Town & Country VETERINARY CENTRE Equine

Equine Parasitic Worms

There are two basic groups of worms, roundworms (of which there are lots of different types) and tapeworms (of which there is one main type that affects horses).

1. **Roundworms**

- ☐ **Large redworms (strongyles)**: This is a very important group of worms. They can cause colic, peritonitis, liver damage and various other problems. The adult worms are 2-5cm long and live in the large bowel (colon and caecum). There can be several months between the horse first ingesting the infective larvae and the larvae maturing into egg laying adults. Negative worm egg counts in foals do not necessarily mean that they have not got strongyles, it just means that there are no egg laying adult worms present. It is the migrating larval stages of these worms that tend to cause the most problems.

- ☐ **Small redworms (cyathostomes or 'small strongyles').** The small redworms are extremely common and a frequent cause of diarrhoea and loose droppings in horses. The adults live at the surface of the large bowel and by feeding at this site can cause significant inflammation and irritation to the bowel lining. This group of worms has a seasonal life cycle and they tend to become dormant over the winter. During the winter the eggs on the pasture do not hatch, and will slowly die out (although it can take over a year for the number of eggs on a pasture to die back completely). The worms inside the horse in the autumn will burrow into the wall of the gut and become encysted (that is to say, they go into a type of hibernation inside the wall of the intestine). In this state they are resistant to a lot of the round worm drugs and will not be laying any eggs. In the spring, there is some signal that will cause the encysted worms to wake up and emerge back into the intestines to start laying eggs and damaging the gut wall again. The emergence of the encysted small redworms will cause diarrhoea. This happens at the same time that the spring grass is coming through.

- **Large round worm (Parascaris):** These are very large (can be up to 50cm long) roundworms that are found in the small intestine, particularly in foals and youngsters. The eggs are very tough and can live for several years on pastures. Older horses develop a good immunity so rarely have a problem with parascaris. This worm can cause problems by obstructing the passage of food through the gut. The immature stages of the worm migrate throught the liver and lungs and can cause coughing and respiratory problems, they can cause liver damage and large burdens can cause death.

- **Pinworms:** Male pinworms are about 1cm long but the female can be up to 15cm long and slender with a tapering tail. They are found in the colon and the anus. The main problem they cause is cause tail rubbing and irritation around the anus. The eggs and sometimes even adult worms can be seen around this area. If the horse is very itchy they can rub the skin raw, in some cases this can lead to secondary bacterial skin infection.

- **Lung worms:** The equine lung worm tends to be adapted to donkeys rather than horses, it can however cause problems in both. The main symptom being coughing and respiratory problems. Lungworm eggs will rarely be found in horse faeces, even those who have syptoms caused by the worm, but can be readily detected in donkey faeces.

1. **Parascaris or 'Large Roundworm'**

2. Tapeworms

- ☐ **Equine Tapeworm (anoplocephala):**The adult tapeworm can be up to 8cm long and around 1.5cm wide. They are found at a very specific site in the equine gut, at the junction between the ileum (small intestine), colon (large intestine) and caecum (extra large intestinal chamber). When they accumulate here they can cause colic by causing gut spasm, causing the gut to telescope in on itself (intussusecption) or by causing a functional blockage or impaction of food matter. Eggs are released intermittently in little packets. For this reason, a negative fecal egg count does not rule out tapeworms. There is a blood test now available that can give an indication as to the degree of exposure to tapeworms. The tapeworm life cycle is not as seasonally variable as the roundworms.

3. Other

- ☐ **Bots:** These are not worms; rather they are the larvae of the bot fly. Eggs are laid on the horses skin, the horse grooms itself and the eggs are swallowed where they hatch into larvae in the stomach. Surprisingly, it is not thought that bot larvae are responsible for many problems in horses unless they are present in very large numbers. The adult flies tend to cause more of a problem as they bother the horse when grazing ‘fly worry’.
