



Previous VET NOTES

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Foaling Protocol

Pregnant mares should be properly vaccinated 4-6 weeks prior to due date to allow for production of maternal antibodies. These crucial antibodies are present in the colostrum and passed to the foal when it nurses. Grass pastures or large foaling stalls are adequate foaling areas, and should be clean, dry and easy to visualize in case of any complications. Stalls should be stripped completely, disinfected and allowed to dry prior to foaling.

Mares should be examined for presence of a Caslick's and opened at least two weeks prior to foaling date or earlier if needed. Clinical signs of foaling begin subtly with noticeable change in udder size around 4-6 weeks prior to foaling. The teats will remain relatively small until last few days in which they will fill with milk and become engorged. A thick waxy substance (colostrum) is often observed at the tip of the teats 24-48 hours prior to foaling.

When foaling initiates, the tail of the mare should be wrapped loosely to minimize contamination and interference during the foaling process. Cleaning the perineum and udder of the mare with appropriate cleanser prior to foaling also decreases likelihood of bacterial contamination.

Labor is divided into three stages. Characteristics of the first stage include restlessness, signs of mild colic, tail switching, frequently lying down and rising, and sweating. These signs may be difficult to determine in mares that have foaled previously. The onset of uterine contractions initiates this stage and ends with the rupture of the chorioallantoic membrane; known as 'breaking her water' and a visible out pouring of fluid from the vulva is observed. The length the first stage can last several hours.

The second stage of labor begins with presentation of the amniotic membranes, ends with expulsion of the foal, and has a usual duration of 5-15 minutes. Characteristics include active abdominal straining resulting in expulsion of the foal. During this phase the front feet should be presented, soles downward, followed soon by the knees and the foal's nose lying between the legs. The amnion often tears free from the foal's head during expulsion of the foal, however if it remains intact after the foal has been delivered it should be removed from the nostrils to prevent suffocation. The mare usually chooses to lie down during the final contractions and should be allowed to do so. She

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should also be allowed to lie quietly after foaling which allows for transfer of blood from the placenta into the foal before the umbilical cord breaks. After several minutes the cord can be severed by an attendant but it will spontaneously break when the mare stands or the foal tries to. The umbilical stump should be disinfected with a navel dip immediately upon breaking and several times per day for a few days.

The third stage of labor involves the passage of the placenta. After the foal is delivered, the membranes may be tied up so that they hang just below the hocks. This adds weight and prevents the mare from stepping on it. The placenta often passes within two hours and should be considered retained if it has been longer. Retained placentas may require treatment to ensure removal of the total membrane.

The most common complications of term parturition include difficult births (dystocias) and 'red bags'. Dystocias are often caused by the foal being malpositioned, suffering from limb contraction or being too large for the mare's pelvic inlet. 'Red bags' are the result of premature separation of the placenta resulting in a dark red velvet 'bag' being expelled prior to the foal. This is an emergency and can result in hypoxia and even death of the foal. It should be treated as an emergency and is seldom handled rapidly enough if an attendant is not present at the foaling to tear the placenta open immediately and assist the birthing process.

Foals normally stand and nurse in less than two hours. When this does not occur, evaluation of the foal by a veterinarian may be necessary. Ideally the foal should receive colostrum within those first two hours and certainly by four hours of age.

Veterinary intervention may include sedation of the mare, an epidural and even general anesthesia to prevent straining and provide safe evaluation and repositioning of the fetus for vaginal delivery. In some cases normal delivery is not possible and a cesarean section may be required. Special immediate attention is crucial for foals experiencing a difficult birth. These foals are at high risk of multiple neonatal diseases including maladjustment syndrome, failure of passive transfer, septicemia and other infections, ruptured bladder, and other trauma.

Many breeders are very experienced in this process but those that are not would certainly benefit by consulting with their veterinarian before doing so or choosing a place that has adequate facilities and experienced staff.

For this reason Peterson and Smith Equine Reproduction Center offers a fully staffed and equipped foaling facility. It provides 24 hour observation with a staff veterinarian present at every foaling. Please call (352) 307-3000 for more information and scheduling.

forelimbs of foals

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