



Grant K. Johnson
D.V.M.

Otho Galen Johnson
D.V.M.

6928 State Route 245 North Lewisburg, OH 43060
Tel. (937) 747-3282 Fax (937) 747-3280 johnsonvetclinic@embarqmail.com

Phenylbutazone – Considerations With Long Term Use

Phenylbutazone, or Bute, is a non-steroidal anti-inflammatory, much like aspirin. As with aspirin, or any medication for that matter, there are always potential side effects – both immediate and long term. Bute, and other non-steroidals, work by blocking the production of prostaglandins. Prostaglandins are basically chemical messengers for the body. They are important in creating inflammation, which can result in heat, swelling, pain, etc. There are several types of prostaglandins however, and not all cause inflammation, some have properties that help the digestive tract and urinary tract to adjust to adverse conditions - a more protective effect.

Some horses experience digestive or stomach irritation immediately from bute, especially when given orally. Usually we see indication of this early in the treatment process – signs such as loss of appetite, loose stool, or sour attitudes. The more insidious effects of chronic bute therapy go back to the prostaglandin blocking properties - since phenylbutazone blocks all prostaglandins, both those that cause inflammation and those that serve a more protective role. Some horses can develop ulcers in the lining of the stomach. Others will develop inflammation in the colon (in particular the right dorsal colon). Kidney damage is also a possible consequence of long term bute use.

It is valuable to remember that the protective effects of prostaglandins are more important during periods of stress or disease. Bute does not directly harm the stomach, colon, or kidneys. By blocking prostaglandin production, what bute does is limit the body's ability to respond to adverse events or conditions.

There are several ways to mitigate the negative effects of long-term bute therapy. Using the smallest effective dose is an obvious way to limit the harmful effects - often every other day dosing is adequate to control pain and inflammation. Maintaining good digestive health with high fiber/roughage diets and possibly the addition of corn oil to grain meals can be beneficial. Ulcer-gard is an omeprazole compound that can be given to horses to decrease gastric acid production. In general, routine vaccinations and other preventive health care practices as well as a clean and safe environment to decrease stress in the horse's life will also serve to lessen any potentially negative effects of bute therapy.

Most commonly, when discussing chronic bute therapy, it is due to chronic pain issues, frequently degenerative joint disease. While bute is often very helpful and cost-effective for such conditions there are many other possible treatments. Several joint health supplements/treatments such as Legend or Adequan are available. More specific treatment of problem joints with joint injections reduces systemic effects. Surpass is a topical non-steroidal that can be applied directly to problem areas, thereby reducing systemic effects. Other non-steroidal anti-inflammatory drugs such as flunixin or naproxen may be used (though potential side-effects are similar). A new non-steroidal called Equioxx (firocoxib) is now available and is proven to be more specific for blocking production of inflammation causing prostaglandins, thereby reducing if not eliminating the negative side effects of bute. This drug is considerably more expensive to use.

Certainly other non-drug therapies can be useful. Regular exercise helps to maintain strength and prevent stiffening. Cold application, from water or ice helps to decrease pain and inflammation. Massage therapy can provide relief for some horses. Acupuncture, therapeutic ultrasound, electrical stimulation, herbal treatments are all possible adjunctive therapies that can be tried.

Each case, each patient, should be considered individually and an appropriate treatment regimen planned. An important part of any therapy program should be re-evaluation so that changes can be made as the need arises.