

## Time heals, but good care helps

### Layups benefit from an accurate diagnosis, healing nutrition, proper therapy, and patience

By: Robin Stanback

Surgery, soft-tissue injuries, and other problems that sideline racehorses have few common threads. A successful return to racing depends upon the type of injury, the temperament of the patient, and even the pocketbook of the owner. But one common thread unites them all-time. There is no substitute for it. Stephen Selway, D.V.M., an equine surgeon with clinics at Belmont Park in New York and in Hollywood Florida, emphatically said: “You cannot rush a recovery. As soon as you do, the horse will make you slow down.”

Injuries happen in every sport, and racing is no exception. No matter how carefully the horse’s exercise, nutrition and health programs are monitored, accidents and break-downs occur. The difference between a career-ending problem and one that is recoverable begins immediately.

#### Accurate diagnosis

Kent Allen, D.V.M., who owns Virginia Equine imaging in Middleburg and is a Federation Equestre Internationale contact veterinarian for the United States Equestrian Team, maintains that an accurate diagnosis of any equine injury is paramount. He said: “I have a favorite quote that I have used in talks and in papers that states, ‘Absent a diagnosis, surgery is trauma, medicine is poison, and alternative medicines are witchcraft.’ Without a diagnosis, all the treatments that can be devised are a waste of time.”

Today, making an accurate diagnosis is faster and easier than ever before. Advances in digital radiography and digital ultrasonography have produced machines that are portable, are easily maneuverable around fractious patients, provide immediate images, and allow a veterinarian to store, compare, and share images quickly and easily with owners, trainers, and consulting veterinarians via the internet.

Magnetic resonance imaging (MRI) requires a clinic environment to accommodate the size of the machine, but MRI scans can provide more defined images of anatomic and physiologic detail in both bony and soft-tissue structures than can radiographs and ultrasound scans. According to Allen, it is currently the only method available to assess all tissues during a single examination.

Two other diagnostic tools- thermography and nuclear scintigraphy- measure inflammation. A thermography machine measures body heat and can pinpoint the heat signature of injuries, even potential injuries. Nuclear scintigraphy uses a short acting radioisotope with a tracer agent injected into the horse’s bloodstream to show areas of concentration of the isotopes that indicate bone inflammation.

“We can use the images we obtain not only to diagnose, but also to help guide the treatment itself,” Allen said. “This technology did not exist even five years ago. For instance, if you have to inject a joint with a corticosteroid, you want to pinpoint the exact area, which could be a two-to three millimeter space. With ultrasound technology you can guide the needle exactly where it needs to be.”

Selway agreed that digital radiography and ultrasonography are especially helpful. However, he cautioned against being quick to jump to the more expensive tests, such as scintigraphy or MRI.

“The thing I see with some of this technology is that it is so expensive,” Selway said. “You need to establish a real need for these tests before you empty an owner’s pockets.”

Once an accurate diagnosis has been made, treatment protocols can be explored, and there are quite a few options. Most, however, begin with time off. Here is where expert opinions differ.

### **Time Off**

“Thirty years ago, if you broke your leg, you sat on your butt until it healed,” Allen said. “Today, you are in physiotherapy almost immediately. We have learned that exercise is essential to the healing process. We rarely lay a horse up for months in a stall anymore. We use a process of low-intensity exercise to bring them back to health.”

Selway practices a much more conservative approach. “I’m a firm believer in stall rest, thought not a prescribed amount of weeks in the stall, followed by a certain amount of hand-walking for every patient,” he said. “Certainly, recovery programs vary from the severity of the injury, you absolutely have to take into consideration the temperament of the horse. Each case requires careful monitoring to determine when a return to a controlled exercise program is appropriate.

“I will use a long-acting tranquilizer to help keep a horse comfortable and quiet. Horses are not like human patients that can cooperate with their physical therapists. You cannot tell a horse how far to bend a joint or depend upon that animal not to shy, jump, or buck. There are plenty of things a horse can do to get itself in trouble over which we have no control,” Selway said.

### **Nutrition Counts**

While exercise is a major part of every recovery plan that Selway and Allen design for their patients, so too is a sound nutritional program. The diet the horse was on while racing in unlikely to a good one for an invalid.

“We sure don’t need horses in recovery programs to be high as a kite or to gain weight while they are recovering,” Selway said. “Horses are just like people in that regard. An overweight human puts more pressure on his or her joints and muscles. That is not conducive to a rapid recovery. We feed very small amounts of grain and rely upon plenty of good-quality hay to fill their needs.

“I am not a big believer in feeding lots of supplements, either, though I will use products like GastroGard (anti-ulcer drug omeprazole) and Succeed (digestive aid) to avoid digestive problems. I think it is best to keep a feeding program simple. The more supplements you use, the more likely you are to set the horse up for an imbalance, particularly with calcium and phosphorus.”

Any horse forced to undergo a period of inactivity will lose muscle tone. Some people suggest that muscles will atrophy. But Selway does not feel this is an issue. “Horses aren’t going to turn into pumpkins if they have to undergo stall rest. Of course, they will lose muscle tone, but that can be brought back with a carefully designed exercise program after the healing process is complete I don’t believe muscle tone can be maintained by electric stimulation.”

Mimi Porter, of Equine Therapy in Lexington, is a proponent of electric stimulation. Porter, who has been a practicing equine therapist since 1982, was called in when Nureyev suffered a catastrophic injury to his right hind leg in ’87.

“There was a great deal of concern about muscle atrophy for this horse, particularly in his hip muscles,” she said. “He was a very valuable breeding stallion, and the worry was that even if his leg recovered enough to stand, he might not be able to have the muscle strength to cover mares.”

Porter used electrical stimulation to help keep Nueyev's gluteal and hip muscles supple. "Another huge advantage to the electrical stimulation was an endorphin response that helped the horse relax," she said. "This was a very intelligent animal. He was going stir-crazy. His response to the stimulation was like that of many horses: His eyes glazed over and you could see him relax. That is a key to recovery for many horses."

Drug-free pain management using chiropractic medicine and acupuncture is gaining acceptance from the veterinary field, though these therapies still have many skeptics. Selway's personal experience with acupuncture led him to have a more open mind toward its use for his equine patients.

"I had back surgery and was persuaded to try acupuncture from a lady who really helped me," Selway said. "It was a wake-up call. I had her work on some of my patients, and I think it really was an advantage for them. There were some horses that I was able to definitely help but that I was not able to bring back all the way. She was able to help some of those achieve 100% of their former ability. In the right hands, these therapies could be advantageous."

### **Good horsemanship**

Allen contends that good horsemanship must be employed along with all the tools available to veterinary medicine. "My father was a wonderful veterinarian. He could put his hands on a horse and know what was going on with it," he said. "Experience and skill cannot be replaced by tools. Medical therapy is wonderful for starting the healing process, but it is only the beginning. It must be combined with a carefully designed exercise program."

Horses benefit greatly when veterinarians, nutritionists, therapists, and trainers work together to devise a treatment and training program. Porter is quick to point out that no one therapy stand alone. "There is not a magic bullet," she said. "Time and a multifaceted approach are necessary to bring an athlete back from an injury."