Rehabilitation from injuries

Rehabilitation is the act of restoring something to its original state or former capacity. We’d all like our horses to recover completely and quickly from an injury and be back to riding with as little down time and as little pain as possible.

Injuries can happen to any horse, at any age. They can happen from a miss-step, an accident or from a sports injury no matter what the sport. Sometimes these injuries are minor and recovery is quick, but sometimes they can be severe and take a lot more care and time to completely heal. Rehabilitation from an injury can be broken down into the acute phase and the chronic phase. Initially in the acute phase you are trying to control inflammation, swelling, pain and establish structural integrity. The chronic phase is the longer phase where emphasis is on completing healing, building up strength, reducing scarring and returning to normal function and work.

Initially in the acute phase, some of the most effective treatments are natural. Some of these include, ice, poultice, leg wraps, laser therapy and acupuncture. Ice is one of the least expensive and easiest therapies for anyone to access. When an injury is hot, painful and or swollen, icing 20 minutes at a time has been researched and proven to be very beneficial. The biggest benefit is usually in the first few of weeks of the injury. If there is a lot of heat and swelling you may ice 2-3 times per day. Other modalities that reduce inflammation and also can reduce pain and promote healing are Acupuncture and Laser.

Acupuncture is based on traditional Chinese medicine and has been used for thousands of years. The simplest way I’ve heard acupuncture described if you are not familiar with it, is that acupuncture points on Meridians (energy channels) are like switches on an electrical circuit. When you place a needle in a point you turn on that circuit and get the energy (Qi) flowing. This can clear blockages and decrease pain. Acupuncture increases the release of natural painkillers such as endorphins, enkephalins and serotonin, which act on the pain pathways in the brain and spinal cord and can block the transmission of incoming pain signals. Acupuncture also increases blood flow and increase the body’s ability to heal naturally. In an injury acupuncture can be used to clear heat, reduce pain and swelling, relax muscles, stimulate nerve regeneration and speed up healing. In severe injuries acupuncture is also used to balance and protect the organ systems.

In my practice I have also found Class IV lasers extremely useful in the healing of many injuries. All lasers use light therapy. Class IV therapeutic lasers are very powerful lasers that have the ability to penetrate much deeper than previous lasers and allow us to administer a proper treatment dose for healing in much less time. (e.g. 20 minutes for a back vs. 2 hours or more with a Class III laser) Class IV therapeutic lasers emit unseen light in the range of frequency that receptors on cells can absorb and start chemical changes in the cells which increase blood flow (vaso dilation) increase cellular metabolism, release natural pain killers and start the natural healing process. This is now called photobiomodulation. Just as plants can use light to cause a chemical reaction to make energy and just as we need sunlight to create the proper form of vitamin D, laser light can stimulate chemical reactions at the cellular level that start the natural regeneration process. The advantage of this therapy is that is can be used in a localized manner for specific injuries. It stimulates actual natural healing (not just covering up pain) and it helps reduce scarring which is important in the healing of tendons and ligaments so they result in more normal function. Lasers are very useful for wounds as well, speeding up healing, treating infection, reducing pain and reducing scarring.

When I work with injuries I like to use a combination of therapies for maximum benefit. If possible we use natural therapies. Of course if a strong infection is present antibiotics may be used. If the horse is in a lot of pain that cannot be easily managed with natural therapies then a painkiller such as phenylbutazone may be prescribed so the horse does not develop founder in the supporting leg. However in recent years studies have shown that too much use of Bute can actually inhibit the healing process. So each case is managed individually and anti inflammatory drugs are kept to a necessary minimum.

During the “Chronic” phase of healing we are usually not dealing with much pain any longer. We are controlling exercise so that the remainder of healing, strength and flexibility can be achieved. Tendon and ligament injuries usually require the longest layup and a lot of “hand walking”. During this time the collagen is being laid down to replace the damaged tendon. A small amount of stress such as walking will help the collagen be laid down in a more even parallel pattern to achieve the best strength and flexibility. Actually at first type 3 collagen is laid down and this is later replaced by Type I collagen which is the strongest. In a tendon this replacement is occurring around months 6-9 so patience is also of utmost importance. During this time period acupuncture can help release any tight muscles groups, stimulate blood flow and decrease compensatory pain in other parts of the body. Laser can be use to stimulate stronger, faster healing and reduce scar tissue which is so important in tendon and ligament healing for the best possible outcome.

Other practical issues to think of when your horse is being laid up for an injury are their nutrition and mental state. Your horse’s exercise may be drastically reduced during this time and you will need to decrease their feed. Having your horse gain weight on top of an injury will only create more issues. I know this can be hard to see your horse begging for more food as they are now also a little bored, but in the long run your results will be much better if you can keep your horse’s weight down. Feed mostly forage and decrease any concentrates so your horse gets calories from something he has to eat more of. Talk to your veterinarian as you will still want to provide quality protein for healing and a balance of vitamins and minerals. Both of these can be provided in ways that do not add a lot of calories or sugars to your horse’s diet.

As we all know horses can also get bored and they will have more energy if they cannot exercise. Depending on the injury and how much movement they are allowed you could provide a slow feeder, a hay pellet ball or even toys (hanging jolly ball). This is actually a really GREAT time to work with your horse with your training on the ground to create better ground manners. There are a lot of natural horse trainers with great programs just working your horse in hand. You might look at Chris Irwin, Buck Brannaman or Clinton Anderson. A horse that respects you on the ground will translate to when you are back in the saddle so just consider this a different form of training. If your horse is getting really excited and you are worried that they might re-injure themselves or you, contact your veterinarian. There are some natural products that I use such as Synchill, or valerian to quiet horses. There are also some medications that can be used as well if necessary. Long term controlled exercise can sometimes be challenging so communicating with your veterinarian and re-evaluation on a regular basis is important.

Additionally if a horse is laid up for awhile some form of physical therapy to activate the core muscles is so helpful. This will give you a huge advantage when you are ready to ride again. Imagine if you sat around and ate beer and potato chips on your couch for six months and then tried to start exercising. Instead if you watched your diet and did some core exercises like Pilates or sit-ups, you would be much more prepared to start back. For horses Dr. Hilary Clayton has done a lot of research in this area and has a great book on exercise and created simple “bracelets” to use on the front feet when hand walking your horse to stimulate them to pick their legs up just slightly more than normal. Her book is called. Activate Your Horse's Core: Unmounted Exercises for Dynamic Mobility, Strength & Balance.

So there is plenty for you to do with your horse during their lay-up! You will still have plenty of bonding time and your horse will have an even better outcome.

I don’t know if you want me to add anything about myself in the article? As below?

(If you have any questions or want more detail feel free to contact me at office@ Equitage.com or visit my website: www.equitage.com)