



RW EQUINE VET

Equine Asthma

Equine asthma is a syndrome characterized by intermittent crises of airway inflammation and bronchoconstriction that develop when horses are exposed to certain allergens and other inhaled pollutants. Equine Asthma includes inflammatory airway disease (IAD), a milder lower airway inflammation, and recurrent airway obstruction (RAO), a more severe presentation of the disease. IAD affects horses of any age, while RAO is typically seen in horses older than 7 years old.

Equine asthma can have a significant impact on a horse's performance and quality of life and should be addressed as soon as possible to avoid irreversible changes in the lungs. It is caused by high exposure of organic dust, which is mainly found in hay and bedding. A subtype of equine asthma called summer pasture asthma is seen in horses kept outside during grazing seasons, where pollens and air pollution play a role in the disease.

Clinical Signs

- Poor performance and/or exercise intolerance,
- Cough (with or without mucous),
- Increased respiratory rate (during exercise or at rest in more severe cases),
- Nasal discharge.

(Some horses present just 1 or 2 of these clinical signs)

Diagnosis is usually made by characteristic clinical presentation and history, however, to be able to confirm it, a bronchoalveolar lavage (BAL) and/ or tracheal wash (TW) is recommended. This is a procedure that can be performed at the yard and consists of passing a camera, via an endoscope, to the trachea and beginning of the lungs where a sample of these areas is collected and sent to the lab to give us a diagnosis. This procedure is not painful and is performed under sedation.

In chronically affected horses, it is possible to visualize some alterations on the trachea, such as thickening and mucous production.

Treatment of equine asthma consists mainly of management improvement and medication to reduce lung inflammation.

Management:

- Decrease dust exposure: Use wood shavings instead of straw, soak the hay, avoid having the horse in while mucking out.
- Increase turnout time (but careful with weight and laminitis risk associated) except in horses with summer pasture associated asthma

Medication includes corticosteroids that are the gold standard treatment in reducing lung inflammation and can be prescribed orally or inhaled and bronchodilators, which are meant to dilate the airways and improve breathing.

As equine asthma is a chronic condition, sometimes an equine nebuliser could be a better long term device to deliver the medication (picture below).

