"HEAVES": What is it and what can I do?

What is it?
Heaves— is basically a common term for a breathing problem in horses. It has also been called COPD (chronic obstructive pulmonary disease), RAO (recurrent airway disease), and SAID (small airway inflammatory disease). Heaves is a chronic condition of the small airways, or bronchioles, in the lungs. It is a condition involving the immune system—the body overreacts to foreign substances that are inhaled.

How does it Start?
Heaves seems to start as an allergic reaction to dust or mold spores. Some horses have a history of sickness or pneumonia as a youngster (this is a current subject of research—whether these sick babies are more likely to get heaves as adults). There is also a genetic component—horses are more prone to develop heaves if one parent has it.

What happens?
The small airways will swell, or become inflamed. Inflamed airways produce mucous, which builds up and blocks airflow. The airways also constrict, which makes breathing even more difficult. So there are 3 processes at work: 1) Inflammation, 2) Mucous production, and 3) Constriction. Each horse can manifest these differently, so while one horse may get primarily mucous buildup and congestion, another horse may only have constriction and wheezes.

Symptoms
A very early symptom of airway hypersensitivity is an occasional cough when eating, or when just starting on a ride. This progresses to an intermittent, dry cough and exercise intolerance (getting 'out of breath' while working). With moderate to advanced heaves, the horse will have trouble breathing at rest—with flared nostrils and extra movement in the flanks called an abdominal push as they try to move air out. The expiration phase becomes longer than the inspiration phase. Horses may have a clear or white/frothy nasal discharge from one or both nostrils, especially after working. Typically there is no fever, and no history of any other 'sick' horses around.

Diagnosing Heaves
Diagnosis is often simply based upon evaluating your horse's history and clinical signs/symptoms: the horse is congested and/or wheezy, with no fever, and no yellow or coloured nasal discharge. Bloodwork can be done which typically shows a relative increase in neutrophils (one of the white blood cells) without an overall increase in white blood cells. Further diagnostics could involve endoscopy (looking into the airways with a camera), BAL (broncho alveolar lavage—flushing fluid into and out of the lungs to get a sample of inflammatory cells), and/or allergy testing. Some of these procedures (such as the BAL) are done at a referral centre.

Treatments
First and most important part of the treatment: MINIMIZE DUST in environment. I cannot overemphasize this. I have some patients that have been heavily medicated, but with environmental management alone we now have them off meds. What can you do?
--NO ROUNDBALES—These are the number 1 biggest contributor to heaves. The nature of baling rounds makes them more likely to be dusty or moldy in the centre/core. And we've all seen our horse eat with their head right in the middle of the roundbale! They go right to the dusty part, and dig their head in where there is no airflow at all. That just funnels the dust right up the nose.

--WET HAY--Even square bales carry dust and mold. I highly recommend soaking the hay—right under water, then drain. Sprinkling the hay with a watering can or out of the water bucket does very little.

--FEED OFF THE FLOOR—Don't use a haynet or rack. It's better that your horse puts his head down to take a bite, as this allows the nose to drain and also has less dust go up the nose.

--KEEP HORSE OUTDOORS IF POSSIBLE. Not possible for some show horses, but keep your horse out in the fresh air as much as possible.

--If horse must be kept inside—keep near a window or door. Keep away from stored hay (even hay in a loft above can bother the horse below). Keep ammonia odours down. Do not clean stalls, sweep the floor or groom other horses while your horse is inside.

--MEDICATIONS—It is my opinion that medications should not be used as a replacement for proper management. Even with medication, a heavy horse that is exposed to dust or mold will continue to get worse, and the medication will stop working. However, there are some situations that cannot be helped, and some horses that cannot get their symptoms under control without the extra help of medication.

There are 3 different broad types of medications for heaves treatment.

1) Anti-inflammatory: Usually a corticosteroid is used. These come in oral, injectable, or inhaler form. It is very important to suppress the inflammation, as this will help with all symptoms. Corticosteroids are not suitable for all horses, due to systemic effects—they can cause laminitis in a susceptible horse. There are other side effects with chronic or long-term use. Examples of products are Prednisolone, Prednisone, Dexamethasone, Triamcinolone (previously called Vetalog and Ketalog), and inhalers such as Flovent or Tilade.

2) Bronchodilators: The most commonly used is Ventipulmin (clenbuterol) oral syrup, which opens up constricted airways in the short term. Note that clenbuterol is not a cure, but only alleviates one of the symptoms (constriction). The vet may use a ventipulmin injection in an emergency situation, but this route is not recommended for owners. There are other, weaker, bronchodilators that work in some horses. One product example would be Quiex (with aminophylline and guaifenesin). Inhaled ventolin can be very effective in horses, but requires a lot of inhalations and a very dedicated owner (and willing horse—not every horse will tolerate an inhaler!)

3) Expectorant: This helps to unplug the airways, by loosening up the mucous, thinning it out, and encouraging the body to eliminate it.

Other medications that may be necessary:
Antibiotics: Heavy horses are very prone to infection. The horse may have to start treatment on antibiotics at the same time as the heaves treatment, to be sure than any potential infection is eliminated. Your horse could also get a cold while being treated for heaves—and then they need to have antibiotics while the corticosteroids are stopped for a short period of time.

Herbals:
I am a big supporter of herbal medicine and it can be very effective in the maintenance of this disease for horses with mild to moderate symptoms. Personally, I prefer to get the condition under control with medication, and then use the herbals to maintain that healthy status. When a horse has moderate to severe symptoms, the herbals are just not strong enough to get the condition under control to start with.
At our office we carry the Omega-Alpha line of Herbals. Please ask if you have any questions about these products.

Alternative medicine:
Can chiropractic treatments, massage therapy, or acupuncture help my horse?
Yes—horses with heaves often have sore ribs or other related problems that can be helped by chiropractic and massage therapy. Acupuncture and acupressure can also help with lung problems. As with the herbals, I believe these are most effective in mild cases or for ongoing maintenance.

Exercise:
Heavy horses do better with regular exercise to 'use' the lungs and open up the small airways. A horse with flared nostrils is a severe case and should NOT be exercised. Horses should not be exercised until all the symptoms are under control, and then it can be used to keep the lungs healthy. Do not work a horse through a 'coughing fit'—just stop and allow him to catch his breath before continuing. Make sure he can get his head down to cough (ie. sidereins, etc. are not a good idea).

Prognosis:
This is one of the most common diseases that I see, and one of the most common reasons for euthanasia. However, horses can live for many years with mild heaves and have a good quality of life. Signs that quality of life is deteriorating are: weight loss, constant nostril flare or abdominal push, separation from the herd, unable to follow the herd, depression, and poor response or resistance to medications. Please do not hesitate to call us if you think your horse is going downhill or needs reassessment.

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