



Horse Care

Heaves in Horses

by HEATHER SMITH THOMAS

Horses are athletes, able to run swiftly for long distances, primarily because they have good lung capacity for keeping blood and muscles well supplied with oxygen during strenuous activity. Anything that interferes with proper working of the lungs and air passages can limit a horse's athletic ability. One of the most common problems that hinders breathing is recurrent airway disease, often called heaves. This condition is similar to asthma in humans and is often triggered by allergies to molds, pollens or other airborne allergens, or sensitivity to dust.

Dr. Philip J. Johnson, Professor of Equine Internal Medicine at University of Missouri, says that breathing problems associated with exercise are commonly attributable to this condition (also called recurrent airway obstruction), but there are other diseases of the lung that are relatively uncommon that can cause the same clinical picture of exercise intolerance with increased breathing effort. "When faced with a horse that seems to be having breathing issues, we recommend a veterinary diagnosis, especially if the common sense things that are being done to help the horse are not having the desired effect. It could be that the horse is suffering from one of these less common conditions," says Johnson.

"These are generally referred to as restrictive lung diseases and these are things going wrong within the lung itself rather than in the airways. These conditions include pulmonary fibrosis (formation of fibrous tissue in the lungs) and chronic granulomatous lung disease (with granulomas within the lungs)."

"Another condition that is not rare, and has nothing to do with the lungs but looks like it does, is anhidrosis—the inability to sweat. This often causes horses to appear to have

breathing difficulties, especially in summer when exercising in hot weather," he says. Those horses can't sweat to cool themselves when they exert, so they overheat. They look like they have a respiratory problem because they are breathing so hard in an attempt to pant and cool themselves. Because the horse can't cool off, his temperature will rise, and in some instances the owner may think the horse has an infection.

Diagnosis

Determining the cause of a breathing problem can be done by observing clinical signs (such as coughing, increased respiratory effort after exercise, nasal discharge, etc.) and by listening to lung sounds with a stethoscope. The veterinarian may also listen to the breath sounds in the windpipe. Making the horse breathe a little harder (by exercising him just before examination) may make it easier to detect abnormalities. To further pinpoint the diagnosis, tests can be performed, such as blood tests (to check for infection) or endoscopic examination of the airways, to look for evidence of inflammation, or lung x-rays. An x-ray can be helpful in diagnosing some of the less common lung problems, says Johnson, especially in horses who do not appear to fit the typical pattern.

One of the tests that can be done for heaves is to put a little sterile fluid (about two cups) into the bronchial tubes via a long tube and then suck it back out—to look at the type of cells that are present, and possibly culture them. "We call this a bronchoalveolar lavage (BAL)," he says.

Treatment

If a horse is having a hard time breathing, medication can be given to help open the airways, dilating the bronchial tubes. "We would only do this if the horse is not in a dusty environment. You can actually make the problem worse if you open those airways to enable the horse to breathe in more dust (and allergens). The best treatment is always to get the horse into fresh air, to get the horse away from the dusts that cause the problem. Then, if necessary, you can use bronchodilation treatment if the change in environment is not enough," says Johnson.

"As is the case in humans with a similar problem, if there is a need for drugs, we often use corticosteroids, which have an anti-inflammatory effect," he says. But your goal is to try to change the horse's environment enough that you can use less and less medication. If you can manage the environment, this works the best. Also, these drugs are not allowed in competition.

Recognize It Early

"Airway inflammation is one of the most common medical conditions in horses. Sometimes they cough and sometimes they have nasal discharge, but often it's just exercise intolerance and an increased breathing effort," says Johnson.



A bronchoalveolar lavage (BAL) entails putting sterile fluid into a horse's bronchial tubes and then sucking it back out.

Feeding big bales of hay (where horses eat on the bale for several days and have their faces buried in it) is one of the most common causes of this problem. Horses exposed to dusty hay are most at risk for respiratory conditions.

“These horses often get treated with antibiotics, thinking the coughing and nasal discharge is due to infection. Eventually the owner realizes that the antibiotics don’t seem to be working, and further diagnosis is needed,” he says.

One thing that’s confusing to many horsemen is that they think the horse will have a heave line (ridge of muscle along the lower abdomen, on both sides) if they have heaves, but most of these horses do not have a heave line. “Significant heave lines are very uncommon, and people make the mistake of thinking the horse does not have heaves because there’s not a heave line. But not all horses develop this,” says Johnson.

Horse owners often know the horse has a slight breathing problem, but may not do anything about it, nor get it explained, until the horse gets worse. “They may not try to resolve the environmental issues until after it’s been going on for a few years. It starts out as a seasonal problem; the horse often has a breathing impairment when accommodated indoors for the winter, but the condition has been gradually developing over the years. A lot of young horses are kept for long periods of time in barns, and this is where hay and bedding is stored. This is often the start of the problem, in many horses. If horsemen recognize this sooner, they could possibly postpone the time that the horse would develop a breathing problem,” he says. If young horses could be kept outdoors more, this would help.

“If you go into horse barns you often hear horses coughing. The barn manager may shrug it off as a barn cough or a hay cough, but it is really this respiratory condition.” Sometimes the lack of recognition can lead to worse symptoms because nothing is being done about it. This is the most common cause of “stable coughs,” according to Johnson, and is not as innocent as the horseman thinks. Racehorses and showhorses are prime candidates for problems since they are generally kept indoors.

Changing the environment to eliminate or minimize dust (in feed and bedding, or a dusty paddock or arena), feeding pelleted feeds instead of hay, wetting the feed, etc., can go a long way toward relieving the condition. If a horse must be kept indoors, the entire

barn must be carefully managed to be as dust-free as possible. Even if hay or straw bedding is used at the other end of the barn, these will put dust particles into the air. Outdoor horses should not be pastured next to a dusty road.

If an affected horse is in a strenuous athletic career, Johnson suggests training the horse as thoroughly as possible (to maximize cardiopulmonary fitness) under optimum circumstances—in fresh air with no dust. “Then the horse’s fitness will be better when he has to compete in less than ideal conditions. As in the case with people, being as fit as possible will maximize the ease with which competitive athletic work can be accomplished. Airway disease is more of a problem for the unfit horse who needs more air because of an underlying lack of fitness.” 🐾

Have you registered your yearlings as CAL-BRED yet?

Don't Miss the Date—

DECEMBER 31, 2007

\$100 for Members of the CTBA

\$130 for Non-Members

After Dec. 31, the registration fee is

\$750

You can register online at

ctba.com



For information please call

Mary Ellen Locke at

800-573-2822 or 626-445-7800 Ext. 236

E-Mail: registration@ctba.com