

What's New at the Clinic?

Spring is in full swing at PPVS and we are busy with calving/lambing/foaling season along with vaccinating horses and floating teeth! As you may have heard, we are offering 3 Equine Wellness Programs this year, our original program, as well as a neonatal program and a geriatric program to meet the needs of all of our equine patients. For more information and pricing please call or email the office.

Starting in May, we will be hosting final year veterinary students from the Ontario Veterinary College for their externship placement. We thank you in advance for allowing these students to visit your farms and for helping contribute to their education.

We are carrying 2 new equine supplements that are only available through veterinary clinics. EquitopPronutrin is comprised of a pectin-lecithin complex which helps support the stomach of horses and assists with gastric ulcer healing. EquitopGonexis a joint supplement with green-lipped mussel as its active ingredient. This product is intended to reduce joint pain and severity of lameness in horses with arthritis. Should you have any questions about either of these products please feel free to call the office and speak with your veterinarian.

In January, Dr. Erin Branigan attended the Ontario Veterinary Medical Association (OVMA) Annual Conference where she learned about equine distal limb ultrasound and limb and neck radiology.

Post-Foaling Complications Affecting the Mare

Now that foaling season is in full swing, it's important to remember that once baby hits the ground and everything is going well with the young one, we still need to pay attention to the mare. Even if everything up to this point has gone smoothly, there are things that can go wrong with mom and being on top of it will help everyone stay happy and healthy. There are a number of things that can go wrong after foaling. The following are some of the more common issues that you should watch out for in your broodmares.

Retained Placenta

In horses, if the placenta has not been expelled within 3 hours post-foaling it is considered retained and a veterinarian should be called. Retained placenta is a relatively common but serious post-foaling complication as it can lead to toxemia and/or laminitis, both of which can be life threatening. After a mare foals, it is important to keep the placenta for careful inspection by the veterinarian, as even a small piece of retained tissue can lead to these issues. Treatment includes uterine lavage, oxytocin to encourage contractions, antibiotics and anti-inflammatory medications. The duration and extent of treatment will depend on how long the placenta was retained and the rest of the clinical picture for each individual case.

Uterine Prolapse

A prolapse will occur, though very rarely, very soon after foaling, while the cervix is still open. It is very important that the uterus be replaced as soon as possible. The weight of the tissue can cause life threatening strain on the uterine artery. The prognosis for the mare depends on the level of contamination and trauma sustained which usually relates to the amount of time the uterus is prolapsed. Possible further complications include metritis and laminitis and the mare should be monitored closely after the prolapse is corrected to promptly address any further issues. These

mares also need treatment with anti-inflammatories and antibiotics.

Perineal tear

Perineal tears can range widely in severity and are a product of the tissues having to stretch in order to allow the foal to pass. The severity of the tear is described using degrees, with a first degree tear including damage to the skin and mucous membrane only. A second degree tear would also include damage to the muscle layer and a third degree tear is the most severe with complete perforation of the vaginal wall and rectum which creates one opening to the vagina and rectum. These more severe tears will require surgery to fix, although the procedure is often delayed by several weeks to allow the swelling to subside. Related to perineal tears are recto-vaginal fistulas. In these cases, the foal's hoof has penetrated the vaginal wall and made a hole between the rectum and vagina. This can lead to problems as feces will fall through the hole into the vagina and contaminate the area. These can be more difficult to appreciate as the external genitalia will still look normal. As with third degree perineal lacerations, surgery is required to correct these fistulas. This is a great example of why a proper exam of the mare is just as important in the first day post-foaling as the new foal exam. It is always better to find these kinds of things before they really turn into a problem for the mare, and by association for the foal.

Urolithiasis in Ruminants

Uroliths, or stones in the urinary system, affect all types of ruminants, both male and female. However, clinically, mostly only males will show signs of blockage due to their much longer urethra. The urethra is the tube that leads from the bladder out of the body. A male's urethra is not only longer but it also is not straight. It curves almost 180 degrees around the pelvis and also has what's called a sigmoid flexure, which is an S-shaped deviation. This makes it an easy location for small stones to get stuck, which means the animal cannot urinate.

Clinical signs of obstructive urethrolithiasis (blockage of the urethra) are depression, inappetance, tenesmus (straining), abdominal pain (tail switching, shifting weight), bloat and rectal prolapse. You can sometimes feel dried mineral deposits on the prepuce and they can dribble bloody urine. This condition is an emergency because if the obstruction is not relieved, the bladder can rupture and then the animal will eventually die. Also an animal with a ruptured bladder is no longer fit for slaughter.

Treatment in sheep and goats generally involves removing the urethral process (the small tip at the end

of the urethra) which is the most common site of obstruction in small ruminants. They can still be used as breeding animals after this. If it doesn't work, they require the same procedure that we perform on cattle, which makes the animal useless as a breeding animal. Cattle tend to obstruct at the sigmoid flexure which is more difficult to relieve. Some attempts may be made to pass a catheter up the tip of the urethra and flush fluids up it in an attempt to push the stone back into the bladder, but this is not usually effective as the stone then has to go around all of the curves again. So generally a procedure called a perineal urethrostomy is performed, which involves creating a new hole under the rectum for the urethra to come out of and the animal urinates from there. This allows you to continue to grow the animal to slaughter weight and then it can be shipped but will render it no good as a breeding animal.

There are different kinds of stones that can develop but all are nutritional in origin. Struvites will develop in animals on high grain diets with a low calcium : phosphorus ratio. Diets high in calcium (alfalfa hay) will result in calcium carbonate stones, while diets high in certain plants can predispose the animal to calcium oxalate stones. Also the mineral content of water can play a part in formation of the stones. There are preventative measures you can take. Decreasing the amount of calcium in the diet or increasing the amount of phosphorus will help prevent calcium carbonate stones. This situation is often seen in rams and bucks who are in with the lactating females and eating their higher calcium diet. The other group that gets stones, generally struvites, are grain fed feed lot animals. Providing them with additional sodium chloride (salt) helps increase sodium chloride excretion in the urine which leads to dilute urine and increased water intake which all help to increase the mineral solubility. Also adding calcium to their diet helps prevent struvites. Ammonium chloride can be used in all types of stones to decrease the pH of the urine and help prevent stone formation.

If you have any further questions or concerns about uroliths in your animals, feel free to call the office and speak to a vet about this.

