

The Foaling Mare

When is it an EMERGENCY?

with **Dr Paula Williams**
BSc (Hons) BVSc MRCVS MANZCVS
of WestVETS Animal
Hospitals



Paula qualified in the UK in 1993 and has been an equine veterinarian since then. She completed an internship at Rossdale and Partners in Newmarket, UK and has subsequently

worked in equine hospitals both in the UK and Australia. Paula is currently an equine practitioner at WestVETS Animal Hospitals in Queensland.

Her clinical interests include diagnostic imaging, the investigation and management of musculoskeletal issues in the equine athlete, the equine foot, neonatology and internal medicine.

The time is here! You have excitedly and patiently waited for over 11 months for this moment and now it is happening – your mare is foaling! In this issue, we are going to look at the normal birthing process and what to expect, what can go wrong and when to call the veterinarian.

Most of the time there isn't an issue and mares foal without difficulty, but it is important that any problem is recognised promptly so the veterinarian can be called for assistance. This could mean the difference between saving the mare or foal or both.

In the next issue, we will look at the newborn foal, what to expect and when to call the veterinarian.

"In one study, 65.5% of mares foaled at night between 8pm and 1am."



Photo: Getty Images/DavideWomhelli

Foaling Kit Essentials - Be prepared!

- ✓ Foaling alarms
- ✓ Foaling cameras
- ✓ pH strips / calcium strips
 - These are useful for checking the pH level/calcium levels of the colostrum and predicting whether the mare is going to foal
- ✓ Important numbers and contact information
 - Veterinarian's number/after-hours number plus an alternative should your vet not be able to attend
 - Key contacts/friends that may be able to help if necessary
- ✓ Access to transportation for foal and mare (in case they need to be transported to a hospital)
- ✓ Halter and lead rope
- ✓ Mild soap
 - For washing hands
 - To wash the perineal region and udder
- ✓ Clean buckets
- ✓ Strong plastic bag/bucket with lid
 - For the placenta so it can be checked by the veterinarian
- ✓ Tail wrap
- ✓ Gloves
- ✓ Scissors
- ✓ Clean towels
- ✓ Antiseptic for the foal's navel
- ✓ String/baling twine
- ✓ Pen and paper/whiteboard
 - To note down key events and times
 - More reliable than memory alone
- ✓ Sterile lubricant
- ✓ Charged phone
- ✓ Torch and batteries
- ✓ Watch/clock
 - To time each stage of the birth process – make notes
 - Time becomes distorted in the excitement of the moment!

How do I know my mare is about to foal?

Hopefully you have a due date from the service of the mare to give you some idea of when she is due; the normal gestation period of a mare is 320 – 360 days with the average being 340 days.

And be prepared for a late night - in one study, 65.5% of mares foaled at night between 8pm and 1am.

It can be frustrating watching mares and predicting when they will foal. The signs of imminent foaling are variable and can be subtle — different mares show different signs.

The following may be seen:

- Udder distension - begins two to six weeks prior to foaling
- Relaxation of the muscles of the hindquarter around the tail head and buttocks
- The lips of the vulva may be seen to elongate and appear moist
- The teats become engorged with milk
- Waxing (wax beads) of the teats – occurs two to four days prior to foaling but some mares don't show this



Waxed teats.
Photo Dr Tori Doyle.

- Dripping of colostrum 24 – 48 hours prior to foaling. This should be noted as if excessive, may result in an inadequate supply for the foal
- Prior to foaling, the mare's rectal temperature may drop to lower than her normal temperature
- Use of milk calcium or pH changes. As the mare becomes imminent, the electrolyte composition of the milk changes. Testing strips can be used to sample a small amount of milk taken from the udder.
- Calcium – we look for a sudden increase in levels. When they reach over 200ppm the mare is likely to foal in the next 72 hours
- pH – we look for a sudden decrease in pH. When the pH reaches 6.4 or lower then the mare is likely to foal in the next 72 hours

Preparing for birth

Most mares foal without any difficulty and it is best to allow the mare to foal undisturbed and unassisted, but to observe closely.

The table on the previous page shows the foaling kit essentials that you should consider having ready.

The mare's tail can be wrapped with a clean bandage when the first sign of labour is observed – be careful not to wrap too tightly or leave it on for too long, as it can affect the blood supply and permanently damage the tail. The mare's udder, vulva and hindquarters can be washed with mild soap and rinsed thoroughly.

Understanding parturition – the normal foaling process.

The normal delivery of the foal is a continuous process which is described in 3 stages:

STAGE 1

Getting ready

This stage can be quite variable in mares and some may not show obvious signs. The signs may look like colic and include:

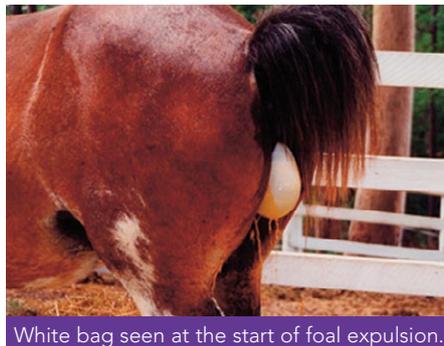
- Increased restlessness
- Getting up and down
- Stretching
- Flank watching
- Kicking at the abdomen
- Sweating
- Small frequent urination
- Tail swishing

This stage usually lasts 15 – 90 minutes.

STAGE 2

Expulsion of the foal

This stage starts with breaking of the chorioallantois foetal membranes and water passing from the vulva ("waters breaking)." This is initially seen as a white fluid-filled bag at the vulval lips.



White bag seen at the start of foal expulsion.

During a normal delivery, the foals' feet are presented at the vulval lips within three minutes of the bag appearing, followed by the head resting on the legs within five minutes – resembles a diving position (front feet, one slightly ahead of the other with hooves pointing down,



Normal foal presentation.



A normal delivery.

then the nose and then followed by head, neck, shoulders and hindquarters). They may be covered by a white/bluish membrane which can be removed from over the foal's nose and mouth.

Some mares may get up and down and change position during this process but most mares foal lying down. This stage usually lasts 10–45 minutes but during this time there should be a constant progression of the foal out of the vulva. The mare will often lie quietly for 10 – 15 minutes following foaling.

STAGE 3

Expulsion of the placenta

This final stage involves the passage of placental membranes after the foaling. The placenta is normally passed within 30 minutes to three hours after foaling. The mare may show mild signs of discomfort during this time.

Keep the placenta in case the veterinarian wants to evaluate it – it tells a story of life in the uterus! If your mare has not passed the placenta within three hours, please call your veterinarian.

What can go wrong?

Most foalings go ahead without any issues and are uncomplicated. There are however a variety of foaling issues and they can differ in their clinical signs, some are obvious and some are more subtle.

Dystocia

Dystocia (problem foalings) are one of the most commonly encountered issues – it is where the foal is having trouble coming out. It may be due to an abnormal position (for example the head or a leg flexed back or a breach position - backwards). It may be due to abnormalities of the foal such as a very large foal or severe flexural deformities.

If the mare has “broken her waters” and you do not see two front legs and the head of the foal within five minutes or the foal stops advancing then call your veterinarian immediately. There is a very narrow window for veterinary intervention and a favourable outcome – therefore acting promptly is the key - the quicker you get help, the better the prognosis.

Some dystocia can be corrected in the field, but some may require referral to an equine hospital for more intensive assistance or intervention and a potential C-section. These have a more serious prognosis.

KEY MESSAGE – if waters have broken and there isn't progression of the foal within five minutes – call the vet!



Three examples of dystocia (problem foalings).

Red Bag Delivery

The red bag delivery (premature placental separation) is where the placenta has detached from the uterus and is being delivered before the foal. This may occur when mares have placentitis.

It is an issue that requires prompt intervention by the owner because the foal normally gets oxygen from the connection between the placenta and uterus. If the placenta has separated then the foal does not receive any oxygen until it is out and breathing.

If this is occurring, instead of the “white bag” you will see a “red bag” (chorioallantois). This is a red wet velvet-like structure at the vulval lips. Very prompt intervention is required, as if this is allowed to continue it will result in a severely compromised foal. There is no time to wait for the veterinarian – the red bag needs to be cut with scissors (careful not cut the foal) and then help the foal to be delivered.

Still contact the veterinarian as these foals can become severely compromised and require ongoing care.

KEY MESSAGE – if there is a red bag delivery – cut the bag and assist the foal to be delivered. Cut the bag before calling veterinarian.



A red bag delivery.

Retained Placenta

A retained placenta is when the placenta has not been expelled within six hours of foaling – it remains in the uterus and is often seen trailing behind the mare. If the placenta is retained then there can be serious complications – these include uterine infections, septicaemia, endotoxaemia and laminitis.

If your mare retains the placenta do not try and pull them out, tie them up with

string so the mare doesn't tread on them and call the veterinarian.

Retained placenta are managed with flushing of the uterus regularly, oxytocin and antibiotics if required. If the mare becomes sick then more intensive care is required.

KEY MESSAGE – if your mare retains the placenta for six hours - call the vet!



A retained placenta.

The other problems that may occur after foaling include rupture of the uterus, uterine artery rupture, colic and tearing of the rectum and vagina. Monitor your mare for any abnormalities or pain after foaling and call your veterinarian if you are concerned. If the mare has had a difficult time foaling, then it is worth getting a vet to check her afterwards.

A routine check for both mare and foal is definitely worth considering so that any issues are picked up promptly.

Summary

Having a foal is a very exciting time; most foalings occur without any issues but occasionally there can be problems. The stages of foaling are getting ready, expulsion of the foal and expulsion of the placenta. Issues that can occur are dystocia, red bag deliveries and retained placenta.

If there are any issues around foaling call your veterinarian immediately.

When to call the vet

- The foal doesn't present with normal position (two front feet and a head) within five minutes of the waters breaking
- If there is an abnormal presentation evident or the mare is having difficulty foaling
- Red bag delivery – cut the bag and assist with the delivery of the foal, then call the veterinarian
- The placenta is retained for over six hours
- If the mare shows colic, depression, doesn't get up or is not eating after foaling
- If the foal looks abnormal or is not standing and nursing within two hours of foaling.