

Newborn Foals - the first 24 hours

By Colin Tait BVMS MRCVS

Spring is a fabulous time of year because it brings new life, With many of you eagerly awaiting the arrival of new foals, the following article discusses the adaptive changes foals go through in the first few days of life, what to look for in the new born foal and early warning signs. It also touches on some management features when caring for the newborn foal.

The first few days of life is a unique period in a foal's life when its body systems are rapidly adapting to cope with independent life – it also carries the highest risk of disease. As naturally horses are prey species they have evolved to develop very quickly leaving little room for error. Another survival strategy is to exhibit few outward signs when things are not quite right until often they are very sick. Given these factors the newborn foal needs a high standard of management, a good eye for when things are abnormal and rapid veterinary intervention in such cases. Lack of knowledgeable veterinary attention is one of the key factors affecting the outcome of neonatal foal disease.



Once a foal has been born, if all is well, the mare will usually lie quietly on her side or sit on her chest for a few minutes. During this time the foal's hind legs will often still be in the birth canal and the foal's umbilicus will remain attached to the placenta. The umbilicus will break at a natural weak point when the mare stands; it should not be cut or clamped. Once the cord has broken it should be dipped in 0.5% chlorhexidine solution. This solution is now the treatment of choice and should be repeated a further 2 times over the first 24 hours. After a few minutes the foal can be pulled, on its back by the front legs, under the mare's nose for her to lick. It is essential that the mare-foal bond is firmly established in the first few hours after foaling and therefore minimal interference is recommended.



However, observation then becomes critical. Normal, healthy foals generally follow a very consistent behavioural pattern and so by understanding and monitoring these patterns the majority of owners can be re-assured that their foal is progressing normally. Likewise, for those who are able to pick up the early signs of neonatal disease this will allow them to influence the outcome by instigating urgent treatment.

Within minutes of birth the foal should sit and maintain itself on its brisket. The suck response is present within 5-10 minutes of birth. The licking of the mare should stimulate the foal to extend to its forelegs in preparation for attempts to stand which will often occur within one or two hours of birth. Taking over two hours to stand would be considered abnormal. Once standing they waste little time in searching for milk and certainly foals that have not suckled from a teat within 4 hours of birth would give much cause for concern. Occasionally the foal may need gentle steering in the direction of the udder and in some cases the mares may need to be restrained to allow the foal to suckle for the first time. This suckling will usually take place approximately 5 to 7 times an hour with reduced frequency during periods of rest. Weighing the foal daily can help determine whether the

foal is getting sufficient nutrition with most foals gaining 1.5-2kg per day in the first week. Less than 1 kg per day would be considered abnormal.



Within the first 12 hours (and ideally within the first 3 hours) it is vital that the foal receives an adequate volume of good quality colostrum. This is because the efficiency of the small intestine to absorb the vital colostral antibodies rapidly reduces with time. Failure of transfer of these antibodies places the foal at increased susceptibility to infection. Routine blood sampling of foals at around 12-18 hours post-foaling can check how successful this passive transfer has been, with plasma transfusions being available for those foals which are need of a boost in antibodies.

As long as there were no complications with the foaling or the foal, the ideal time for your vet to perform a routine post foaling check is between 12-18 hours. During this examination your vet should help to assess the health of your foal whilst also checking for congenital conditions of the limbs, heart, eyes and other body systems. A tetanus antitoxin given to the foal at this time will provide cover against the tetanus toxin for approximately 3 months. The mare should also be examined and the placenta checked to ensure it has been passed complete.

The first faeces, the meconium, are usually seen within 6 hours of foaling. This is usually in the form of dark brown

to black pellets and will be followed by the softer milk faeces. Impaction of the meconium is the most common cause of colic in newborn, particularly colt, foals. The first urination is usually observed around 8 hours after foaling. Normal foals will often run behind the mare when humans enter the stable and should appear inquisitive and interact with the mare when awake. Signs of an underdeveloped foal might include a small bodyweight, silky coat, domed forehead, weakness and limb deformity. It is important to try to observe and record the normal bodily functions and behaviour of the foal, as this will help the vet with the diagnosis of a problem, if one arises.

If there are any problems during the foaling, involving the passage of the placenta or with the foal once it has been born it is worth contacting your vet sooner rather than later, even if it is just for reassurance.

It is usual to allow the mare and foal out in a small nursery paddock the day after foaling, as long as the foal is strong enough, and the weather is good. For those of you fortunate enough to observe this, it is one of the true joys of spring.

For further advice on the management of the brood mare, the foaling process and the care of the newborn after the first 24 hours visit www.equitait.com