

Breeding the Foal Heat Mare

Stephen D. Fisch, DVM
www.avsequinehospital.com
850-386-3619

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Everyone in the racing and showing industries want that early foal. The earlier the foal is born the bigger the advantage he has over his competitors in age and growth. In his two year old year, any advantage can be significant. One way to get an earlier foal is to get your mare in foal on "foal heat". Foal heat is that first heat cycle after the foal is born. Ovulation on foal heat normally happens between a very early ovulation at 7 days and a late ovulation at 15 days post foaling. The majority of the ovulations will be between 10 to 13 days post foaling. If you are going to breed on foal heat with shipped semen then also make sure that the stallion has semen that ships well. Not all stallions' semen undergoes the shipping process well. Just like mares they all have their different degrees of fertility.

Getting her in foal on foal heat starts way before the foal is born. It begins with proper nutrition at the beginning of gestation and throughout her pregnancy. The mare should be physically in good shape and have a little extra weight on her. She doesn't need to be too fat but she needs to have a little extra weight so that her body thinks that all is well in the world. Her hair coat should reflect her degree of health. Even in winter a healthy mare will have a hair coat that has a healthy glow to it. If the person in charge of feeding the mare is not very versed in equine nutrition then it will pay to have a consult with someone that is knowledgeable in equine nutrition. This person should know not just about protein levels but also about the interrelationship that the different micro and macro minerals have with each other. They should know about omega 3 fatty acids and the different vitamins and how they support pregnancy and uterine health. There is a lot more to know about equine nutrition than feeding a certain percent protein and dumping some vitamins in the bucket. Since nutrition is a very involved subject, we will hit on the details in a future article.

The second detail in increasing the chances of getting the mare in foal on foal heat is to be there when the foal is born. This assures that the birthing process goes as well as it can. A faster easier birth means less wear and tear on the mare and her uterus. It can mean less bruising and inflammation in the reproductive tract which means the mare's uterus will involute and get back to normal shape and size faster. If someone is there when the foal is born, the mare can be given oxytocin to speed up the process of passing the placenta. The placenta should be passed within 4 hours post foaling. At our hospital we normally stay with the mare and foal until the foal has nursed and the mare has passed her placenta. If she hasn't passed it in four hours, we put her on broad spectrum antibiotics and we start flushing her uterus with large volumes (5 liters) of sterile lactated ringers solution. Normally with aggressive flushing and oxytocin treatment the placenta will pass fairly soon. If the mare does not pass her placenta within a normal period of time, we do not breed on foal heat. We may short cycle her six days post foal heat and breed her on that heat.

If everything goes correctly with the foaling we give the mare oxytocin two or three times per day for the next 3 days. This helps insure that all the fluid and blood is pushed out of her uterus. We start flushing her on day two or three post foaling and flush her with 5 liters of sterile LRS. The mare's vulva is prepped with chlorhexidine scrub so that it wipes clean when we swab it cotton. Everything that goes in the uterus is sterile. We will flush her on day two or three and again on day five or six depending on what the first flush looked like. If she is clean on the second flush then that will be the last flush. If she is not clean with all the blood and other discharge gone then we will flush her again on about day eight. Normally they will be clean on that flush.

Article By Dr. Steve Fisch, DVM



Another important part of the process is to ultrasound her uterus on about day eight to make sure there is not fluid in her uterus. This is a very important step both pre insemination and post insemination. If the mare doesn't ovulate before day ten and her uterus is flushing clean and she has not fluid retention in her uterus then we inseminate her when the ultrasound and palpation say she is ready to be bred. If she is going to ovulate before day ten then we skip the foal heat because the chances are much slimmer that she will get in foal without her uterus having at least ten days to rejuvenate itself. We try to inseminate her only once because the semen is foreign and it serves as a source of inflammation for her uterus. We start giving her oxytocin six hours post insemination to move any inflammatory fluid that was caused by the insemination out of her uterus. We give .5 ml IV twice per day. One half ml gives the uterus a more evenly spaced uterine contraction rhythmic effect versus giving her a larger dose. The smaller dose has also been shown to keep the rhythmic uterine contractions going longer than a larger dose. When we check her with the ultrasound to make sure she has ovulated, we check her uterus for fluid. If no fluid is there we discontinue the oxytocin. If fluid remains in her uterus we continue to the oxytocin until it clears. If a mare has a lot of fluid we may flush her uterus one more time with five liters of LRS.

Once she has ovulated, hopefully all the fluid is out of her uterus and her uterus is back to it is normal size. At that point if she has a history of needing to be on Regumate to hold a pregnancy then we start her on Regumate on about day eight post ovulation and we check her for pregnancy on day fifteen or sixteen post ovulation. If all the above steps are taken then the chances of a foal heat pregnancy are good and you have effectively backed up your mare's due date for the next year by about three weeks. If you have a late foaling mare and don't want to skip a year or embryo transfer her to move her due date back then working on getting her in foal on her foal heat can get her back to an early foaling date by three weeks each time the process is successful.

Stephen D. Fisch, DVM
AVS Equine Hospital located at
9085 Magnolia Hill Drive - Tallahassee, FL 32309.
Visit their website at www.avsequinehospital.com
or call 850-386-3619.



