Understanding Tranquilizers, Sedatives and Anti-Anxiety Medications
By Jeremy Shaba, DVM

Pharmacological intervention can play an important role in many veterinary procedures as well as with behavior modification. The terms tranquilizer and sedative often are used interchangeably, and the true meaning of the two can sometimes get lost in translation. This article will explain the two, how they are used in veterinary medicine and how they compare to anti-anxiety medications and calming supplements.

A sedative is a drug that reduces excitement or irritability, therefore allowing the horse to become sleepy. These include xylazine (Rompun), detomidine (Dormosedan) and romifidine (SediVet). These are short-acting and provide reliable sedation with some analgesia (pain relief) as well. Sedated horses are often unaware of their surroundings, but these drugs cannot prevent all reactions (kicking, biting) and may even increase the risk. Sedatives are commonly used to facilitate short veterinary procedures.

A tranquilizer, on the other hand, is a drug that decreases anxiety without causing excessive sedation. Typically, tranquilizers do not provide any pain relief and work by stabilizing mood, reducing anxiety and controlling aggressiveness. Horses that have been given tranquilizers are typically aware of their surroundings but appear more relaxed.

Tranquilizers can be split into two categories: minor and major. Minor tranquilizers are more frequently used to combat anxiety whereas major tranquilizers are used to induce relaxation. Examples of minor tranquilizers include diazepam (Valium), which is used frequently in foals to facilitate veterinary procedures, as well as alprazolam (Xanax), which is used anecdotally and infrequently in the horse for anxiety.

Major tranquilizers are considered antipsychotics that, in humans, are used for major mental illness. Examples of major tranquilizers used in veterinary medicine include acepromazine (short-acting), fluphenazine (long-acting), and reserpine (long-acting). Acepromazine is labeled as an aid in controlling fractious animals whereas fluphenazine and reserpine are utilized when long-term relaxation is needed, such as when a horse is put on stall rest for an injury. Neither are without side effects, ranging from mild to major, and should be used with caution and only under veterinary guidance.

Because some competitors have used tranquilizers to improve their horses’ performance in the show ring, the Fédération Équestre Internationale and the U.S. Equestrian Federation have banned most during competition. If you compete, be sure to talk with your veterinarian about withdrawal times for any tranquilizer or sedative your horse has received.
Most **anti-anxiety medications**, including clomipramine (Clomicalm), Zylkene and fluoxetine (Prozac), work by altering the way serotonin is processed in the brain. Serotonin is a chemical that provides a feeling of comfort and happiness. In the horse, most of these drugs are used with varying degrees of success, have significant side effects or are used extra-label, meaning they were tested and approved for a condition other than anxiety or were designed for another species.

Many horse owners turn to **calming supplements** to modify their horses’ behavior. Calming supplements, which do not require a prescription, typically include magnesium, vitamin B1, valerian root and other natural ingredients. Supplements have not been FDA-approved and any effect noted should be interpreted carefully.

If your horse has a behavioral problem for which you are considering medicating, first

1. consult your veterinarian for an evaluation to make sure that a behavior is not related to an underlying medical problem;
2. work with your trainer and veterinarian to come up with strategies to solve a behavioral problem;
3. use pharmacologic intervention as a last resort once all other options have been exhausted.

Sources:


**About the author**

Dr. Jeremy Shaba, a field care intern at Hagyard Equine Medical Institute, is a 2015 graduate of the Ontario Veterinary College at the University of Guelph. His professional interests include ophthalmology, respiratory disease and social media. In his free time he enjoys running, camping, and horseback riding. You can follow Jeremy’s adventures as a Hagyard intern at Jeremyshaba.com.