Equine Pain Management Options

A vet explains pain management options for chronic and acute pain in horses.

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Thanks to modern medicine, horse owners have a plethora of options when it comes to managing their equine’s discomfort. In order to make sure your horse is getting the most relief, however, you’ll need to ensure that he’s receiving the proper pain protocol for his condition.

Options for equine pain management have expanded greatly in the past 10 years, notes Dr. Martha Rodgers of Shephard Hill Equine Clinic in Lexington, Ky., and that’s a great thing for any horse owner who has to deal with injury, age or other issue that requires pain management.

Integral to understanding equine pain control is the role of enzymes cyclooxygenase-1 (COX-1) and cyclooxygenase-2 (COX-2) in the inflammatory pathway. Dr. Rogers explains that pain medicines can work on one or both of these enzymes. COX-1 inhibitors reduce inflammation, but also affect the mucosal lining of the stomach and inhibit kidney function (which is why gastrointestinal support is so important when these treatments are used). COX-2 inhibitors are more specifically targeted to reducing inflammation only, and are more protective to the gut and viscera.

Common Medicines

One of the most commonly prescribed medications for pain control in horses is phenylbutazone, or Bute. Bute has both COX-1 and COX-2 inhibitors, and Dr. Rodgers uses it primarily for musculoskeletal pain (mainly bone and joint). There is some evidence that Bute is less effective than other analgesics and anti-inflammatories for visceral pain (pain caused from damage or injury to internal organs). Though used often, long-term use (even at a moderate dose) or high dosages of Bute can have side effects like irritation or ulceration of the mucosa.

Bute is traditionally given as either a paste or a powder, though there is also an injectible, intravenous form.

The other most commonly prescribed pain medication Dr. Rodgers uses is flunixin meglumine, or Banamine. Banamine is also a COX-1 and COX-2 inhibitor, but Dr. Rodgers uses it mostly for more visceral pain, soft tissue inflammation, muscular injuries and opthamalic issues. Banamine is not as effective as Bute for joint or bone pain, though its risks are similar, but at a lower rate. Long-term use of Banamine may also affect the kidneys' bloodflow, so any pre-existing renal issues should be taken into consideration before long-term use is prescribed. Additionally, follow-up bloodwork should be done if the horse will be on Banamine for longer than a week.

Banamine comes as an oral or injectible medication. Injectible Banamine can also be given orally.

A newer drug on the pain management market is Equioxx , which is a COX-2 inhibitor. Dr. Rodgers uses this oral medication for musculoskeletal pain—primarily bone and joint. It performs similarly to Bute, but has a longer half-life, which means that owners can dose the horse once a day instead of multiple times throughout the day to get the same effect. Equioxx also preferentially blocks the COX-2 pathway, placing less stress on the gastrointestinal tract. However, this medicine can still cause some GI irritation and bloodflow restriction effects with long-term use. This product is more costly than both Bute and Banamine.

Other oral medicines that Dr. Rodgers uses are Arquel (Meclofenamate) , which is similar to Banamine, but seems to be specifically more helpful with heel pain; Gabapentin , which is used more for neuropathic pain; and Dexamethasone or other steroids . Steroids must be used cautiously and should be used more for soft tissue inflammation rather than pain as their side effects are more significant. Local Delivery

There are also topical treatments for pain—some that are newer to the market, like Surpass, and some that have been around for quite awhile (like Dexamethasone).

Dr. Rodgers finds Surpass (diclofenac) helpful for tendon, ligament and muscular injuries more than bone pain issues. It will reach a therapeutic level in the joint fluid after seven days of use, but at a much lower concentration than intra-articular
therapies. Risks of using Suprass are absorption through the skin by the owner during treatment, which is why Dr. Rodgers recommends anyone applying the topical ointment wear gloves. Additionally, horses on which Surpass is used for a long period of time will develop a systemic level, which could potentially cause GI issues.

Topical steroid ointments like dexamethasone are commonly used to treat certain conditions of the skin and eyes that involve inflammation. These ointments, too, should be used with caution as they can increase glucose, insulin and triglyceride levels, while decreasing cortisol.

Harthill Butecort Sweat includes phenylbutazone and hydrocortisone that is absorbed through the skin and can aid in relief of minor swelling and soreness. This product, like Surpass, should be applied with gloves as it can be absorbed through human hands. Oral Delivery

There are also indirect ways of dealing with pain and inflammation by increasing the bloodflow to an area. Dr. Rodgers notes that specific oral supplements like Devil’s Claw, Cat’s Claw and nitric oxide promoters (eg. Surge) have an effect. Anti-inflammatory/anti-oxidant supplements like grape seed extract based products (Equithrive), Boswellia, curcumin and others can create a marked decrease in an equine’s pain level. Additional Options

There are other non-medication, non-supplement methods of increasing bloodflow and decreasing inflammation, such as laser therapy, acupuncture, therapeutic ultrasound, magnetic therapy, vibrational therapy, chiropractic and massage therapy, among others. Getting (and keeping) your horse comfortable may take some trial and error with both pharmaceuticals and other options.

Finally, Dr. Rodgers notes that all of the products (both pharmaceutical and supplements) should be discussed with your veterinarian, who will help you weigh the pros and cons of each, as well as long term effects. If you and your horse compete, note the allowable level of each medication or supplement during competition. The governing body for each discipline will have reference materials available for their specific medication rules and regulations.

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