Parasites and Your Horse

There are many different types of internal parasites and these can cause different problems in your horse, some of which are very obvious and others you may not even realize are happening. Some of the common problems that internal parasites can cause are general un-thriftiness and a poor hair coat, a pot belly, colic and in severe cases death. Overall parasites can cause a horse to be more susceptible to infections, can rob a horse of important nutrients and can damage internal organs by moving through these organs.

There are many different types of internal parasites that can affect horses and I am going to focus on the most common ones in this area and those that cause the most significant problems.

Large Strongyles (also known as bloodworms or redworms) live in the large intestine in your horse. The adult worms, lay eggs which are passed in the manure. These eggs hatch in the manure and the larvae climb up the grass where your horse eats them. The larvae can migrate through the large blood vessels that supply blood to the intestines, causing damage to these vessels. In very severe cases, the damage can result in the blood vessel rupturing and the horse bleeding to death. In other cases, the blood vessels can be damaged enough that the blood supply to the large intestine is affected leading to damage of the large intestine. This can result in signs of colic (or a belly ache) in your horse.

Small Strongyles have a similar life cycle to large strongyles but they don't migrate through the blood vessels. Instead the larvae move through the walls of the intestines causing irritation to the intestines. They also have the capacity to encyst (become dormant and live in walled off cysts of scar tissue) for several months which can make them more difficult to kill. These parasites can cause colic, diarrhea and weight loss from the irritation they cause to the walls of the intestines.

Ascarids (also known as roundworms) are very common and have an amazing capacity of laying 100 000-200 000 eggs/day. These are the long white worms that you might occasionally see in your horse's manure. Their life cycle differs slightly from that of the strongyles because the eggs that pass in the manure, can live for years in the environment. The horse actually eats the eggs which then hatch into larvae in the horse's intestine. These larvae then take a potentially damaging journey through your horse, particularly the liver and the lungs. This migration can cause problems in the lungs making the horse more susceptible to pneumonia and bleeding when they are heavily exercised. The horse will cough the larvae up and then re-swallow them where they will hatch into adult egg laying machines. In severe cases, there will be enough of these adults present in the intestines that they can cause a physical blockage. These generally affect young horses the most severely and cause them to be pot bellied and unthrifty by robbing them of nutrients.

Bots are well known to horse owners due to the obvious nature of the flies and the eggs. Bot eggs are laid by brown flies which are bee like in appearance. These little yellow eggs are usually laid on your horse's legs and chest and sometimes around their nose and mouth. When the horse licks at these eggs, they can get them in their mouth. The eggs hatch into larvae which can occasionally cause sores in your horse's mouth. The larvae then spend our cold winters attached to the lining of your horse's stomach where they have a warm home and lots of food. When spring comes they are passed in the manure where they hatch into flies. Your horse should be dewormed with a dewormer that works on bots every fall.

Pinworms are probably the least harmful of all but are the ones we can often blame when your horse starts rubbing his tail on the fence. These little worms live inside your horse's anus and then pop out and lay eggs . This irritation is what makes your horse itch so much.

Tapeworms have historically been considered to be fairly uncommon and non problematic in horses. Part of this is due to the fact that the normal fecal evaluations we do to determine if your horse has parasites, is not very good at detecting tapeworms. In recent years a better test has been developed for tapeworms and more research has been done to show that these may be more of a problem than we expected. Tapeworm eggs live in mites that live in soil and on your horse's feed. Then the mite with the tapeworm egg or larvae is eaten by the horse. Adult tapeworms live in the opening of the large intestine where they irritate the intestine. Tapeworms have been found to cause colic as well.

So now you know about some of the little parasites than can be living in your horse's body and causing him or her damage, what can you do about it? Pasture management, good nutrition and a regular deworming programs can protect your horse. Because so many of these parasites live as eggs or larvae in the soil and on the grass, overgrazing and overstocking of pastures can result in your horse having very high parasite loads. Rotating pastures and minimizing overgrazing and overstocking can help with this. Harrowing pastures can also help by exposing the larvae to sunlight and dry air – they can be pretty resistant to cold but they don't like getting dried out.

There are a huge number of dewormers on the market and it can be quite overwhelming when trying to decide what to use and when. For a specific program for your horse or your herd, you should consult with your veterinarian. Veterinarians can do a special test on your horse's manure to determine what kinds of parasite are laying eggs and they can also give an idea of how many parasites are affecting your horse by counting the eggs. They will also look at the type of horses you have and the management of these horses when recommending a specific program. Most dewormers come in liquid or paste formulas which can be given to your horse by mouth. Horses should be dewormed a minimum of 2 or 3 times a year but often will need to be done more often if they are kept in smaller paddocks or with lots of other

horses. There are too many brand names of dewormers available to discuss in this article but there are relatively few active ingredients so I will try to discuss the important differences between these. Packages and inserts for specific dewormers will give you more detailed information.

1) Pyrantel (example: Strongid T)is an older dewormer that gets most of the common internal parasites I have discussed except bots and the larvae of small stronglyes when they are in their dormant stage. It works on tapeworms when given at a higher dose. Ivermectin (example: Equell and Eqvalan) is a newer type of dewormer that was developed in the 80's. This gets most of the internal parasites except tapeworms and the small strongyles when they are in their dormant stage.

2) Moxidectin (example: Quest) is even newer, being developed in the 90's and can get most of the parasites other than tapeworms. This should not be used in foals that are less than four months of age. There are new dewormers on the market which contain both Pyrantel and Ivermectin or Moxidectin which work on tapeworms.

3) Fenbendazole (examples: Safe-guard and Panacur) is also an older dewormer that gets most internal parsites except bots and tapeworms.

If you have any questions about parasites in your horse or you want recommendations on a parasite control program for your horse, please call the Dawson Creek Veterinary Clinic where we will be happy to help you.