The best start in life

Ensuring your mare's foal is safely delivered is only the first step. **Kate Maxwell MRCVS** explains how to care for your newborn during its fragile first few weeks

A normal labour lasts about 20 minutes, after which the mare becomes rapidly attached to the foal – as does the foal to his mother

HAVING waited 11 months for the arrival of your newborn foal, your priority now is to ensure it is healthy and remains that way. The first step in assessing your foal's condition is to know what is normal.

Gestational length is on average 340 days, although there is some variation between individuals, and healthy foals have been delivered as late as 365 days. A normal, uneventful delivery will usually involve an active labour of approximately 20 (10-30) minutes.

Following delivery a healthy foal should stand and begin nursing within two hours. In these first few hours, respiration and heart rate stabilise to normal values of around 40 breaths per minute and fewer than 80 beats per minute.

The mare becomes rapidly attached to the foal and, likewise, the foal becomes attached to the mare.

The healthy foal will usually pass meconium (black, tarry faeces) in the first two to four hours. Some straining is normal but a dark, sticky stool should be produced. Foals should be watched carefully to ensure they urinate normally, particularly colts.

Finally the foal should be checked for any congenital problems that may become an issue later.

Early warning signs

AN unhealthy foal will often deteriorate and become sick very quickly, so it is important to look out for the following early warning signs and to be proactive:

- A premature foal, defined as being born at a gestational age of less than 330 days. These foals often display a soft, silky hair coat, floppy ears, a low birth weight and can be weak.
- A foal who endured a prolonged delivery of more than 30 minutes.
- A foal who fails to stand and nurse within two hours.
- A foal displaying signs of respiratory distress or whose breathing becomes increasingly fast or laboured.
- A foal whose dam has only small amounts of milk, which may be a watery consistency rather than thick, rich colostrum.
- A foal whose dam refuses to allow the foal to nurse.
- A foal exhibiting abnormal behaviour or any physical deformities.

The newborn foal needs careful monitoring for several days as it can sometimes appear normal at birth but develop problems later on. The foal should become stronger and more active in the first few days. Therefore, if it appears to be sleepy, spending increasing amounts of time lying down, seek veterinary attention.

Below is a list of problems to look out for that might not be immediately apparent at birth but will become more obvious:

- A foal with a distended abdomen and who fails to pass urine in the first eight hours.
- A foal who does not pass meconium, strains to pass faeces and appears uncomfortable.
- A foal whose eyes and gums appear yellow in colour (jaundiced).
- A foal who develops diarrhoea and also appears dull and depressed.
- A foal who develops any lameness or swelling.
- A foal with any heat, swelling, pain or drainage from the umbilicus.

Predisposing factors for problems

IT is often impossible to predict whether the impending birth will result in an unhealthy foal, but there are some predisposing factors.

These include conditions that affect normal foetal maturation and development, normal delivery or the peripartum period. For example: twinning, dystocia (difficult birth), premature placental separation (red bag delivery), placentitis (inflammation of the placenta), vaginal discharge, premature births, hypothermia and mare illness. Furthermore, poor husbandry and a dirty environment to foal in increase the risk of the foal developing disease.

Initial care of the newborn

ONCE the foal arrives the navel should be dipped repeatedly in the first few days with antibacterial solution such as dilute 0.5% chlorhexidine or dilute 1% povidone-iodine solution. A normal, healthy foal should have a good attitude, be willing to nurse, be active in the stable and interact with the mare.

A vital step in the maintenance of newborn foal health is the transfer of passive immunity via colostrum. This transfer of immunity ensures the foal is well protected against disease and consequently it is important that the foal is tested between 15 and 18 hours after birth to ensure it has received adequate colostrum and subsequent immunity from the mare.

The test is simple and is carried out by your vet. It is a blood test that measures the level of immunoglobulin (IgG) circulating in the foal's blood. If the level of immunoglobulin is insufficient this could be for several reasons:

- Insufficient or no colostrum available from the mare.
- Low levels of immunoglobulin in the mare's colostrum.
- Foal has not nursed well.
- Foal is not absorbing the immunoglobulin proteins well.

Once a foal develops a systemic infection it rapidly becomes very sick and the infections are difficult and expensive to treat. As a result of this, if the immunoglublin level is low when the foal is tested it is recommended that a plasma transfusion be given immediately, before the foal becomes sick, as prevention in this situation is far better than cure.

When to vaccinate

THE mare should have a tetanus booster vaccination four to six weeks before foaling. This will ensure the foal is covered for tetanus for six to 12 weeks following birth.

If the mare has not received this booster vaccination prior to foaling then the foal can be given a tetanus antitoxin injection soon after birth. This tetanus antitoxin will also provide initial cover against tetanus.

Tetanus vaccinations can start at four to six months depending on the manufacturer, and consist of two initial vaccinations four to six weeks apart.

Influenza vaccinations can begin at five to six months depending on the manufacturer, and consist of an initial course of two vaccinations 21 to 92 days apart with a third vaccination five to seven months after the second.

Remember to worm

THE mare should be wormed one month before foaling to kill the majority of adult worms in the gut. Following this, around 10 days after foaling the mare should be wormed again and then approximately once every six weeks depending on the type of wormer.

Mares and foals are constantly together for the first six months or so and should be wormed at the same time with a wormer suitable for both mares and young foals.

Foals are particularly vulnerable to the effects of worms and they can begin to contaminate a pasture by six to eight weeks of age. They should initially be wormed at around six weeks of age and every four to eight weeks thereafter, depending on the type of wormer. After they reach six months old the frequency of worming should be reduced and once they reach 18 months old they can be wormed following the same regime as an adult horse. Your vet can advise which wormers are most appropriate at which time. H&H

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A healthy foal will stand and nurse within two hours, but will need careful monitoring for several days for possible problems

Care of the mare

SOON after the foal arrives it is important that the mare undergoes a careful examination. In particular, her reproductive tract should be carefully checked to confirm the entire placenta has been passed and that there is no evidence of significant trauma or injury. The placenta should pass within a couple of hours of birth and if this has not happened within six hours then veterinary treatment is required. In addition, the udder should be checked for adequate colostrum production.

DID YOU KNOW?

• THE most common cause of foal death is infection. A foal can go from being healthy to critically ill in less than 24 hours and therefore if you suspect your foal is at all unwell you must act quickly and seek immediate veterinary intervention.

Pictures by Bob Langrish