

What's New at the Clinic?

As most of you know, Dr. Rachel Stadnyk did not return to work at PPVS after her maternity leave. We miss working with her, but wish her all the best at her new job. We are very excited to welcome Dr. Erin Branigan to the PPVS team this month! Erin recently completed a yearlong internship at an equine clinic and referral hospital in Wisconsin and is very passionate about equine sports medicine and lameness.

We would like to thank you all for your patience and understanding over the past few weeks while we have been short-staffed during Dr. Stephanie Cukier's absence as she recovers from an injury. Although we may need to book routine appointments into the next week, please be assured that we always make time for sick animals and emergency cases.

We recently made some changes to our website. By visiting www.portperryvetservices.ca, you can check out our updated staff, veterinarians and services pages, find out about upcoming events, and read all of our past newsletters (we know you all are racing to your computers to read our newsletters!)

We have entered the 21st century! We now offer e-transfer as a payment option. For more information about making payments using e-transfer, please contact the office at 905-982-1243.

New Medication for Dairy Cattle: Imrestor

If you haven't already, you'll probably see advertisements for this medication the next time you pick up a dairy magazine. In the coming weeks we will start carrying a new product made by Elanco Animal Health, called Imrestor.

Imrestor contains a special protein called pegbovigrastim that works to stimulate the production and improve the function of infection-fighting white blood cells called neutrophils in the days leading up to and the month following calving. This periparturient period is when the cow's immune system is the most suppressed making her more susceptible to invasion by bacteria, particularly in her quarters.

Imrestor is designed to help periparturient replacement heifers and cows when they are most vulnerable. In studies performed during the approval process for this product, cows treated with Imrestor were 28 percent less likely to develop clinical mastitis than those who were not treated with it. A case of mastitis in a dairy cow affects milk production, conception rates, damages the affected quarter(s), and causes the cow pain. The cost of a case of clinical mastitis has been estimated to be between \$180 and \$400 depending on the amount of milk the cow is expected to produce. Most of this cost comes from production loss.

The treatment of mastitis is one of the most common reasons for antibiotic use on a dairy farm. In a time where antibiotic stewardship is of utmost importance, Imrestor offers a proactive approach to reducing clinical mastitis, thereby reducing antibiotic use.

Imrestor is available in pre-filled individual syringes. It is given as a subcutaneous injection 7 days before the cow's anticipated calving date and again 24 hours post-calving. There is no milk or meat withdrawal and it is not intended to be used as a treatment if a cow already has mastitis.

If you are interested in learning more, feel free to contact us to discuss whether Imrestor would be a useful addition to your herd health program.

The Lowdown on Lyme Disease

Lyme Disease is such a hot topic in the news that we thought we should talk about it. Although it is not a common condition in horses in Ontario, it appears to be on the rise. Lyme Disease is a tick-borne disease that affects humans and companion animals including dogs and horses. Deer ticks, also called black-legged ticks carry the bacteria *Borrelia burgdorferi* which causes Lyme Disease. The ticks themselves acquire the bacteria when they are feeding on animals such as the white-footed mouse and the white-tailed deer during their various life stages. The ticks are not affected by the bacteria, but they harbour and spread it. Adult ticks play the primary role in transmitting Lyme Disease when they attach to a host and feed off of it for greater than 24 hours (anything less than that, and sufficient transmission of the bacteria to cause disease is unlikely).

The clinical signs that a horse with Lyme Disease may exhibit are variable and include: lethargy, lameness, swollen joints, fever, weight loss, muscle soreness, or behaviour changes including irritability. In some more advanced cases neurologic signs or eye problems may develop. The difficulty is, there is no classical presentation for Lyme Disease, so an affected horse can show one or more of these signs and the signs that they show can be intermittent. Because of this, when we are working up a possible case of Lyme Disease it is important to rule out the more common causes of lameness, muscle soreness, irritability, etc...

We make a diagnosis of Lyme Disease when there is a history of exposure to ticks, consistent clinical signs and a blood test result suggestive of infection with *Borrelia burgdorferi*. The blood test that we use shows the presence or absence of antibodies to the bacteria, called a titre. There are some limitations with the current tests for Lyme Disease. Early detection is difficult because it takes about 3 months to develop a titre, healthy horses can have a positive titre but show no clinical signs, horses that have been successfully treated can have elevated titres for a prolonged period of time, and an elevated titre does not distinguish between infection and vaccination. Sometimes we

repeat the blood test 3-4 weeks after the initial test to see if there is a rise in the horse's titre, if there is, infection with *Borrelia burgdorferi* is likely.

Usually treatment involves administration of an intravenous antibiotic called oxytetracycline, followed by a course of an oral antibiotic called doxycycline. Treatment with doxycycline can range from weeks to months. Sometimes anti-inflammatories such as phenylbutazone (bute) or flunixin (Banamine) are also used to help manage the pain associated with muscle soreness or lameness. Although Lyme Disease is rarely fatal in horses, relapses occasionally occur when treatment is discontinued.

Prevention is aimed at minimizing a horse's exposure to ticks and should a tick attach to your horse, minimizing the length of time it is on your horse. To reduce your horse's exposure to ticks, do not encourage deer to visit your property, clear brush out of your paddocks, and trim tall grass in turnout areas. If you go riding in forested areas or areas with long grass, you should make sure to check your horse for ticks and remove any that you see promptly. A good general practice is to check your horse daily during grooming for ticks. They are mostly found on the lower limbs and the roots of horse's manes and tails. Using insect repellents with tick coverage is also a wise choice. There is no equine vaccine available to protect against Lyme Disease, however a canine one is available that has been shown to have some efficacy when used for horses.

Port Perry Veterinary Services is participating in a study being performed by veterinarians from the Ontario Veterinary College looking at the prevalence of Lyme Disease in horses in Ontario. Stay tuned for the results!
