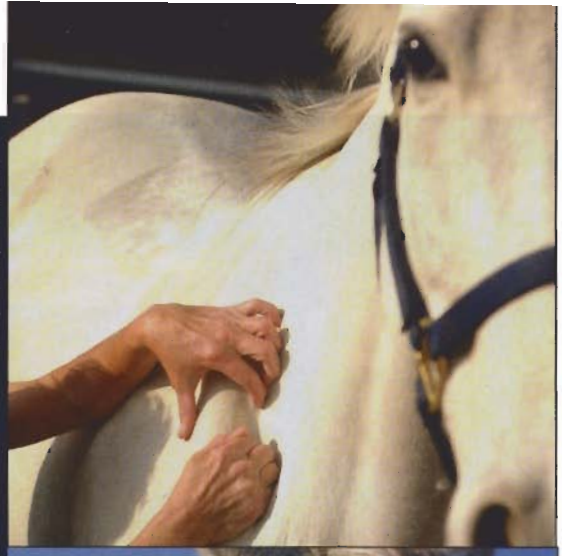
To trained hands, the quality and texture of the deeper layers of muscle and connective tissue indicate areas of constriction needing release. Manual manipulation of the tissues and separation of the muscle bundles increase range of motion, which, in turn, encourages freer movement. Deep-tissue work generally involves slower strokes and more direct pressure applied across the grain of the muscles, as compared with standard relaxation massage. Yet deep pressure isn't always necessary, McCormick says, although horses typically need more pressure than human subjects. McCormick uses her fingers and hands for the more superficial work, but when she needs to manipulate the deeper muscle tissues, she often uses a currycomb, her fist or even her elbow. Most horses respond with pleasure, leaning into the pressure to "help" her find just the right spot.

In a business that's all about pain, sensitivity to the horse's subtlest responses is the bodyworker's critical feedback loop. McCormick closely observes the horse's body language, watching for signs of protectiveness, warning or submission. "When a horse first



McCormick separates muscles in the upper leg to reduce stress to the knee and shoulder. Excessive scar tissue can "glue" these muscles together, which can result in lower-leg damage over time.

Regardless of the horse's discipline, keeping the shoulder area free and mobile helps distribute the force of concussion and increase range of motion.



As she works, McCormick closely observes the horse's body language, watching for signs of protectiveness, warning or submission. "When a horse first begins bodywork, we often need to negotiate," she explains. "There may be some real problem areas that I'll work on very lightly the first time. Once the horse 'gets it' and realizes I'll listen, I usually can work more deeply during the next session."

Through frequent lectures and demonstrations, McCormick educates horse owners about the effects of training on the equine athlete.

begins bodywork, we often need to negotiate," she explains. "There may be some real problem areas that I'll work on very lightly the first time. Once the horse 'gets it' and realizes I'll listen, I usually can work more deeply during the next session." Equally important is distinguishing between a chronic condition in need of release and an acute injury that could be made worse by physical manipulation. "A horse might be hesitant or cranky when I work on the area of a previous injury," says McCormick, "but showing obvious pain is another thing. There are instances where massage is not appropriate, where a muscle injury needs time to heal before bodywork can help restore it."

McCormick usually recommends a day off from normal training following a massage session to give the horse's muscles time to recover. Hand walking, supervised turnout or a quiet hack the next day provides sufficient exercise without overdoing it. Jil Walton, an Olympic-level three-day eventer who uses McCormick's services, testifies to the need for some downtime following bodywork sessions. "Aleta works on my horses and my clients' horses, but she also has worked on me," she says. "If I ride several horses after a massage session, I'm a bit sore the next day. I'm sure my horses feel the same way, and I like them to have a day to recuperate."

Who needs it?

Certainly, top competition horses in rigorous training programs are candidates for deep-tissue work both for preventive and restorative purposes. Given veterinary approval, massage also can be a key ingredient in a physical therapy program that gets an injured horse back on his feet. (See "The Case for Bodywork," page 54.) "For the more elite horses, bodywork helps to maintain a good balance in their bodies," says top dressage

THE CASE FOR BODYWORK

Horses in demanding training are prime candidates for Aleta McCormick's brand of bodywork, and periods of change—either physical or emotional—are often indications for some deep-tissue manipulation. The following cases are typical of the California practitioner's clientele:

Previous injury: Some riders look to bodywork to solve dramatic problems with their horses. Take Will, for example. The Irish Thoroughbred, owned by dressage trainer and former eventer Larisa Mantor of Moorpark, California, had suffered a broken hip that ended his career as an advanced-level event horse. Although Will was completely sound when purchased by Mantor, he arrived with some "issues." The pencil-thin, 17-hand horse hated to be touched and would tolerate being groomed only with a soft rag. He was stiff and locked up throughout his whole body, says Mantor, who had already seen regular deep-tissue work produce great changes in her FEI-level Dutch warmblood. "I knew Aleta's massage had helped Dutch Chocolate," she says. "His whole body had changed, his muscle mass had probably doubled, and he was more responsive and looser in his back. He seemed more relaxed mentally."

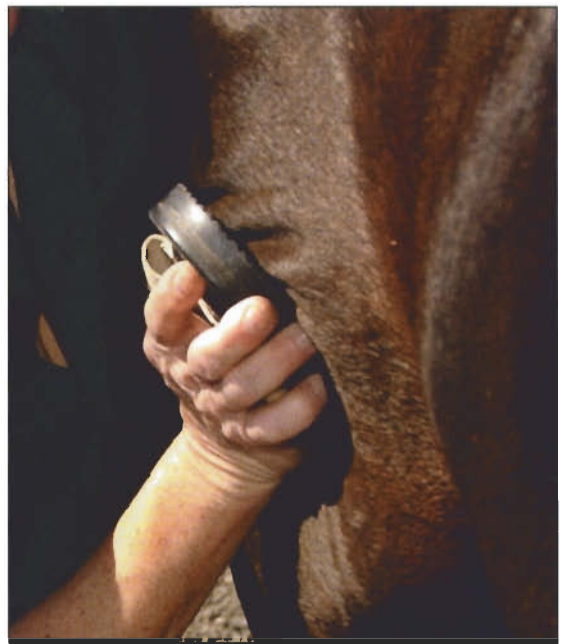
Mantor signed up her new horse for regular bodywork, and after six months, Will was a different animal. "His whole demeanor completely changed within a couple of months," says Mantor. "Now you can brush him anywhere, he has bulked up and has this huge crested neck, and he seems so much happier. He's really comfortable in his body and is working well. People who had seen him before can't believe it."

A changed attitude: In some cases, riders give massage a try when the horse's attitude changes or his progress suddenly slows. Heather Toma of Somis, California, says that's what prompted her to have McCormick work on her Thoroughbred dressage horse, Lyric. Several years ago, at the start of training in highly collected movements, including tempi changes and passage, Lyric became sore and resistant. "I think he understood what was being asked, and he really likes to work," Toma says. "He would have done it if he could. He was sound, but I felt that he must have been hurting somewhere to resist."

Lyric began a program of frequent bodywork with McCormick, and their training program got back on track. Over the next few years, bodywork helped support him through the peaks in his training. Now 16 years old and showing at international level, Lyric has remained sound and cooperative in his work. "One of the benefits of bodywork is that it helps loosen up the horse's stiff side," says Toma, who has studied deep-tissue massage with McCormick and is developing a practice of her own. "Most horses have a 'bad' direction, and a lot of owners say that their horses feel more even or balanced after bodywork. Helping horses become more symmetrical and balanced is something I'm really interested in as a practitioner."

Entering a new training program: At Olympic-level eventer Jil Walton's barn in Walnut, California, the newcomers usually receive deep-tissue massage as an aid to their transition into the demanding work awaiting them. "When I get new horses that are already going, we tend to work them pretty hard, so I often put them on a three-month program with Aleta. I also like to have her work on horses as we're getting close to a three-day event."

What changes when horses begin receiving bodywork? "It seems that they give themselves to you more easily," says Walton. "There's less resistance, and it really helps across the topline. I had an advanced-level horse, Polaris, who really improved with regular bodywork, especially in his topline. He was a real 'Aleta junkie' for a while!"



McCormick uses her fingers and hands for the more superficial work, but when she needs to manipulate the deeper muscle tissues, she often uses a currycomb, her fist or even her elbow. Her deep tissue bodywork technique sometimes requires up to 100 pounds of pressure per stroke.

trainer Betsy Steiner. "In any discipline, certain muscles are being stressed and used every day. Massage helps keep the balance between overexerted muscles and supporting muscles to help prevent injury."

Race training and competition is probably the most rigorous occupation for horses. "Racehorses tax their muscles fully," says Chris Alpin, an exercise rider at Southern California racetracks for 25 years. "They have the same stresses as other very athletic horses, but they also run in a left-hand pattern all the time, so their bodies develop accordingly. They need regular maintenance, and massage really helps them along." McCormick calls racing "the ultimate extension," observing, however, that race trainers are probably the least receptive of all horsepeople to using bodywork for preventive or therapeutic reasons.

Horses in any discipline, at any level, can enjoy the relief that deep-tissue bodywork brings, particularly when age is a factor. Freedom of movement and flexibility tend to diminish as horses grow older, and deep-tissue massage can reduce that sort of generalized stiffness for an immediate result. The added benefit is that the increased flexibility and comfort encourage greater activity, which perpetuates greater range of motion. McCormick's current clients are primarily in English disciplines, but she sees no divisions along sport lines in the need to manage athletic demands. "Western disciplines can place the same kinds of stresses on horses as English disciplines," she says, "and Western horses can benefit from the same

types of bodywork. Athletes are athletes."

Standard training practices tend to encourage the development of chronic stiffness and limited range of motion over the long term. "As part of a normal training routine, horses sometimes move in repetitive ways that cause problems," explains McCormick. "Repeating the same exercises day after day builds certain muscles, while others can become underdeveloped from limited use. Even moderate work can reduce flexibility and cause discomfort if the work fatigues the same muscle sets repeatedly."

While adding more variety to the horse's exercise can provide part of the solution, it may be necessary to first "undo" some of the muscular damage that may have occurred over time. Deep-tissue therapy can help wipe the slate clean, so to speak, so the horse can resume training with greater freedom of movement. "Bodywork is a great way to manually remove some of the collagen[9] buildup that forms as scar tissue around damaged muscles and keeps them from moving correctly," says McCormick. It doesn't take a major injury to create this condition, she adds. Even horses who are sound and seem to be doing okay probably have some scarring of connective tissue that restricts movement.

How does it work?

Countless hours spent working on horses and watching the way they move have provided McCormick with many theories about bodywork's long-term effects. In 2000, she founded Omni Equus Research Center, a nonprofit organization, to further the practice and study of equine bodywork techniques and rehabilitation methods. McCormick has enlisted equine locomotion and gait researcher Hilary Clayton, BVMS, PhD, MRCVS, professor in the department of large animal clinical sciences at Michigan State University, to study bodywork and other rehabilitation methods. "There are many excellent bodyworkers in this country, and many who have developed their own style or technique," says Clayton. "Aleta's technique seems to work well, and we share an interest in trying to quantify the results of bodywork."

Clayton says an objective study requires choosing appropriate evaluation methods, along with developing an experimental design that's suitable for statistical analysis. The goal is to apply a set of conditions to a group of very similar subjects with only one difference in the protocol: Half of the study horses would undergo bodywork and half would not. Conducted as a "blind" study, the data collectors would be unaware of the subjects' treatment status to avoid bias in the results. For a study of the effects of bodywork, says Clayton, each horse would likely be evaluated before and after the bodywork or the "sham" treatment. Useful measurements might include stride length (at constant speed), range of motion of each joint, back flexibility during locomotion, torque developed around the joints, mechanical power developed across the joints and electromyographic studies of muscle activity.

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Laboratory studies offer the advantages of a controlled environment and precise measurements. Two treadmill-based evaluation tools used in Clayton's gait studies are a motion analysis system, which uses infrared cameras to record joint movement, and a force plate, which measures the impact of the horse's hoof on the ground. The data from these sorts of tests can be analyzed for significant differences in the movement of the treated and untreated research subjects. Field studies are less controllable and possibly subject to other influences, but they also might provide useful information regarding the effects of bodywork, such as recovery rate from injury, electromyographic activity during recuperation and changes in muscle size. "A study that quantifies the effects of bodywork would be exciting," says Clayton, "because there have not been a large number of controlled scientific studies on this topic."

Without objective evidence showing specific health benefits to horses, massage and other alternative therapies will continue to be met with some skepticism in the larger horse-care community. McCormick's interest in working with Clayton to document the measurable effects of bodywork is her response to that skepticism. Skepticism also arises because alternative practices have little to no oversight or required training. "Practitioners may not have much training," McCormick observes. "For some therapies, anyone can hang out a shingle and begin offering his services with minimal training."

Horse owners are ultimately responsible for doing the policing when they choose to involve unregulated practitioners in their horses' maintenance and recovery program. This means checking on the person's training, certification, experience and references and consulting with the horse's regular veterinarian about the advisability of applying alternative practices, given the specifics of the case. "Listen to the professionals," Steiner advises. "It takes a whole team to produce a top athlete, whether it's ourselves or our horses. That means the trainer, vet and farrier and maybe other elements, like chiropractic work or massage therapy, are needed to get the very best results. You want to find out a lot about someone before you put your horse in his hands."

Steiner's own preliminary check, including bodywork sessions for herself to help her understand the technique, convinced her to have McCormick work on most of her horses when she was training in California. "Her work made a big difference in their suppleness and the quality of their muscling, and the horses were more relaxed," says Steiner. "I'm interested in getting a higher level of performance and keeping it, and I'm very loyal to the concept of bodywork to help achieve that goal. It all boils down to putting our horses' well-being first. After all, horses work hard for us, and we ask them to do very difficult things. Keeping them happy and comfortable really is the least we can do."

More information about Aleta McCormick's work is available at www.omni-equus.org. Also, for a variety of horse information go to

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