

## IT'S FOALING SEASON AGAIN!!!

There is no doubt that foaling season is one of the most exciting and most stressful times for those Friesian owners whose mares are preparing to deliver. While we are happy to see our newest herd members, getting them on the ground and keeping them healthy can be quite a challenge to even the most experienced among us. There are so many things to remember when a mare is foaling, even when things go exactly as planned, and then add in the complications that can occur with the mare, the foal or even both. Not to mention the fatigue that goes along with “foal watch”. Yet, the satisfaction that comes with the a successful foaling and the privilege of helping these youngsters grow up is something that can't be matched, so we deal with the stress and lack of sleep year after year, happily.....

There is so much information available on the topic of foaling, from on-line articles, webinars, breeder's symposiums, books and magazines. We look to fellow breeders to give us some tidbits of advice not easily found elsewhere. Veterinarians can talk all day on the subject. Search the topic and you will find thousands of sources of information, to the point of being overwhelming. What is sometimes lacking is a thorough understanding of the “glitches” that can occur before, during and after foaling that can make the difference between success and disappointment if they are not addressed quickly and correctly. As a veterinarian, I look at the weeks before parturition, the foaling process itself, and the first 24 hours of a foal's life as an opportunity to “push “ that foal in the right direction, taking precautionary steps to prevent problems later on. Owners and breeders are also integral part of this process as they are right there with the mare through the entire event. My goal with this article is not to cover every aspect of the normal foaling process, but to provide easy sources of information to help familiarize you with what is considered to be normal. What I do hope to accomplish is to provide some insight into some of the more common abnormal scenarios that can develop in the weeks before and the days surrounding the birth of the foal and what you can do to help your mare and your foal to insure the best possible outcome.

### Development of the Udder

Most commonly, your mare's udder will begin to develop 2-4 weeks prior to her anticipated foaling date. Maiden mares may not have the early development that might be expected when compared to a mare which has already had a foal, instead waiting until closer to parturition (birth). The base of the udder should fill first, usually from the back to the front, with the teats filling last. This should be somewhat symmetrical from side to side. **If one side of the udder is markedly larger than the other, call and discuss this with your veterinarian** – it could be a sign of an infection in the udder that can affect the quality of the colostrum. **If the udder begins to develop much earlier than is normal, especially if there is any discharge from the mare's vulva,** this is something that you would need to **contact your veterinarian immediately** as this could be a sign of placentitis (infection of the placenta) that can result in abortion of the foal.

## Softening of the Tailhead and Elongation of the Vulva

The muscles around the tailhead will often soften in preparation for foaling. The vulva can elongate and show mild edema as the due date draws closer. This is harder to observe in heavy mares. While this is commonly seen, it can be highly variable, so one might caution using this as the only criteria for assessing when the mare is due. Use these signs in conjunction with other changes that your mare is exhibiting. **\*\*Be sure to check for a Caslicks and have it opened well before the mare's anticipated due date. If uncertain if your mare has a Caslicks, discuss this with your veterinarian.\*\***

## "Leaking" of the Mare's Milk Prior to Foaling

**Excessive leaking of a mare's milk in the weeks to days prior to foaling** is a cause for concern. The colostrum, the first "milk" that a mare produces which is rich in antibodies that are a necessity for a healthy foal, could be completely lost prior to delivery of the foal. **Discuss this with your veterinarian.** Colostrum is termed "liquid gold" for a reason – lack of sufficient colostrum ingestion by a foal by approx. 12 hours of life can result in **Failure of Passive Transfer (FPT)**, which can be partial or complete. These foals are susceptible to infection as their own immune systems are not yet able to respond adequately to the bacteria and viruses that they are exposed to. There are some options available for you to consider if your mare does lose her colostrum prior to delivery:

: **Equine Colostrum** – usually banked by equine veterinary clinics or larger breeding farms. Stored frozen and good for about a year. **THIS IS THE BEST**

### **SOLUTION and**

**can provide complete protection for your foal.**

: **Bovine Colostrum** – provides a short duration of passive transfer, use only when you don't have access to a source of either artificial or mare's colostrum

ex. Equi-Col Foal Colostrum

: **Commercial Concentrated Serum Products**

ex. Seramune – from Lake Immunogenics

: **Lyophilized Equine IgG**

ex. Lyphomune by Bioqual, Equine Immunogam or Minigam by Bioqual

Planning ahead and having an alternate source of immunoglobulin available will provide some protection for your foal in the short term.

To determine if your foal has received enough colostrum, blood will be drawn from the foal for an **IgG test**. This test is often done "stall side" (with the goal being >800) such that the results are immediate and a plan of action can be determined if need be. This test can be done as early as 8-12 hours of life, depending on how quickly and how well the foal nursed. If the foal is older than 24 hours of age, oral supplementation is no longer an option as the foal's gut is no longer able to absorb these large immunoglobulins. A plasma transfusion can be done to boost the IgG value in the foal to a safe level. In a complete FPT, it often takes (2) liters of plasma to get the IgG level where it needs to be, with the IgG test being repeated to insure a safe

IgG level. **Partial FPT** foals, whose IgG level is between 400 and 800, can sometimes be safely managed without a transfusion depending on their environment and exposure – this is something that should be **discussed with your veterinarian**. **Being proactive in the event that your mare is losing her milk**

**prior to foaling can help you to avoid the expense and stress of a plasma transfusion.**

### The Foaling Process

While many mares each year foal normally without needing assistance, I believe that

**every foaling should be attended**. With the technology we have available to us today, it is possible for owners/breeders to watch their mares via computers and cell phones. It is possible for our “helpers” to watch our mares when we can’t and contact us quickly if they observe the first signs of foaling. There are many different **foal-monitoring systems** that are readily available. Here is just a sampling:

:Foal Alert System [foalalert.com](http://foalalert.com)

:Breeder Alert *Foaling* Montitor Alarm Devices and Systems [www.breederalert.com](http://www.breederalert.com)

:Barn Cam [barncams.com](http://barncams.com)

:Home security cameras – can be purchased from any number of sources

There are many sources of information about the **normal foaling process** and I have included in this article a “flow chart” that will help guide you through the major checkpoints for both the mare and the foal. It is very important to know and understand what is normal, as that will help you to determine if something is going wrong. You may not be able to say, with certainty, what exactly is wrong, but you and your veterinarian together can decide on a course of action. I can recommend a few sources of good information on all aspects of foaling:

:The Horse <https://www.thehorse.com>

:American Association of Equine Practitioners <http://www.aaep.org>

: From Merck Animal Health <http://www.foalcare.com>

There are also many foaling videos to watch on line that will help to give you a “visual” of what a normal foaling should look like. **Anything other than a NORMAL delivery is a potential emergency and should warrant a call to your veterinarian IMMEDIATELY**. After the normal 15-30 minute time frame for delivery of the foal once the mare’s water breaks, every 10 minutes of delay in the birth of your foal lessens your foal’s survival by 10%. Prompt action may make the difference between a live viable foal and one that does not survive.

### Passing of the Placenta

The mare should pass the placenta within 4 hours of foaling, after which time it is considered “retained”. While this can happen with any breed of horse, it has been well documented that Friesian mares retain their placentas at a much higher rate (around 50%) when compared to other breeds. While there are many “trains of thought” as to the best course of treatment for a retained placenta, **this condition ALWAYS warrants a phone call to your veterinarian** so a course of treatment can be started. Treatment often involves the use of oxytocin initially, to stimulate small peristaltic contractions of

the uterus in an attempt to cause a more natural separation of the placenta from the uterine lining. Additional therapy, in the form of systemic anti-inflammatories and antibiotics, as well as intrauterine therapy (the use of fluids to lavage the uterus to loosen the placenta and remove blood and debris followed with the infusion of the uterus with antibiotics) are used commonly when oxytocin alone is not enough. It is not always clear how aggressive an attempt should be made to remove the placenta, but what we should all agree on is that care should be taken such that the entire placenta is removed to avoid complications such as laminitis or metritis. Close monitoring of your mare and good communication with your veterinarian can help resolve this situation with the best possible outcome.

### The Newborn Foal

Again, there are numerous articles that have been written about the newborn foal and an internet search will easily overwhelm one with the volume of information out there. Here are some good sources:

:[www.thehorse.com](http://www.thehorse.com)– do a search on this site by typing in “newborn foal”

:[www.roodandriddle.com](http://www.roodandriddle.com) – this equine hospital provides educational articles about newborn foal care.

: [www.aaep.org](http://www.aaep.org) - another very good source of accurate information for new foal care.

There are a few very important things to remember in the first few minutes of a foal's life:

:make sure that the amnionitic sac is pulled away from the foal's nostrils quickly upon delivery such that the foal is able to take its first breath easily.

:it is desirable to allow the foal and mare to rest quietly once the foal has been delivered. Don't rush either of them to get up.

:the umbilicus will usually tear apart naturally as the foal moves and the mare stands up. Don't interfere with this process unless it becomes obvious that there is an issue. At that point, using good clean technique, tie it off approx. 1” from the base and cut it with a clean instrument. Dip it with navel dip immediately.

:the foal should stand within about an hour and nursing, an average, within about 2 hours. Some foals seem to find it very difficult to find and latch on to the mare's teats-it is frustrating to watch this process. Patience, along with some techniques for assisting the foal, will usually result in the foal getting that first taste of milk. **If the foal is still not nursing by 4-6 hours, a call to your veterinarian is in order.** Save any milk that you may have collected as this can be fed to the foal, either by bottle or through a tube placed by your veterinarian.

:an enema can be given to encourage the passage of the meconium. **If you have given two enemas and the foal is still unable to pass the meconium, call your veterinarian** and discuss this issue with them. Foals can have meconium impactions that may take additional therapy for it to resolve.

It is important to remember that a “new mom” can be quite a different horse with regards to temperament and attitude in the presence of her new foal. Some mares become very protective of their foals and can become aggressive towards their owner.

I believe that it is always best to have 2 people present for safety reasons at the time of delivery, especially if this is a maiden mare or a mare whose behavior with a foal is unknown. As many of us know, it is always just a really good thing to have an extra set of hands and some reassuring support for us as well during this whole foaling process.

Educating yourself before your mare foals, close monitoring of your mare as she nears her due date, good communication with your veterinarian and a thorough understanding of what a normal foaling “looks like” will help you feel prepared when the moment arrives. It is reassuring that most mares can and will foal normally without any assistance and that much of the time we are able to observe and thoroughly enjoy the whole experience. It is that small percentage of the time, when complications arise, that we are going to be called upon to do more. Our mare and foal will depend on us to know what to do and when to do it. This is the time when a team effort can change the course of things and “push” the mare and foal in the right direction so that we can, again, have the privilege of helping the foal to grow up and thrive and protect the future breeding potential of our mare.