Adverse Effects of Common Pain Medications in Horses

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Most horse owners have administered bute or Banamine to their horse at some point for reasons such as lameness or colic. Since these medications are so readily available, many people equate this availability with safety. However, this is not necessarily true. While their use can be an important part of the treatment plan for a wide variety of conditions, these medications do have some important side effects that are worth discussing.

These medications are in a class of drugs called Non-Steroidal Anti-Inflammatory Drugs, or NSAIDs. NSAIDs work by manipulating an inflammatory pathway in the body. These drugs decrease the production of enzymes that, in turn, decreases the production of inflammatory mediators called prostaglandins. This process minimizes the inflammatory response in the body, which results in decreased pain. While this effect is very beneficial to our equine patients, other effects of these drugs can have negative consequences.

The enzymes that are blocked by NSAIDs are an integral part of the normal protective response in the gastrointestinal tract. This can lead to the production of gastric or colonic ulcers in some horses since the body's protective response is impaired. Another side effect that can be seen with these medications is damage to the kidneys. In a normal, well hydrated horse, this is usually not a problem. However, when a horse is dehydrated, which is a common finding in severe colic cases, NSAIDs can have lasting, detrimental effects on the kidney.

Another common problem seen with NSAIDs is associated with their route of administration. Phenylbutazone (bute) can be given either orally or by intravenous injection. If it injected outside of the vein, it is extremely irritating to the tissue and can lead to severe inflammation and skin sloughing around the injection site. Flunixin meglumine (trade name: Banamine) is labeled for intravenous or intramuscular injection or for oral administration. However, most veterinarians do NOT recommend injecting Banamine into the muscle. There is a high incidence of a bacterial infection called Clostridial myositis. This can be a life threatening condition for your horse that requires immediate veterinary attention. If your horse received an injection of either bute or Banamine and the horse now has a lump at the injection site, please call your veterinarian immediately.

Flunixin meglumine (Banamine) is commonly used in cases of colic because it is very effective at relieving mild pain associated with spasmodic, or gas, colic. However, if a horse remains painful after Banamine has been administered, it typically means that there is a more serious medical problem with the animal. Giving multiple doses of Banamine does not have an additive effect and will not cure the horse if there is a severe underlying condition. Therefore, it is recommended that horses with pain that is not responding to a single dose of Banamine be evaluated by a veterinarian.

NSAIDs are available for use in horses by prescription only in the United States. However, many horse owners and trainers have access to these medications through their veterinarian. It is important that the veterinarian be involved in the decision making process when determining if a NSAID should be used. When used correctly, these medications can improve the quality of life for your horse and typically do not cause any adverse effects. When the dose or frequency of administration of NSAIDs becomes excessive, serious health consequences can occur. Please consult your veterinarian to help determine the best way to keep your horse comfortable and living a long and healthy life.

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