

Clinical Guidelines for Veterinarians Treating the Non-Racing Performance Horse



**American Association of Equine Practitioners
4075 Iron Works Parkway
Lexington, KY 40511
(859) 233-0147
www.aaep.org**

Introduction

The non-racing performance horse competes in a wide range of athletic activities. A majority of AAEP members work with this type of horse during its years of training and competition. The AAEP recognizes that veterinarians need to be responsive to various discipline demands, which influence the ways in which they practice. However, irrespective of the influence current competition business/economic models may have on treatment protocols, the AAEP believes that appropriate treatment of performance horses requires accurate diagnostics and the development of evidence-based therapeutic regimens.

Non-specific treatment including multiple joint injections, without specific indication, is an example of under diagnosis and over treatment. Some horses are simply unable to perform effectively in today's intensive scheduling of competitions and may require periods of decreased activity as part of appropriate medical management. Ignoring the individual's needs while responding to the demands of the particular competition may lead to excessive treatment and failure to consider the best interests of the horse.

Veterinarians are trained to evaluate and manage performance-limiting problems, and when actively involved in the care of a horse, can provide expertise effective in preventing injuries resulting from training or competition and can help prolong a horse's career. The judicious use of therapeutic techniques and medications is at the core of successful veterinary intervention.

The current use of medications to manage competition horses is often permissive and excessive.¹⁻⁸ This environment is propagated by owners, trainers and veterinarians who fail to appreciate the potential harm to the horse inherent in the excessive or frivolous use of multiple medications and supplements in the quest for competitive success. Failure on the part of the primary care veterinarian to evaluate the supplement and medication menu of each individual horse can lead to inadvertent overdoses and antagonistic effects between compounds. The administration of medications, implementation of treatment techniques and the recommendation of nutritional supplementation should be based on thorough examination, the subsequent development of a differential diagnosis and a thorough understanding of the athletic and scheduling demands of the particular discipline in which the horse participates.

The mission of the AAEP is to improve the health and welfare of the horse, to further the professional development of its members and to provide resources and leadership for the benefit of the equine industry. The AAEP recommends these "Clinical Guidelines for the Treatment of Non-Racing Performance Horses" to enable its members and the equine industry to provide appropriate care of the horses involved. While veterinary practices may vary depending upon the type of competition, basic tenets concerning diagnosis, treatment and safe and ethical use of medications must be employed.

Treatment of equine athletes must be directed toward normalizing their performance and avoiding performance enhancement by illegal or unethical means. While veterinarians are required to follow the regulations governing the discipline in which their patients are

competing, participation in the establishment of these rules and regulations can be the most effective way to ensure that they are reasonable, uniform and give due consideration to the health and welfare of the horse.

Definitions

For the purposes of this document the following definitions apply:

complementary and alternative therapies: Acupuncture and chiropractic therapy, also called integrative therapies, which may be used alone or in conjunction with other medical therapies deemed in general to be more traditional or conventional.

desensitization procedure: The placement of a local anesthetic or other chemical agent adjacent to a nerve or within a synovial structure for the purpose of desensitizing a portion of the body, such as a joint, muscle, limb or tail.

extra label (off label) drug use: Use of a drug which is not approved for the horse or for a particular disease, but which has FDA approval for use in another species or for a different disease or route of administration. Off-label use does not apply in cases in which the product label prohibits a certain use or AAEP medication guidelines prohibit a certain practice for ethical reasons. Off-label use does not apply to illegally compounded products or to medical devices. All the criteria for therapeutic medications apply to off-label use.

extracorporeal shockwave therapy (ESWT): The application of acoustical shocks to bone or soft tissue to reduce inflammation, reduce pain and promote healing.

intra-articular (IA) injection: An injection intended to deposit medication into a joint space, such as the carpus, tarsus or fetlock.

intramuscular (IM) injection: An injection intended to deposit medication in the muscle.

intrathecal (IT) injection: An injection intended to deposit medication into a tendon sheath.

intravenous (IV) injection: An injection intended to deposit medication into the circulatory system by way of a vein.

medication: substances administered to horses for the purpose of preventing, treating or alleviating the clinical signs of disease or injury.

non-steroidal anti-inflammatory drug (NSAID): A drug which inhibits cyclooxygenase enzymes which are needed for the production of prostanoids and leukotrienes and which results in analgesic/anti-inflammatory effects.

performance-enhancing treatments: Medication intended to create a level of performance that is beyond the capability of the horse in its natural state.

prohibited medications: Those agents that can affect a horse's disposition, performance or appearance. These substances should not be administered internally or externally to a horse prior to or during an event except in a medical emergency under proper veterinary care and within competition regulations.

- Any stimulant, depressant, tranquilizer or sedative that could affect the performance of a horse. Stimulants and depressants are defined as substances that stimulate or depress the cardiovascular, respiratory or central nervous system.
- Any substance that might interfere with or mask the detection of a prohibited drug or medication.
- Any non-steroidal anti-inflammatory drug (NSAID) other than those allowed by the governing discipline.
- Any metabolite and/or analog of any of the above described forbidden drugs or substances.

soring (hypersensitization): The term used to define an intentional increase in sensitivity to a portion of the body.

subcutaneous (SQ) injection: An injection intended to deposit medication beneath the skin.

therapeutic medication: A drug or pharmaceutical used to control or cure a disease or disease process.

therapeutic procedure: a veterinary activity intended to treat disease or injury.

veterinarian-client-patient relationship: The veterinarian-client-patient relationship (VCPR) is the basis for interaction among veterinarians, their clients and their patients.⁹ A VCPR exists when all of the following conditions have been met:

- The veterinarian has assumed responsibility for making clinical judgments regarding the health of the horse(s) and the need for medical treatment, and the client has agreed to follow the veterinarian's instructions.
- The veterinarian has sufficient knowledge of the horse(s) to initiate at least a general or preliminary diagnosis of the medical condition of the horse(s). This means that the veterinarian has recently seen and is personally acquainted with the keeping and care of the horse(s) by virtue of an examination of the horse(s), or by medically appropriate and timely visits to the premises where the horse(s) are kept.
- The veterinarian is readily available, or has arranged for emergency coverage, for follow-up evaluation in the event of adverse reactions or the failure of the treatment regimen.

Medication and Treatment Guidelines

- All therapeutic treatments for performance horses should be based upon a specific diagnosis and administered in the context of a valid and transparent owner-trainer-veterinarian relationship.
- All therapeutic treatments for performance horses should be based upon a specific diagnosis and administered in the context of a valid veterinarian-patient relationship.
- All therapeutic medications should be administered to performance horses by or under the direction of a licensed veterinarian.
- All therapeutic procedures should be performed with a sufficient interval provided to allow evaluation of the response to treatment prior to competition.
- All treatments should be scheduled and administered with an underlying recognition that the health and safety of the horse are the ultimate objectives. Maintenance therapy is an inappropriate medical concept. Systemic and or intra-articular medication administered on a periodic basis must be based on a prior diagnosis with periodic monitoring of the diagnosed condition to determine the appropriate frequency of administration.
- Non-therapeutic or non-prescribed medications or substances should not be administered to performance horses by anyone. The use of some non-therapeutic substances prior to competition is considered unethical, i.e., as in the use of substances intended to produce a calming effect. Some of these substances may carry a risk of injury or illness for the horse.
- Veterinarians should not perform surgical procedures or injections of any foreign substance or drug that could affect a horse's performance or alter its natural conformation or appearance, except for those treatments or procedures, which have the sole purpose of protecting the health of the horse or are therapeutic.
- Understanding of regulations in specific competitions is imperative. Any medication administered prior to the day of competition should be done so in accordance with the rules of the competition and should not affect performance, behavior, normal movement or inhibit the physiologic response which protects the horse from injury.
- No medication should be administered to a horse within 12 hours prior to competition.
- Only one (1) Non-Steroidal Anti-inflammatory Drug (NSAID) should be permitted in plasma or urine samples collected for testing purposes.

- The AAEP recognizes that the judicious use of intra-articular medications with a valid veterinarian-patient relationship is appropriate treatment and can benefit a horse's health and well being. The AAEP defines this relationship to be a clinical or lameness examination with appropriate diagnostic tests prior to initiation of a therapeutic plan. Clinicians treating performance horses in the competitive environment are encouraged to develop treatment regimens, particularly with reference to the use of IA corticosteroids, which allow adequate evaluation of the horse's response to treatment prior to competition.
- Intra-articular use of local anesthetics is indicated for diagnostic procedures only. Under no circumstances should the intra-articular, intrathecal or subcutaneous administration of anesthetic agents be permitted within 24 hours prior to competition.
- Subcutaneous or intramuscular injection of drugs or substances including corticosteroids and pitcher plant extract should only be used as analgesics in conjunction with a specific diagnosis. Timing of these treatments should provide an adequate opportunity for the evaluation of treatment results and should be prohibited within 24 hours of competition.
- Anabolic steroids should not be present in therapeutic levels in the performance horse at the time of competition. Their use during rehabilitation from illness or injury is recognized as valid; however, adequate withdrawal periods prior to competition to insure their absence are vital.¹⁰

Adjunctive Therapeutic Treatments:

1. Extracorporeal Shockwave Therapy: The extent and duration of the analgesic effect of ESWT is a matter of controversy. AAEP recommends that shockwave therapy should not be used within 5 days prior to competition.

2. Acupuncture & Chiropractic Therapy: The AAEP recommends that integrative therapies be based upon a valid medical diagnosis, be administered by or under the direct supervision of a licensed veterinarian and be documented in the horse's medical record. (http://www.avma.org/issues/policy/comp_alt_medicine.asp)

3. Cold therapy: Cooling with ice and water is a valid treatment when prescribed for a specific condition. Machines that can cool below 0 degrees C (32 degrees F) should not be used.

Documentation of Veterinary Procedures

Medical record: All medical treatments and procedures performed on horses in competition or training should be documented in the horse's medical record. One medical record should be kept for each horse and this should be available, with the owner's or owner's representative's permission, to all veterinarians treating the horse. Medical records should include the results of the examination, a working diagnosis and specific treatments including dosages and routes of administration of medications. Documentation of the use of all prescription drugs should conform at a minimum to the requirements of the applicable state's veterinary practice act.

Infectious disease control: Management of infectious disease at competitions and horse sales is a high priority for the general health of the horses. Practicing veterinarians and regulatory veterinarians should work together with competition management to identify index cases of infectious disease and provide a plan, including an isolation area, for containing an outbreak and managing affected horses in order to protect the population at large. The AAEP guidelines for management of infectious disease may serve as a model for disease control practices. (http://www.aaep.org/infectious_control.htm)

Iatrogenic transmission of disease: In consideration of the potential for transmission of infectious disease (e.g. Piroplasmosis, Equine Infectious Anemia, Equine Influenza, Strangles, and Equine Herpes Virus) by contaminated needles and syringes and multiple horse contact, the AAEP recommends that practitioners do not reuse needles, syringes or any equipment that might be contaminated with blood or other body fluids.

Drug compounding: Legal drug compounding requires a valid veterinarian-client-patient relationship and compounded medications can only be used when there is no equivalent FDA-approved drug or medication available. The veterinarian should limit the use of compounded drugs to unique needs in specific patients. Further, medication withdrawal times are calculated only for FDA-approved medications. For this reason, use of compounded medications in the performance horse competition environment is accompanied by an increased risk for drug overage, which has resulted in fines from regulatory agencies and legal exposure for the treating veterinarian. The lack of quality control for compounded medications may result in errors in dosage and has resulted in therapeutic failure or toxicity. (https://www.aaep.org/drug_compounding.htm)

Extra label

Off-label (extra label) medication is the use of an FDA-approved product for a condition other than that for which it is labeled for use in another species. Off-label use does not apply in cases where the product label prohibits a certain use or where AAEP medication guidelines prohibit a certain practice for ethical reasons. By definition, off-label use does not apply to compounded products or medical devices. All the criteria for appropriate use of therapeutic medications apply to off label use.

(<http://www.fda.gov/AnimalVeterinary/NewsEvents/FDAVeterinarianNewsletter/ucm100268.htm>)

<http://www.aaep.org/images/files/White%20Paper%20on%20Medical%20Devices%20in%20Equine%20Medicine.pdf>

Guidelines developed by the AAEP Task Force on Medication in the Non-Racing Performance Horse:

Kent Allen, DVM
Jeff Berk VMD
Jeff Blea, DVM
Doug Corey, DVM
Scott Palmer, VMD
Midge Leitch, VMD
Rick Mitchell, DVM
Stephen Schumacher, DVM
Stuart Shoemaker, DVM
Nat White, DVM, Chair

Approved by the AAEP Board of Directors, July 2011.

References

1. Allen K. Welfare issues in the event horse. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 463-472.
2. Baldwin J. Welfare issues with the carriage horse. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 394-407.
3. Black JB, Frisbie D. Welfare concerns in the training and competition of the cutting, reining and reined cow horse. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 302-317.
4. Corey D. Welfare issues in the rodeo horse. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 275-301.
5. Heird J. Abusive Treatment and subsequent policy development within various breeds of show horses in the USA. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 245-254.
6. Leitch M. Welfare in the discipline of dressage. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 332-340.
7. Loving NS. Raising welfare standards for endurance riding. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 341-369.
8. Mitchell RD. Welfare concerns in the care, training and competition of the hunter-jumper. Chapter in Equine Welfare, ed. CW McIlwraith and BE Rollin, Blackwell-Wiley, London, 2011; pp 370-378.
9. Principles of Veterinary Medical Ethics of the AVMA. Section III. The Veterinarian-Client-Patient Relationship, AVMA Policy (http://www.avma.org/animal_health/vcpr_poster.pdf).
10. Soring KH and Hyde WG. Review of anabolic steroid testing in a racing environment. Proceedings AAEP Ann Convention 2008; 54: pp 38-43.