Montana Equine
Medical & Surgical Center

Manhattan, MT 59741
406-285-0123

Surgery · Medicine · Performance · Reproduction · Preventative Care · Emergency

Spring 2010

We take a lot of pride in our work at Montana Equine. Its not just all the medical devices and diagnostic equipment at our disposal, but more about the people-power, the team that staffs our hospital around the clock, 365 days a year. We are constantly upgrading our tools and equipment, and updating our skills and techniques to continually improve the veterinary services we offer you and your horses.

We can do this because we have multiple board-certified specialists: Dr. Heidmann is the only board-certified equine internal medicine expert in Montana and Wyoming; Dr. Snyder is the most experienced and accomplished board-certified equine surgeon and performance expert practicing in our region. Dr. Flint has a PhD in advanced cellular reproductive biology, and is himself enrolled in on a rigorous program to become a board-certified surgeon. Right now, two of our skilled veterinary nurses are enrolled in training programs leading to formal certification as veterinary technicians.

Our team has extensive experience fine-tuning the performance of horses from all disciplines, practicing all types of reproductive medicine, and caring for all types of emergency situations, from colic to sick neonatal foals. If you've been to the clinic, you already know that comfortable feeling: we have the team and the tools necessary to practice true specialty medicine, the kind of medicine practiced in veterinary teaching hospitals, here in Montana. The kind of veterinary care you expect.

What does this really mean? It means that we practice evidence-based medicine. So we can always offer the necessary steps to determine the specific issue affecting your horse. There are many tools and tests we use to help obtain this specific diagnosis, depending on the nature of the problem. For example, we might use a digital endoscope to obtain a BAL ("bronchoalveolar lavage") sample from your horse's lungs to determine whether he has heaves (equine asthma) or some other condition. Or we might use a combination of diagnostic local anesthesia and digital radiographs ("X-rays") to examine your horse's bones and joints, or digital ultrasound to examine the tendons, ligaments, cartilage and other soft tissues.

Now sometimes, you might decide that extra tests are not warranted, whether because of the cost of the test, or because the results might not ultimately change the therapy, or because you would like to "test" by monitoring response to therapy, among countless other possible reasons. The point is that our team at Montana Equine will offer you a wide range of choices for treatment and therapy. That way, you can make the decisions that make the most sense for you and your horse.

We also believe that less is more. We don't want to give a muscle relaxant shot when massage and acupuncture might solve the problem. We don't want to inject cortisone when a more gradual return to exercise will have the same or better result. We like to take a holistic approach, teaming with you, your farrier and others to minimize disease and maximize performance, from fencing and pasture management to vaccinations and nutrition, with medications and other treatments being used only when truly necessary.

In fact, we take so much pride that we are happy to offer a $25 credit on your account ANY TIME you refer a new client our way. Thanks so much for your support! Happy Spring!

Our specialist Doctors Are Always on-Call:
24 hrs/day, 7 days/Wk
365 days per yr

406-285-0123

Your emergency calls are now answered directly by the on-call veterinarian

Foaling and Neonatal Care: The Basics
Dr. Megan Halliburton

Whether you are an experienced breeder or foaling a mare for the first time, the basics of parturition (the process of delivery) and care for neonates (foals in the first 14 days of life) can be overwhelming. This article is intended to help you know what is normal, and what should prompt you to call for veterinary assistance.

Parturition
Stage I is when the cervix is dilating, the foal is assuming the correct position in the pelvic canal and the uterus is beginning to contract. This stage may take an hour to several hours. During Stage I, the mare can often look slightly agitated and may show showing signs of mild discomfort. She is typically up and down, looking at her flank, tail switching, sweating and restless. However, she is NOT yet straining or showing active signs of pushing.

Stage II labor begins with the rupture of the chorioallantois and several liters of allantoic fluid rushing out of the vulva ("water breaking"). The mare begins actively pushing with abdominal contractions and the foal is pushed through the pelvic canal. The foal should appear front feet first, one slightly in front of the other, followed by the nose and remainder of the body. The foal should be in a diving position with its spine towards the mare's spine. The umbilical cord will break on its own once the foal is on the ground. Stage II labor should only last 15-30 minutes – keep track and call your veterinarian if the mare stops making progress, or if the foal is not delivered within 30 minutes.

Stage III is passage of the placenta, which should be completed within three hours of the foal being born. The placenta should be examined and to ensure all of it has passed. A retained placenta can lead to a serious, life threatening medical condition called metritis, which can result in other complications such as laminitis, sepsis and death. Call us if the placenta has not passed within 3 hours after the foal being born.

Though parturition usually occurs without complication and human assistance is rarely needed, it is crucial to intervene right away if something is wrong. Reasons to call a veterinarian:
- Stage II labor lasting longer than 30 minutes
- Abnormal position of foal (tail first, hind feet first, or soles of feet facing up)
- Red fetal membranes appear before the foal in the vulva (called a 'red bag' delivery or premature placental separation)
- Any other concerns - when in doubt, call! (We much prefer to give advice over the phone and avoid a catastrophe than to hear about things too late!)

Remember your Breeding Permits!

By state law, all stallions shipping into Montana require a Permit

(It's not difficult... Just requires A little planning)

Be proactive to avoid A last-Minute Scramble

(Please call us with Questions)

Neonatal Care
Three important events should occur during the first three hours after parturition. We call it the 'Foaling 1-2-3 Rule'.

1. The foal should stand by one hour after birth.
2. The foal should nurse by two hours after birth.
3. The mare should pass the entire placenta by three hours after birth.

The single most important thing for a healthy foal is colostrum. Foals get all their antibodies from the mare through colostrum; none are passed via the placenta while in utero. After ingestion of colostrum, antibodies are absorbed straight across the gastrointestinal tract through special channels into the foal's blood. This process is called 'passive transfer' and only occurs during the first 8-12 hours of life. Failure of passive transfer (FPT) is when a foal does not get enough maternal antibodies through colostrum. If the foal does not get colostrum in the first 12 hours after birth, it does not get any antibodies from the dam. If the mare's colostrums has leaked out prior to the foal nursing (which is itself a reason to call us!), the foal will not get any antibodies.

Ideally, the foal should get a minimum of 2 liters of colostrum. The foal does have a functional immune system at birth, but it often cannot mount an immune response fast enough to combat disease without the pre-formed antibodies from the dam. FPT is associated with several disease processes, including diarrhea, pneumonia, septic

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THREE FORKS, MT 59752

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Exclusively Dedicated to the Highest Quality Care of Horses

Why does Montana Equine recommend Spring Vaccinations be given in late April or early May and not in March?

Basically, our recommendations are due to issues related to West Nile Virus (WNV). Peak incidence occurs in August and September, but in our region, the season has historically lasted from July through October because the specific species of mosquito that carry WNV proliferate in late summer and Autumn. And although it is relatively rare in Montana, scores of horses die in our state every year from this preventable disease. The vaccines against WNV are very well tested, and provide excellent protection against this serious disease. However, many horses' immunity from vaccination is known to wane quickly, even within 6 months. Other than measuring WNV titers (which is partially correlated with protection), recent vaccination is critical. Therefore, we recommend spring vaccines be given between April 15th and May 15th, providing more reliable immunity through the peak WNV season 5-6 months later. This strategy allows horses to stay well protected after just one annual dose of the WNV vaccine. Having seen too many horses die from WNV, we highly recommend protecting your horses. In the near future, new vaccine technologies may mean that these vaccinations may be given even less often, perhaps just every second year. And, because of our commitment to preventative medicine, we are offering

NO CHARGE RANCH CALLS!!

ANY TWO OR MORE PATIENTS NOW THROUGH MAY 15TH
(Regular Fees for work performed)

REFER-A-FRIEND

WE'RE PROUD OF OUR WORK (AND HOPE YOU FEEL THE SAME!)

GET A $25 CREDIT ON YOUR NEXT BILL WHEN YOU REFER A FRIEND TO MONTANA EQUINE

Neonatal care, contd.
(infected) joints, and umbilical infections. One of the easiest ways to test for appropriate levels of antibodies is with a quick blood test called the IgG Snap Test. A small amount of blood is obtained 8-12 hrs after birth to determine antibody levels. If levels are low, a veterinarian can administer hyperimmune plasma intravenously, which is a blood product that contains high levels of antibodies. We believe this test is so important, we will sell it AT COST to people comfortable drawing blood on their own farm.

There are other things to monitor and watch after the foal is born. The foal usually begins breathing as soon as its chest has exited the birth canal. Sometimes the white/gray amnionic membrane is still covering the foal at this point and should be removed to allow breathing. Straw, rather than shavings or sawdust, is a better type of bedding for foals because it is less likely to obstruct the nostrils. It is also important to have a clean, draft-free environment for the foal to be born into. The umbilical cord may remain attached when the foal is on the ground, but will break at a pre-determined spot approximately 2 inches from the foal's abdomen as the foal tries to rise. Urine should not drip or stream out of the umbilicus during urination. If urine does exit the body via the umbilicus, the foal should be seen and treated under the supervision of a veterinarian. The umbilicus should be dipped with a 1:4 dilution of chlorhexidine gluconate, a disinfectant, 3-4 times per day. The umbilical cord should dry up and fall off, leaving a clean skin edge at the skin level, within the first week of life. If the umbilicus begins to swell or get bigger, an infection may be present and should be treated immediately by a veterinarian. During gestation, the foal accumulates secretory debris within the gastrointestinal tract called meconium. Meconium is thick, dark brown and sticky. The foal will normally pass the meconium with ease during the first 8-12hrs of life. If the foal appears to be continuously straining with no meconium passed, an enema may be needed to help facilitate passage.

Finally, keep in mind that the neonatal foal lives on an all-liquid diet. They need to take in lots of milk, and will typically nurse at least once every 40 minutes. If your foal is listless, won't rise, or does not seek the udder each time it stands, something may be amiss, and you should call your veterinarian. Again, please do not hesitate to call us, even just to discuss your observations and possible concerns. It is so much easier to prevent a problem than to treat one after it has developed – so please call us with any questions or concerns.

Again, foaling season can be a real highlight each year, full of wonderful interactions and surprises. We all wish you the very best (and healthiest) Spring!

Clinical Snapshot

When Kelley Boy, a 3 y.o. Tennessee Walker was referred to Montana Equine last summer, his local veterinarian strongly suspected a problem in his left shoulder. Dr. Jack Snyder, our head of surgery, performed a diagnostic joint block (where local anesthetic is injected into the shoulder joint) and confirmed the diagnosis: Kelley's left forelimb lameness originated in his shoulder joint. Radiographs of the shoulder revealed only mild changes, and Kelley's owner elected for arthroscopic surgery to further evaluate the joint.

At surgery, Jack identified a step defect on the humerus – evidence of an extremely serious, life-threatening fracture of the proximal humerus. Fortunately, the fracture was minimally displaced, and even knowing the very long odds, the owners decided to proceed with surgery to repair the fracture. Jack placed three large bone screws across the fractured humeral head, confirming re-alignment using the arthroscope. Recovery went well, and Kelley was started into a conservative rehabilitation program.

All the right tools, and Jack's expertise put Kelley Boy on the right path, but the horse and his owners, as well as his local veterinarians have done the rest – he is truly doing amazingly well! While he is not yet totally out of the woods, and remains in our prayers, Kelley Boy is doing amazingly well, even surpassing our expectations!! A recent video has been posted on youtube by his owners: http://www.youtube.com/watch?v=kyAQPtdoLmY

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You can call anytime to schedule an appointment with Dr. Jack Snyder, DVM PhD DACVS