

Selective Deworming and Preventing Reinfestation in Horses

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ABSTRACT

A novel method of controlling the horse to lower parasite burdens is strategic deworming. Studies have revealed that it works rather well. Your veterinarian can help you choose the deworming technique that is most effective for you. To avoid increasing the parasite burden on the horse, it's also crucial to manage dung in your pastures and avoid overgrazing. Deworming is most effective when combined with optimal management practices, such as clean farming and waste disposal.

Introduction

In the spring, horse owners frequently consider deworming their horses. Instead of being completely eliminated from equine treatment, anthelmintics should be used sparingly and with awareness [1]. First, let's go through recent discussions on the need for horse owners to convert from rotational deworming or time-based deworming with the same medication to strategic deworming, sometimes referred to as targeted or selective deworming. After that, we'll discuss how to keep dewormed horses from becoming infected again.

Rotational deworming involves treating a horse with a new kind of dewormer each time. Slow rotation is one method of doing this, where one dewormer is used for a year and then a new dewormer is used the next year. Fast rotation is the use of or switching between several classes of dewormers three to six times annually. Deworming horses on a time-based basis means doing it every eight weeks or at other predetermined times [2].

The American Association of Equine Practitioners' parasite guidelines aim to reduce the frequency of deworming treatments by strategic or targeted deworming and the use of environmental management techniques in order to minimize parasite resistance and boost dewormer efficacy [3].

Advantages of strategic deworming

It might lessen the possibility of parasites gaining resistance. There are no fresh dewormers in the works. Some parasites might not perish when a dewormer is administered. The term "resistant" refers to these parasites. The population of resistant parasites increases in proportion to how many parasites endure a deworming, which is intended to kill them. Because of this, several parasitologists and veterinarians recommend utilizing strategic deworming, which might result in horse owners being able to control parasites [5].

Which horses shed more frequently—low, medium, or high—will be clear. You shouldn't need to repeat the test to establish if a horse sheds low, medium, or large amounts of hair until his health or immunological condition changes, as research has proven that this is determined genetically [6].

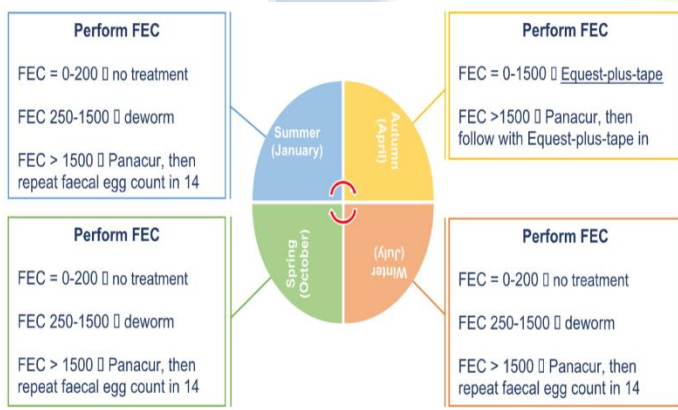
If the dewormer you're using is efficient, you'll know it. Certain internal parasite types will respond better to some dewormers in your rotation than others. For instance, encysted cyathostomes cannot be treated with pyrantel pamoate, therefore you would need to add another dewormer to your rotation to handle this. Since a daily dewormer is ineffective against larva and bots, you need additionally use a larvicide and a boticide [7].

Disadvantages of strategic deworming

- To do FECs on every horse on a large farm will take a lot of time and effort. Additionally, there will be an initial extra payment.
- In order to have a genuinely successful strategic deworming programme, at least initially, you must test every horse on the farm.
- People who have always done things a certain way might be challenging to persuade that a fresh concept would work. It could be challenging to convince a dependable manager with extensive expertise to convert to strategic deworming.

Preventing reinfestation

- Daily and weekly manure removal from stalls and small paddocks; weekly removal from bigger paddocks.
- Rotate dirt paddocks in the summer if at all feasible to prevent the eggs or larvae from dying off in search of a host.
- Consider composting manure as it will aid in the destruction of eggs and larvae.
- Before applying manure to fields, compost it first (the heat of composting will destroy the eggs and larvae).
- Maintain short grass and weeds in the paddocks.
- Avoid feeding hay or grain from manure buckets or wheelbarrows used for cleaning stables.
- Before turning young horses out in lots or pastures, do fecal egg counts and deworm them as needed.
- Do not overstock an area with horses (low stocking density).
- Absence of grass or restricted access to pasture may aid in preventing reinfestation.



Strategic or selective deworming

In order to ascertain the quantity of parasite eggs present, the horse's feces are collected and subjected to a fecal egg count (FEC) test. Then, using strategic deworming, only horses that had that many parasite eggs or more (referred to as "shedders") would be treated. The term "shedding" describes how many strongyle-type eggs are present. Strongyles are seen as a crucial precondition for therapy in the selective anthelmintic treatment (SAT) deworming technique. With the SAT method, anthelmintics will only be administered to horses with individual egg counts of 200 eggs per gramme of feces (EpG) or above. Alternatively, when the average strongyle egg count is greater than 100 EpG, groups of horses, with a maximum of 10 animals in a pool, would be treated as a group [4].

- Pay close attention to young horses' fecal egg counts since they tend to shed more than adult horses do.
- Rotating your pastures will help avoid reinfestation, especially if you clean up dung and cut the grass after removing the horses.
- Cross-grazing with other species can be beneficial since it will protect them from the eggs and larvae and allow them time to fend for themselves.

The purpose of this extension article is to create awareness about novel deworming g techniques that can help reduce anthelmintic resistance among horse intestinal parasites.

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