

RECENTLY PROPOSED NSAID REGULATIONS AND THE USEF

As a member of the USEF Veterinary Committee, I have been involved in multiple discussions regarding the current NSAID or non-steroidal anti-inflammatory drug regulations. This article will explain my views for recommended changes to the current rule.

Currently, among phenylbutazone, flunixin (Banamine), ketoprofen (Ketofen), firocoxib (Equioxx), diclofenac (Surpass), naproxen and meclofenamic acid, blood and urine levels within defined limits are allowed for two of the NSAIDs in the same sample as long as levels of both phenylbutazone and flunixin are not present. The administration of two or more NSAIDs is referred to as stacking. The USEF is the only organization with defined NSAID limits that allows administration of more than one NSAID.

For some time the Veterinary Committee has deliberated the allowed use of two NSAIDs in USEF competitions. There are studies in the veterinary literature regarding the effects of administering multiple NSAIDs. NSAID side effects include gastric and colonic ulceration, large colon and cecal impaction, renal damage, and right dorsal colitis. The occurrence of these side effects is markedly increased with the use of two NSAIDs.

A recent study assayed blood protein levels after administration of therapeutic levels of phenylbutazone, phenylbutazone combined with flunixin, along with a control group. Blood protein levels are sensitive indicators of intestinal mucosal integrity. Levels will decrease with mucosal damage. The study concluded that the use of phenylbutazone alone appeared safe over the study period while the horses receiving two NSAIDs showed significant blood protein loss, indicative of intestinal damage.

Multiple studies have been performed to evaluate whether use of two NSAIDs within limits allowed by the USEF will mediate lameness more than use of one NSAID. One study noted improved lameness scores after administration of two NSAIDs over five days while another study concluded that there was no significant difference in the two groups. The possible benefit of the use of two NSAIDs in mediating lameness must be weighed against the probability of adverse effects.

It is my opinion that although the use of two NSAIDs concurrently might be more effective in mediating lameness, the prevalence of significant side effects is well documented. The increased risk of side effects with the use of two NSAIDs appears to outweigh the possible benefits. Several competitions for Arabians and Half Arabians such as the Scottsdale Show and the US Nationals are ten days or more in duration. Horses typically arrive several days prior to the show and thus may receive NSAIDs for an extended period.

I feel that if a rule change is adopted that prohibits testable levels of two NSAIDs, there should be an exception made that would allow administration of flunixin as a second NSAID by a veterinarian outside of 24 hours prior to a class in the event of a medical colic. The submission of a medication report form would be required to document the dose and time of administration, and to document the administration was done by a veterinarian.

In conclusion, I feel that we cannot ignore the conclusions of ongoing research. We must be aware of new information and modify medication regulations as needed to insure the safety of competing horses.