



Allergic Airway Disease

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In the midst of the hot, humid conditions of the southeast it is important to consider air quality issues and allergic airway diseases in our equine companions.

Signs that a horse may be suffering from allergic lung disease include:

- Exercise intolerance- the horse seems to tire more easily during exercise. It is important to comment here that horses with the sole sign of “poor work ethic” or
- Coughing- Sometimes a cough is associated with eating hay, exercise, or being brought into a dusty environment
- Nasal discharge- the nasal discharge may be clear, white, or even yellow in color. However it should not have a foul odor
- Labored breathing including nostril flare and abdominal effort to the breathing
- **NOTE:** Despite nasal discharge and coughing, a horse with allergies typically does NOT typically have a fever (Normal rectal temperature for horses is 99-101.5F). A fever may indicate a secondary bacterial or viral infection and warrants a visit from a veterinarian even in a horse previously diagnosed with allergies.

How can a diagnosis of allergies be confirmed?

Many times a combination of physical examination, clinical signs and a good history can be enough to make a presumptive diagnosis of allergies. Additional diagnostics that may be warranted, either to confirm the diagnosis, and/or rule out a possible infection includes: a transtracheal wash, bronchoalveolar lavage, thoracic ultrasound, thoracic radiographs, and/or pulmonary function testing.

What is the allergy response to, and how can we determine what the horse is reacting to and eliminate that from the horse’s environment?

Although it is helpful to think about heaves as an “allergic response” it may be more useful to consider the condition a hyper-responsiveness to what horses are normally exposed to in their environment. Common incriminated substances include: molds, dusts, pollens, etc.

Environmental management...

Environmental management is by far the most important aspect of effective long-term success with this condition. Overall management is centered around reducing the allergen and irritant load on the horse’s respiratory tract. Some parts of a horse’s environment may not be easily changed; however with some innovation there are almost always some environmental management changes that can be made to improve the horse’s clinical signs. Environmental management is grouped into three sections: 1) feeding, 2) turnout, and 3) stabling recommendations.

Hay is a primary source of molds, dusts, and endotoxin. Even very high quality hay that is not excessively dusty, without any evidence of mold, has levels of these substances in high enough quantities that it should not be fed dry to horses with allergies. Therefore, hay fed to these horses should be soaked (completely submerged) in water for 30 minutes or greater prior to feeding. Wetting down the hay but failing to truly soak it is not adequate to reduce the allergen load.

Additionally, many horses can do quite well without any hay at all in their diets. Hay alternatives include denji, alfalfa pellets, alfalfa cubes, and senior feeds. It is important that horses have at least 20-25% fiber in their diets, so senior complete feeds are often good alternatives to hay since these grains have appropriate fiber levels to be fed without additional dry forage. Bare in mind that some people don’t initially realize how much

grain their horse will need if he/she is not getting any hay. An average size horse typically requires 14-16 pounds of a high fiber equine senior in order to meet their energy requirements if they are not getting other feeds.

Initially increasing turnout and even having horses live outside on primarily grass pasture 100% of the time was considered ideal. However, more recently researchers have discovered that a subset of the allergy horse population may be reacting to pasture pollens and molds. These horses may do better on well-mowed fields to help minimize tall grass pollen inhalation during grazing.

Stables are, at times, unavoidably dusty places to be. The patients exposure to allergens can be minimized by trying to turn the horse out during the dusty periods of the day (ie when the stalls are being mucked and bedded, when isles are being swept or blown, and when hay is being delivered. Ideally hay should be stored away from where horses with heaves are stalled

How do we treat horses with heaves?

The cornerstone of treatment for horses with allergic disease is corticosteroids. Because the disease process is centered around an excessive immune response and inflammatory reaction corticosteroids are the most effective treatment for heavy horses. Systemic steroids are the cornerstone of therapy during periods of flare-up and when environmental management fails to alleviate signs of disease. Inhaled corticosteroids delivered in low doses directly to the lower airways (lungs) are the ideal therapy for the long term management of these horses.

Stay Vigilant

It is important to remember that air quality and low grade respiratory issues can effect performance in our equine athletes even without overt signs of respiratory disease. Recently a research project looked at causes of “poor performance” and lack of work ethic in horses with no signs of respiratory disease. The researchers were able to associate decreased lung function and low grade allergies to poor performance issues, so remaining vigilant about the quality of air our horses breath and proactively addressing suspected allergy related issues is important for long term respiratory health as well as optimal athletic performance.

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

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