



Ballybrown Equine Clinic



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PARASITES

Internal parasites or worms are silent killers. They can cause extreme internal damage without you even realizing your horse is heavily infected. The effects of internal parasites range from a dull coat to colic and death. Internal parasites lower the horse's resistance to infection, starve the horse of valuable nutrients and in some cases cause permanent damage to the internal organs.

In terms of management priorities, establishing an effective parasite control program is probably second only to supplying the horse with clean, plentiful water and high quality feed.

TYPES OF INTERNAL PARASITES

The most common and troublesome are:

- Large strongyles (bloodworms or redworms).
- Small strongyles.
- Ascarids (roundworms).
- Tapeworms.
- Pinworms.
- Bots.
- Threadworms.

Probably the most important, in terms of health risk, are the first four: Large and small strongyles, ascarids and tapeworms.

The life cycle of most internal parasites involves eggs, larvae (immature worms), and adult (mature worms). Eggs or larvae are deposited onto the ground in the manure of an infested horse. They develop in the environment and eventually are swallowed whilst a horse is grazing, and the larvae mature into adults within the horse's digestive tract (stomach and intestines). With some species of parasite, the larvae migrate out of the intestine into other tissue or organs before returning to the intestine and maturing into egg laying adults.

LARGE STRONGYLES

As larvae, they penetrate the lining of the bowel and migrate along the blood vessels that supply the intestines. Even small numbers of these larvae can cause extensive damage and infection can cause weight loss, poor growth in young horses, anaemia (low numbers of red blood cells) and colic. Colic caused by these parasites is relatively mild, but severe infections can result in loss of blood supply to a portion of the intestine, leading to severe and potentially fatal colic. Fortunately, large strongyles can be effectively controlled with macrocyclic lactones and related wormers.

SMALL STRONGYLES

Small strongyles have become a group of major importance. They do not migrate through the tissues. In some instances, instead of completing a normal cycle, they burrow into the lining of the intestine and remain dormant “encysted” for several months before completing their life cycle. During this time the larvae are not affected by most wormers.

Small larvae can cause severe damage to the lining of the intestine, especially when large numbers of larvae emerge from the “encysted” stage all at once. Colic and diarrhoea are common in heavily infested horses. These parasites also cause weight loss, slowed growth, poor coat and lack of energy. While lighter infestations are not obvious, it is common for a horse’s general health and performance to improve after treatment for these parasites.

The early and late larval stages (before and after they burrow into the lining of the intestine) and the adult parasites are susceptible to several wormers. But currently there are only a few wormers that are effective against the “encysted” larval stage, the stage that causes the most damage. Ballybrown Equine Clinic can advise you on an effective treatment plan.

ASCARIDS

Ascarids, or roundworms, are most often a problem in young horses (especially foals, weanlings and yearlings). Adult ascarids are several inches long and almost the width of a pencil. In large numbers they can cause blockage of the intestine. They migrate through the lungs as part of a normal life cycle and can cause pneumonia. Ascarid infestation in young horses can cause coughing, poor body condition and growth, rough coat, pot belly and colic. Colic is sometimes seen when worming older foals, which are heavily infested with ascarids, for the first time.

TAPEWORMS

Until recently, tapeworms weren’t considered to be a significant problem in horses. We now know that tapeworms can cause colic, ranging from mild cramping to a severity requiring surgical treatment. The tapeworm life cycle involves a tiny mite as an intermediate host, and horses are at risk of developing tapeworm infestation when they eat these in grass, hay or grain.

Treatment of tapeworm takes planning. They are not susceptible to most wormers, and there are certain times of the year when treatment is likely to be most effective. Ballybrown Equine Clinic can advise you on an effective treatment plan if tapeworm is suspected.

OTHER INTERNAL PASASITES

Lungworm causes chronic coughing in horses and ponies. Donkeys are a natural host of this parasite; they don’t show any obvious signs of infestations. When mixed with horses, it is vital that donkeys are included in the worming programme.

Pinworms lay their eggs on the skin around the horse’s anus. The irritation they cause makes the horse repeatedly rub its tail.

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Bots don't usually cause major health problems, although they can damage the lining of the stomach where they attach. They may cause small areas of ulceration in the mouth, where the larvae burrow in the tissues for a time after the eggs are taken into the mouth.

Threadworms are mostly a problem in young foals, in which they can cause diarrhoea.

SIGNS OF PARASITISM

Common signs of parasitism include the following:

- Dull coat.
- Depression.
- Decreased stamina.
- Loss of condition.
- Slowed growth in young horses.
- Pot belly.
- Colic.
- Diarrhoea.

FECAL EGG COUNT

One of the most useful tools in a parasite control program is the fecal egg count. This simple test allows your vet to determine which parasites are present and whether the infestation is light, moderate or heavy. This information is important in developing a worming programme for your horse and in monitoring the effectiveness of worming.

Faecal egg count involves collecting a few manure balls from the horse and sending it to a laboratory. Results are expressed as eggs per gram of manure. The number of eggs present is not as important as determining presence or absence.

It is important to note that a negative fecal count does not mean the horse is free of internal parasites. Some types of parasites produce eggs only intermittently. Larvae do not produce eggs at all and may be present in large numbers in a horse with a fecal count of zero and tapeworm eggs may be missed with routine fecal egg count techniques. The results are most useful when several horses on a farm are tested on the same day. This information gives the vet and farm manager a good idea of the level of parasitism on the property.

DEWORMERS

There are several different dewormers currently available. Most are broad-spectrum, meaning that they are effective against several different types of parasites. It is generally best to use a broad-spectrum dewormer as the basis of your deworming program. If a specific problem is identified, such as tapeworms or encysted small strongyles, a more specific dewormer can be used.

No deworming product is 100% effective in ridding every horse of all internal parasites. However, it is not necessary for a product to kill every worm in order to improve the horse's health, minimize the risk of serious disease, improve feed efficiency and reduce pasture contamination with parasite eggs and larvae.

TREATMENT INTERVAL

Whether paste or liquid dewormers are used, switching to a chemically different product every few months is a controversial topic. When the same dewormer is used repeatedly for years, a population of parasites may be selected that is not susceptible to the dewormer. However, rotating products too often could create strains of parasites that are resistant to multiple products. Whether or how often to rotate classes of dewormer is something you should discuss with your vet.

MONITORING

Whichever deworming product you use, have your vet perform faecal egg counts occasionally to make sure the program is effective.

A COMPLETE MANAGEMENT PROGRAM

As parasites are primarily transferred via manure, good management is essential.

1. Keep the number of horses per acre to a minimum to prevent over grazing and reduce pasture contamination with parasite eggs and larvae.
2. Pick up and dispose of manure regularly.
3. Do not spread manure on fields to be grazed by horses.
4. Mow and harrow paddocks regularly to break up manure piles and expose parasite larvae to the elements. Larvae can survive freezing but they cannot tolerate extreme heat and drying.
5. Keep foals and weanlings separate from yearlings and older horses to minimize the foals' exposure to ascarids and other parasites.
6. Use a feeder for hay and grain rather than feeding from the ground.
7. Remove bot eggs regularly from the horse's coat.
8. Consult Ballybrown Equine Clinic to set up an effective deworming program.