

## Neonatal foal management

As the foaling season is soon approaching, and for some has already started, it is time to prepare for the management of your foal. Of particular importance for the foal is immediate post-partum management. Carefully following the guidelines presented in this article will help prevent and detect future health problems in the foal's first week of life.

Once the foal is born, immediate observation of its various systems will help determine the viability of the newborn. With this in mind, permit the mare and foal time to bond, particularly if it is a maiden or nervous mare. Start with assessing the newborn for vigor and an open airway for optimal respiration. Occasionally fluid needs to be manually removed from the nostrils by carefully running your fingers inside the cavity. Stimulation of respiration can also be achieved by massaging the body of the foal with a blanket. Especially observe the foal for respiratory distress and asphyxia which manifests as gasping for air. It is ideal to have your local veterinarian complete a physical examination of the foal on the day of birth. Blood is often taken and submitted to screen for abnormalities.

Within 30 minutes of birth, the foal will usually attempt to stand and will likely be standing within 1 to 2 hours. The suckle reflex is present almost immediately following birth and the foal should naturally suckle within 1 to 3 hours of birth. At the time of birth, the foal has minimal antibodies but will rely on the passive immunity of the colostrum for the first few weeks of life.

It is essential to ensure that the foal nurses within 6 hours of birth to permit optimal absorption of antibodies, although before 2 hours is best. It is thought that the smallest quantity of colostrum to reach adequate antibodies is 1.5-2L of high-quality colostrum. The level of IgG (immunoglobulins) can be checked in the foal between 12-18 hours of age and assess whether additional high-quality colostrum or plasma needs to be administered. A veterinarian can perform a stall side test using a small blood sample to determine the appropriate action. The reading should be 400mg/dl IgG concentration or greater.



The protection of the passive antibodies tends to wane around 6-8 weeks of age and the foal's immune system is stimulated to generate its own active antibodies. Keep a careful watch on the foal and monitor for any health changes during this very vulnerable time.



The umbilical cord requires care immediately post partum. The cord will naturally break on its own in most circumstances. If it is necessary to break the cord manually, contact your local veterinarian. The umbilical stump should be disinfected twice a day for 3 - 4 days following birth. The optimal disinfectant is 0.5% chlorhexidine solution. Betadine or iodine solutions are not as effective in this situation. Ensure that only the stump is exposed to the solution as it can be irritating to surrounding

tissues. Monitor the stump daily for swelling, drainage, a change in color, excessive warmth, or urine dribbling. If any of these signs are observed contact your local veterinarian as the foal could be developing omphalitis (inflammation of the umbilical cord), an abscess or a patent urachus (abnormal drainage of urine). Ultrasound of the structures by a veterinarian is often helpful in determining the cause of the inflammation. The figure to the left is of a 2.5 day old foal umbilicus. Expect a normal umbilicus to shed its dried tip at approximately 1- 2 weeks following birth.

Monitor the foal for fecal production. Expect a meconium fecal movement shortly after birth. Usually the meconium is dark brown and can be pasty to firm. After this fecal material is passed expect the consistency to become looser and the color to be light brown. If you notice that the foal has not passed or is straining to pass the meconium, contact your local veterinarian to perform an enema.

As is evident, foal care is very intensive and requires patience and a keen eye for observation. Plan on having your veterinarian come out and complete a physical examination on your foal within the first 12-18 hours of life to help prevent or detect future health issues, provided that foal is nursing well and the above recommendations are followed. If there are major abnormalities noted early on, have your veterinarian attend to the foal sooner.