

# Port Perry Vet Services

January 2018

## What's New at the Clinic?

We hope everyone had a wonderful Christmas and wish you all a happy and healthy 2018. As many of you may have heard, we are going to celebrate animal dental health month this February. In honour of this, we will be offering no mobile fee on all dentistry appointments using the powerfloat for the month of February. For more information about this or to book an appointment, please call the office at 905-982-1243.

We are offering our Equine Wellness Plans again this year! The choices include our standard package with optional add-ons that covers the vaccination and dentistry needs of companion and show horses alike. Last year we also introduced an Equine Geriatric Wellness Plan and an Equine Neonatal Wellness Plan and will continue to offer these as well. In the coming weeks we will be sending out more information about these programs via email, and will post everything on our Facebook page and website.

Out with the old and in with the new! We have replaced our endoscope with a new one! The new scope is intended for upper airway and throat examinations, and is long enough to get into the stomach of some foals. With this scope, we no longer have to look through a small eyepiece, everyone can see the images on a laptop screen. It also has video recording capabilities, so we can send images to clients or to other veterinarians.

The veterinarians have been hiding from the cold by doing some continuing education recently. In November, Dr. Erin Branigan was in Texas at the American Association of Equine Practitioners Annual Convention. She attended numerous lameness lectures including some focusing on laminitis. In preparation for the upcoming breeding season, Dr. Rachel Busato recently took in an equine reproduction webinar about managing fertility issues in the mare.

## Wintertime Colic

With the cold temperatures we experience in the winter months, a horse's drive to drink can also decrease. This can lead to cold weather induced impaction colic. The signs to look for are the same as any other colic - the horse stops eating, paws, kicks at its sides, lies down, rolls, etc...

An impaction is a blockage somewhere in the horse's extensive intestinal tract; essentially it is constipation in horses. There are a few areas along the intestines that become narrow and make tight turns, making blockages more common in those sections. Impactions are more common in the winter months as horses move from eating grass with high moisture content to consuming primarily hay, often combined with drinking less due to cold or frozen water being all that is available. As water intake decreases, the feed material making its way through the guts becomes drier and slows, making it more likely to become blocked.

Another reason for their increased occurrence can stem from the decreased activity levels. Horses often get turned out less during the winter months and even those that live outside tend to gather around the round bale, leading to decreased motility in the gut.

As horses develop an impaction, they will often lose their appetite, become depressed or lethargic and will have dry manure, often with decreased output. As the impaction worsens, more obvious signs of colic can occur, including complete anorexia, no manure, lying down and rolling. Should any of these signs develop you should call your veterinarian immediately, who will be able to diagnose the problem with a rectal examination where they may be able to actually feel the impacted feed material.

Treatment includes rehydration by fluid therapy - which can be given orally (through a stomach tube) or intravenously -and with agents to break up the blockage. Pain relief is also important to keep these horses comfortable enough to pass the impaction as this can sometimes take several days. In rare cases, surgery is required to relieve the blockage.

Prevention is aimed at encouraging horses to drink more water. Making sure they have constant access to heated, unfrozen water is of the utmost importance. Wetting their grain or hay can also encourage moisture intake. Providing horses with a salt lick can also stimulate a horse's interest in drinking. These efforts, combined with careful monitoring of your horse's manure consistency, can help decrease your horse's chances of developing an impaction over these cold winter months.

## Dental Disease in Camelids

As llamas and alpacas grow in popularity for their fibre and as companion animals and pets, we are starting to see more of them for routine health care and treatment of illnesses. One of the most common issues we treat is dental disease, particularly tooth root abscesses.

Camelids have a unique dental formula, with a hard dental pad on top (like ruminants), and a row of incisors on the bottom that meets the pad and allows for shearing off forage. They have a set of upper incisors and a set of upper and lower canine teeth. The upper incisors and their canines are their "fighting teeth" and they can be particularly dangerous especially when an intact male uses them to fight. Their cheek teeth consist of premolars and molars, which are used for grinding feed material. Their cheek teeth do not oppose each other completely, allowing for some points to develop. These points are considered normal for this species, and they do not usually need floating like horses do.

Camelids experience several different dental issues such as periodontal disease, fractures, uneven wear, and tooth root abscesses. The causes of tooth root abscesses in this species are poorly understood, and likely involve a combination of factors. Tooth root abscesses generally present with a firm swelling over the affected tooth. Mandibular (lower jaw) teeth appear to be more commonly affected. Occasionally a draining tract may be present. Left untreated, or treated incorrectly, the infection can progress to causing pain when eating and ultimately weight loss.

A diagnosis of a tooth root infection is made based on physical exam results and ideally confirmed with radiographs (x-rays). In a hospital environment, a CT scan is a very useful diagnostic for examination of the teeth and skull. Conservative treatment with antibiotics alone can work in some cases but often results in only temporary resolution of the problem. Surgical extraction of the affected tooth/teeth is usually the preferred course of treatment. Generally this procedure is performed at a hospital. Following surgery, the animal is treated with antibiotics and anti-inflammatories. Camelids that have not become emaciated secondary to dental disease have a very good prognosis post-extraction.

## Cryptosporidiosis in Ruminants

Crypto is a parasite that infects the intestines of many species of animals including people, and causes severe diarrhea and dehydration. Infection occurs when the young animal ingests the oocysts from the environment. The oocysts are the infective stage of the organism that is shed by the carrier animal or are in the environment, where they can live for several months if the conditions are cool and

moist. The oocysts are resistant to most disinfectants but can be destroyed by ammonium hydroxide, concentrated hydrogen peroxide, chlorine dioxide, formol saline, 5% ammonia and temperatures less than 0°C or greater than 65°C and 4 days of drying. They are not species specific so there can be cross infectivity from other types of animals (cats, rodents, horses, etc...) Cases usually occur in animals from age 5 - 21 days and often occur along with rotavirus and coronavirus infections or any other situation that causes immunocompromised animals (such as umbilical infections or failure of passive transfer). This is why calf/lamb/kid health programs should be of utmost importance on any farm to help prevent crypto.

The life cycle of crypto occurs in the cells of the intestinal tract of the animal after ingestion of the oocyst. The whole six stage cycle takes only 2-7 days. The result is that the cells of the intestine get destroyed by the parasite and diarrhea occurs because the intestines cannot absorb anything. Diarrhea can range from mild to severe depending on how many oocytes are ingested and how many other concurrent problems the calf has. In uncomplicated cases the animal's immune system will fight off the infection and diarrhea will last about 3 days with low fatality rates. The more complications that are present the more severe the diarrhea will be and the longer it will last.

Diagnosis is done on a fecal sample using techniques to specifically look for crypto as it doesn't show up on a normal fecal exam. Treatment is usually supportive care in mild cases (IV fluids, oral fluids, anti-inflammatories). Oral fluids should be given in small frequent meals. We suggest 4 meals a day be given, 2 being milk and 2 being electrolytes. The meals should alternate between milk and electrolytes and be separated by at least three hours. If given too close together, the electrolytes and milk as a combo will cause diarrhea. If the calf is so badly affected that it is getting visibly dehydrated or not eating, IV fluids become necessary. Halofuginone (Halocur) can be used as a treatment in more severe cases. It has been shown to reduce the output of oocytes in the feces. It is also used as a preventative. It must be given on a full stomach, so if the calf doesn't eat you will have to tube feed the calf, or it will make the calf stop eating.

Prevention is aimed at controlling the amount of oocysts in the environment. Halocur can be used at birth for a week to help, but most important is cleaning up the environment the calves are born into and live in. Ensuring adequate good quality colostrum at birth, proper naval dipping procedures and other methods to ensure healthy calves will greatly reduce the clinical cases of crypto seen. Also separating the calves with diarrhea from the healthy ones and ensuring they don't share feeding equipment will help prevent transmission. Also of note is that crypto is zoonotic which means it can be spread to people and cause significant diarrhea in humans as well. Always wear gloves and wash your hands after handling sick calves.