Heaves in Horses

Every year we have numerous calls and owner concerns about their horses with respiratory ailments. The common complaints are chronic cough, wheeze, nasal discharge, flared nostrils and difficulty breathing. Usually the onset was gradual and the condition has been going on for at least 4 weeks.

This is a very common story often seen in horses with a disease called “Heaves” or more specifically COPD (chronic obstructive pulmonary disease) or Equine Allergic Airway Disease. This is usually a disease we see routinely in the winter when horses are fed dry hay but it can also be seen in the summer months.

Heaves is a non-infectious, environmental induced disease in horses where exposure to dust is almost always found in their history. Horses have evolved to consume grass out in wide open areas with their heads down in the typical grazing position. The problem arises when we feed them hay, which depending on quality, is almost certain to contain a certain degree of dust, moulds, pollens, and spores. This is amplified by round bale feeders where a horse, with his head elevated, will “tunnel” his way into a bale of hay inhaling these contaminants. It is very common for an “attack” to happen right after they were fed “a couple bad bales”. In the summer the problem has been seen more due to drought and the secondary dusts found on pasture, beside gravel roads, and from horse movement in dry lot husbandry scenarios. Usually horses with some degree of heaves, drastically improve during the grazing season. Barns with poor ventilation and dusty feed or bedding or arenas that are poorly watered and are dusty can also contribute to the problem.

What occurs with Heaves or COPD is very similar to asthma in people. The lower airways in the lung spasm and smooth muscle contraction around these little airways close down increasing resistance to air movement. Along with this contraction, inflammatory cells (white blood cells etc) are mobilized into the airway and increased mucus production creates further obstruction to airflow. The escalator system in the windpipe becomes overwhelmed and this is one of the reasons horses cough and sound “raspy” when they have Heaves. Horses with advanced symptoms may also have a pronounced abdominal lift, which if it has been present long enough causes the abdominal musculature to hypertrophy (get bigger) and leaves a noticeable “heave line”.

Treatment of the disease consists of strict management of the horse’s environment. You have to eliminate any and all sources of dust that may be present. Important sources of dust include hay, dirt pens, dry arenas, dirt roads, poorly ventilated barns and smudges (smoke).

The quality of the hay is a very large factor and selection of winter feed deserves strict attention. One must know however no matter what the quality of the hay, round bale feeders are deadly to the horse’s respiratory tract. Round bales should be hand fed or rolled out over a long distance where your horse can get their head down into the natural grazing position. Some horses which have advanced symptoms may require a 100% wet ration.

Ventilation is another important manageable factor in preventing and treating Heaves. Keep your horse outside if possible, and where it is necessary to have them inside ensure ventilation is adequate to remove air pollutants from the environment. Everyone has seen a sun beam shining through a barn window and seen the amount of floating debris present.

There are medications that can be prescribed by a veterinarian which only work on the symptoms of the disease. These do not treat the disease but may be used in emergency situations where the animal is having acute respiratory distress. One product called Ventipulmin® helps the horse by dilating the lower airways and relieves bronchospasm. Another product called Sputolysin® helps break down the debris in the airways so the animal can clear it. For severe cases of Heaves these horses may be prescribed airmasks with inhalers or corticosteroids to help the condition.

Overall Heaves is an easily preventable disease and with shrewd attention to the environment your horses live in you may even be able to eliminate the problem in mild cases.