



New findings about common pain relievers

For years, veterinarians have used the powerful drug Banamine almost universally to alleviate pain in horses who have undergone colic surgery. But recently North Carolina State University scientists, working with funding from Morris Animal Foundation, made an interesting discovery. Banamine, like its notorious counterparts, Celebrex and Vioxx, may cause unintended side effects.

Banamine belongs to a class of drugs called nonsteroidal, antiinflammatory drugs (NSAIDs), which includes drugs such as ibuprofen, the active ingredient in Advil. These drugs block enzymes that can cause pain and inflammation. The drawback is that the drugs can also cause or worsen gut damage. For example, humans who take too much ibuprofen may form stomach ulcers. Horses with colic already suffer from damaged intestines, and the scientists of this Foundation funded study found that Banamine slows the healing process.

“The drug isn’t as safe as we thought it was,” says Dr. Anthony Blikslager, the lead study investigator. Based on the new findings, the investigators recommend that veterinarians use Banamine with caution. Rather than administering the drug for the typical three to five days, veterinarians are now advised to wean the horse off within 24 hours if possible. “The recommendation is to use the smallest dose for the least amount of time possible,” Dr. Blikslager says.

During this study, investigators also tested etodolac, another NSAID that inhibits an inflammatory enzyme called COX2. When this study began, etodolac was the only COX2 inhibitor on the market for veterinary use. Unfortunately, the study revealed that its side effects mimicked those of Banamine.

“There are now new drugs on the market that should also be tested,” Dr. Blikslager says, which is exactly what his team is now doing. They also are exploring drugs that could be used in conjunction with Banamine to counteract its side effects.

The good news is that investigators also proved Banamine’s painrelieving power. Using a painmeasuring test developed through another study funded by Morris Animal Foundation, the team showed that Banamine provided additional pain relief even when it was combined with the most potent

analgesic available, butorphanol. That makes it an excellent choice for treating other paincausing problems.

Dr. Blikslager points out that until a more effective drug is found, Banamine still offers veterinarians the best option for treating horses recovering from colic surgery. Like doctors treating their human patients with Vioxx and Celebrex, however, veterinarians must proceed with caution.

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