Common Oral Antibiotics for Horses

Antibiotics are commonly used in horses for a variety of conditions. In order to determine which antibiotic is appropriate for a specific condition, a culture of the affected area needs to be performed. The culture is sent to a lab where the bacteria are grown and identified. A sensitivity test is then performed to find out which antibiotics will be effective. Some of the more common oral antibiotics in horses include trimethoprim sulfa, metronidazole, enrofloxacin, and chloramphenicol.

Trimethoprim sulfa (SMZ, TMS, sulfa tabs) is an antibiotic which has a broad spectrum of activity against a variety of bacteria. It is broken down by the liver and excreted in the urine. Side effects of this drug include diarrhea, allergic reactions, and effects on the blood, including decreased number of red blood cells (anemia), decreased number of platelets (thrombocytopenia), and decreased number of white blood cells (leucopenia). Trimethoprim sulfa commonly comes in 960mg tablets. The dose range for horses is 15-30 mg/kg. Generally, 10 tablets administered orally for a 1000lb horse is effective. This medication is given twice a day (every 12 hours) and is best absorbed if given without food. Trimethoprim sulfa may be prescribed by your veterinarian for simple wounds, such as those on the face or legs.

Metronidazole is an antibiotic commonly used for anaerobic (bacteria which can grow in the absence of oxygen) infections. For example, deep puncture wounds, respiratory infections, peritonitis, soft tissue infections, and abscesses are infections that often involve anaerobic bacteria. It is broken down by the liver and excreted in the urine and in the feces. It should be used with caution in horses with liver disease. This drug is usually used in combination with other antibiotics such as trimethoprim/ sulfa. Side effects of metronidazole include anorexia (loss of appetite) and neurologic signs. Metronidazole comes in 500 mg tablets. The dose is 15-20mg/kg, which would be 14 tablets for a

1000lb horse. This medication is administered 2-4 times per day (every 6-12 hours) and can also be given per rectum.

Enrofloxacin is an antibiotic which comes in a liquid which can be administered orally to horses for a variety of bacterial infections. This drug is ineffective for anaerobic infections. Enrofloxacin is eliminated from the body through the urine and the feces. Side effects of enrofloxacin include potential for cartilage damage in young horses and therefore it is recommended that this drug be used only in adult horses. This drug is not labeled by the FDA for use in horses. It is also not available in an oral formulation and therefore must be made specifically by a pharmacist at the veterinarian's request.

Chloramphenicol is a broad spectrum antibiotic and is used for a variety of infections in horses including anaerobic infections. This drug is widely distributed throughout the body, is broken down by the liver, and eliminated through the kidneys. Side effects of chloramphenicol include allergic reactions and negative effects on blood cells such as anemia. It is also important for humans to wear gloves when administering this medication because chloramphenicol has been documented to cause aplastic anemia in humans.

As with any medication, always contact your veterinarian before administering a drug. Your veterinarian help you decide which antibiotic would be most effective for your horse's problem.

Contact Brandon Equine Medical Center at 813-643-7177 or email info@brandonequine.com with any questions regarding this topic.