

# WENSUM VALLEY VETS NEWSLETTER



# Corticosteroids in Horses

What are corticosteroids?

Corticosteroids are synthetic drugs that mimic the effects of hormones naturally produced by the adrenal glands. These hormones play a crucial role in regulating inflammation and immune function. In veterinary medicine, corticosteroids ('steroids') are used to treat a variety of conditions, including:

- Arthritis and other joint diseases
- Allergic Conditions (e.g. skin and respiratory allergies)
- Inflammatory Reactions
- Autoimmune Diseases
- Tendon and Ligament Injuries

## **How Corticosteroids Help**

One of the primary benefits of corticosteroids is their powerful anti-inflammatory properties which work by suppressing the inflammatory cells and inflammatory messengers in the body. This can be beneficial when inflammation is causing pain or damage to tissues, such as in joint disorders, tendon injuries, and respiratory conditions. By reducing the activity of the immune system and inflammation, corticosteroids can provide relief, allowing your horse to move more comfortably or recover faster from injury or illness.

# Common Methods of Administering Corticosteroids in Horses

I. **Joint Injections:** Corticosteroids can be injected directly into a joint or synovial space (such as a tendon sheath and navicular bursa) to reduce inflammation and alleviate pain associated with arthritis, joint injury or tendon injury. This can help improve mobility, lessen inflammation and reduce pain in a very specific area.



2. **Intravenous Administration:** Corticosteroids are sometimes given 'systemically' (throughout the horse's whole body) by injection into a horse's vein to reduce inflammation. This method can be used for conditions such as allergic reactions, respiratory issues, or general inflammation. These forms are typically used for more widespread inflammation or when localised treatment is not effective.





- 3. Oral Administration: Similarly, oral steroid tablets or powders distribute steroids systemically and can be used for conditions such as severe allergic reactions, respiratory issues, widespread skin conditions or other systemic inflammation. As with intravenous administration, these forms are typically used for more widespread inflammation or when localised treatment is not effective. Oral steroids are usually used for a longer period of time than intravenous steroids.
- 4. **Topical Treatments:** For localised skin conditions, corticosteroid creams or ointments can help reduce redness, swelling, and itching. They are applied directed to the site of the problem, such as mud fever scabs.
- 5. **Nebulised Treatment:** Steroids can be nebulised and inhaled as part of the management of conditions such as Equine Asthma. This directs the steroid treatment into the airways where inflammation is present

### Considerations

While corticosteroids are incredibly effective and can be used safely to treat many conditions, it is important to manage the risk of side effects, as with any

treatment we use. The considerations include:

**Cartilage Damage:** Excessive use of corticosteroids in joint injections may increase the risk of cartilage damage, leading to further joint degeneration. This is why it's important to limit the frequency of corticosteroid injections and why we do not recommend regularly repeating joint injections (such as on an annual basis) or 'preventative' use of them (i.e. every year before the competition season).

**Laminitis Risk:** Systemic corticosteroid use can potentially increase the risk of laminitis. This risk is more significant in horses that are overweight or have other metabolic conditions like Cushing's disease or Equine Metabolic Syndrome (EMS). Topical and intra-articular steroid use (joint injections) are very low risk for laminitis, as the steroids are directed to a very specific area. In the past we believed that joint injections of steroids could directly cause laminitis, however this has now been disproved.

Weight Gain and Muscle Loss: Long-term corticosteroid use can sometimes lead to muscle wasting or regional fat accumulation. Regular monitoring and adjusting of your horse's diet may be necessary when long term use is needed as part of their treatment plan.

### Summary

Corticosteroids are only recommended by your vet when the benefits of their use out way the risks listed above. They are an essential part of the treatment of many conditions and can be very effective at providing relief.