The Foaling Mare
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management guidelines

The Foaling Mare

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A LIVE, HEALTHY FOAL is the result of considerable time, money and effort. Good management practices should not be relaxed at any time in an equine program and especially not prior to the time the foal is weaned. The mare should be on a regular worming, exercise, and vaccination schedule and an adequate nutritional program, and the horse owner should have an established relationship with a veterinarian who will be available for advice or emergency calls.

Variation of the gestation period in the individual foaling mare is important as it relates to length of pregnancy and other aspects of foaling. Mares may change their foaling habits from one year to the next. The "normal" length of gestation is 340 days; however, this is an average and there are documented cases of "normal" pregnancies ranging from 315 to 365 days. Pregnancy examination by a veterinarian, known breeding dates and the foaling signs exhibited by the mare are helpful in predicting the time of parturition.

Preparing the Stall

The foaling stall should be prepared in advance. It should be at least 12 by 14 feet, clean, maintained at a comfortable temperature, and located in a quiet area of the barn. The stall should contain foaling rails if possible to keep the mare off the wall and out of corners. Because straw is less adherent to the wet foal's mouth and nose, it would be the bedding of choice over wood chips or sawdust. It is desirable to foal on clean pasture where there is minimal exposure to infection, but many farm managers, owners and veterinarians prefer to have the mare inside where she can be closely watched and assist-

ance can be provided more easily when necessary.

The expectant mare should be closely watched during the last month of pregnancy. The signs observed will help determine when to change feeding practices and when to move the mare from the maternity area to the foaling stall.

Signs of Approaching Foaling

Mares may exhibit all or none of the following signs: the musculature around the tailhead becomes soft and flaccid 2 to 4 weeks before foaling. The genitalia relaxes, and the udder begins to fill during the same period. The mare may show signs of uneasiness during the last two weeks of gestation. Waxing of the teats (sticky droplets on the ends of the teats) occurs 24 to 28 hours before foaling. Milky fluid may leak from the teats for hours or days before parturition. Some mares, especially maiden mares, might not produce milk until after foaling. Move the mare to a foaling stall 7 days before expected foaling.

Change the Ration

Reduce the grain and feed a more bulky ration which includes bran at least 1 week before foaling. One pound of oats and two pounds of bran morning and evening is recommended to decrease the likelihood of constipation before and after foaling. This ration will also discourage heavy milk flow, thereby decreasing the chance of scours in the foal and mastitis in the mare. After foaling, the grain can be increased gradually over a ten day period until a full grain ration is resumed.

Final Preparations

Keep the mare in the foaling stall. If possible, an experienced person should attend her. This attendant can be helpful if problems arise but must know his or her limitations and call a veterinarian without delay when problem signs appear.

A list of commonly used items to have on hand at foaling should include: umbilical cord antiseptic (50% tincture of iodine and 50% glycerine), towels, clamp to crush the cord, flashlight, enema kit, plastic garbage bag, tail wrap, scissors and twitch.

Wash the mare's genitalia with a mild soap. If the mare has had a Caslick's operation (the vulva sutured), open the vulva with a clean pair of scissors. Wash the udder to remove only secretions and dirt buildup between the two glands. Wrap the tail and readjust wrap (remove and reapply) several times each day until foaling is complete.

The Three-Stage Labor Process

Stage 1 — During the first stage of labor, the muscles of the pelvic girdle relax, allowing the bones to spread so the foal can be positioned toward the birth canal. This stage will last from 2 to 24 hours. Movement is often noticeable as the foal turns into position. The abdominal wall above the flank and behind the ribs becomes concave, and the tailhead becomes more prominent. Uterine contractions cause nervousness, erratic eating, sweating, pacing, tail switching and frequent urination. Colic can also cause these signs, and it is possible for a mare to become colicky from constipation prior to foaling. If the colic signs become severe or the signs continue for several hours, call a veterinarian.

Stage 2 — The second stage of labor can last from a few to 30 minutes and include contractions and delivery. It is important to leave the mare alone at this point if birth is progressing normally. Disturbances may interrupt or prolong the birth process. The mare has very powerful uterine contractions, and when the unborn foal is positioned in the birth canal properly, delivery can occur in a relatively short period of time (10 to 15 minutes). Birth usually occurs shortly after the outer water bag ruptures. If birth does not occur within a reasonable length of time (20 to 30 minutes) after strong contractions begin or shortly after the rupture of the water bag, malpositioning may be present, and a veterinarian should be notified.

Presentation of the foal's front feet, soles down, relatively close together, one slightly more advanced than the other, occurs first in a normal delivery, and the nose of the foal should be positioned between the front legs near the knees.

Most mares are down during the delivery of the foal; however, some insist on standing. Standing mares should be tied or held to prevent walking. An attendant should stand behind the mare so the arriving foal can be assisted. A fall may not only injure the newborn foal but also tear the umbilical opening in the abdominal wall and predispose the foal to a hernia. The urachus (tube leading to the urinary bladder) may also tear, causing urine leakage into the foals abdomen.

Do not pull on a foal progressing slowly through the vagina. If birth progress stops for more than ten minutes in one spot, apply gentle traction times with the contractions. If the foal feels "locked in," rotate the body one way, then the other; this might allow the hips to slip through the pelvic opening of the mare. Call a veterinarian if this technique is not immediately successful. Walk the mare until the veterinarian arrives.

Suspect malposition of the foal and call a veterinarian when only one foot is present, more than two feet are visible, feet are upside down, the nose does not appear, or the nose appears without the front feet.

As the foal emerges, the inner sac usually breaks. If the sac does not break, free the foal from the sac and wipe the nose and mouth. Foals not breathing well should be rubbed vigorously with a towel to stimulate breathing. Allow the foal to lie quietly behind the mare for 10 to 25 minutes until the pulsations in the umbilical cord cease. This allows the foal to take advantage of the blood remaining in the placenta still attached to the uterus. Then crush the navel cord and separate it three inches from the body and dip in antiseptic (iodine and glycerine). This antiseptic will destroy bacteria, help dry up the stump, and prevent infections. Dip the stump again in a few hours. Some individuals also dip the feet (a possible portal of entry for bacteria).

The novice horse owner should be warned to be careful. A mare's disposition can change quickly from friendly to aggressive at this time due to maternal instinct.

Stage 3 — The afterbirth is expelled during the final stage of labor with the aid of uterine contractions. Once the membranes are expelled, these contractions continue to decrease the size of the uterus. Colicky symptoms may also appear at this time which are caused by contractions of the uterine muscles.

Passage of the membranes should take only a few hours. Membranes which are not expelled within four hours are considered retained. Do not pull on these retained membranes. Tie them in a plastic bag near the mare's vulva to keep the mare from walking on them. A veterinarian should treat a mare with retained afterbirth to prevent possible uterine infection and founder (laminitis). Membranes which are passed should be saved in the plastic bag for the veterinarian to examine.

During this time, the mare will clean the foal which should be trying to stand. Foals not standing within the first 2 to 4 hours after birth may be weak or abnormal and may require special treatment. The mare should be "milked out" and the foal fed 4 to 8 ounces. This will stimulate most of the slow starters. The foal also needs first milk (colostrum) before 6 hours pass to help combat disease and to aid in eliminating fecal material which has built up in the intestinal tract. Once on his feet, the foal will generally find his way to the udder. "Milking out" a small amount of milk by hand will open and clean the teat ducts. Check the teats for soreness. Some mares will not accept their foal readily if their udder is inflamed. Let the foal find the teat himself; to help him by forcing his head is futile. Maiden mares should be held during this first nursing in the event they become anxious and kick at the foal.

An enema to help the foal pass meconium (sticky feces in the rectum and colon) is a preventive step because retained meconium in the intestine can form chunks and become impacted, causing the foal to strain to defecate and flag his tail back and forth. A fecal blockage might require corrective surgery if the enema does not relieve the problem.

A word of warning regarding the enema: long or sharp objects should never be placed in the rectum by inexperienced persons. A human rubber bulb syringe with the tip lubricated with vaseline and gently placed no more than 1 inches inside the anus works well. A pint of warm soapy water is instilled and then allowed to be expelled. Repeat the process several times. The foal usually passes pieces of yellow-yellow brown manure (meconium). If the foal fails to defecate, becomes constipated or colicky, call a veterinarian.

Soon after parturition a veterinarian should examine the mare and foal for abnormalities such as cleft palate, heart defects, cataracts and musculoskeletal disorders. At this time, the veterinarian can also vaccinate against tetanus and administer any appropriate antibiotics. He should also examine the mare for damage to the reproductive tract and palpate the udder to check for mastitis. The mare should receive a tetanus toxoid injection at this time if she has not had a booster recently. The placenta should be examined to make sure it is completely intact. Retained placenta, even small pieces, could impair future breeding ability. After a complete examination the veterinarian can advise whether or not the mare should be bred back on foal heat, which usually occurs 7 to 10 days after foaling.

Good foaling management is an important aspect for optimum health and survivability of both the mare and the foal.

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