

Principal Diseases In Newborn Foals

The breeding season is in full swing. Unfortunately, the newborn foal is prone to diseases just as a horse any age is. Phryso International focuses on the main diseases.

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Photo: Karin Sevinck

This foal came through that crucial first period just fine. Always make sure the foal drinks well.

In practice, four to eight percent of the newborn foals perish in the first few weeks after they're born. Sometimes the cause of death is clear, but that isn't always the case. It's very important for the person attending the mare giving birth that he or she is able to assess as soon as possible whether the foal is healthy or in trouble. Right after it's born the foal must manage to get into the so called chest position all by itself. It must respond to touch and sound. As soon as twenty minutes after the foal is born it must show clear signs of an active suck reflex.

When the foal is only about an hour old it has to make its first attempts to stand up and look for the mare's udder. The foal must take its first sips from the udder within three hours after it's born. This way you can make sure it takes in the mare's colostrum. If the foal does not drink within those three hours after birth some assistance is required. The mare must be milked so the foal can drink the colostrum milk after all. If this doesn't work, you can try and have the foal drink from a bottle. In some cases the veterinarian can administer the colostrum milk through a small nasal

explorer. Don't shake the colostrum of the milk and make sure the foal doesn't choke, as that can be very dangerous.

Energy Boost

It's wonderful to see the colostrum do its job in the foal's young body. The first colostrum gives it a true energy boost. Many foals immediately become much more lively and start running around and sometimes even buck. It's the colostrum that does the trick. It's almost common knowledge that a foal should drink as much colostrum as early and as often as possible. Colostrum is actually a matter of life and death not to be underestimated. In the initial stage the young foals' guts absorb the ready-made antibodies from the colostrum. It's only after twenty hours that the foal's guts lose their ability for this absorption. In general, you could say that a foal needs to have drunk as much as a litre of colostrum within eight hours after it was born. If the mare has lots of milk and (involuntarily) releases precious colostrum prematurely, then the colostrum left might be of inferior quality for the foal to build sufficient resilience from its first sip. It's important to offer these foals additional deep-frozen (and defrosted) colostrum or colostrum from another mare to build its antibodies. Colostrum from another generously producing mare can easily be frozen and kept for some years without loss of quality. Take about half a litre. Heat

it slowly and then give it to the foal. Larger veterinary clinics usually have a high-level antibody serum in stock to come to the rescue of foals in trouble. The vet can administer the serum intravenously but also through the nasal explorer, preferably right after it's born.

When in doubt about the amount of antibodies in the foal's young body, its blood can be tested twelve to sixteen hours after it's born.

Luckily enough most newborn foals do very well. In the unfortunate case of a problematic foal and even loss of the young horse, it's very useful to have an autopsy to establish the cause of death. It's always good to know why you've lost your foal. Perhaps this information can help you next time. This autopsy does not have to be expensive. Many countries have a courier-service.

Premature foal

Foals that are born two to three weeks prior to their date are often insufficiently developed and therefore called premature foals. A premature foal – it's obvious from the term – has not matured enough yet. Its weight at birth is often too low, its fur short and different-looking, almost velvet-like, it doesn't stand very well and it shows signs of deviant behaviour. Sometimes they also produce anomalous sounds. Overdue foals usually don't have problems, but premature foals do. The critical line is at three weeks premature. Foals that are born even sooner than that in general do not survive. A premature foal calls for thorough care. Some bigger veterinary horse clinics such as the Dutch Veterinary Faculty in Utrecht have an intensive care unit dedicated to these and other challenging foals. Here these foals receive the utmost care and attention with every thinkable facility at hand. The treatment often consists of intensive drips, nasal explorer feeding, antibiotics, oxygen therapy and warmth care. All newborn animals need a lot of warmth. It's essential for their survival. A cold and wet surface is no good to lie on even for a full-grown and healthy foal. Newborn foals

spend their time eating and drinking. Due to their relatively large body surface they easily cool off too much in this early stage when lying on a cold floor. These treatments are obviously not simple and rather time and money consuming.

Neonatal

Maladjustment Syndrome

Another type of problem manifests itself in the newborn foal with the so-called Neonatal Maladjustment Syndrome. The name pretty much covers the issue: the foal is insufficiently adapted to life after birth. These foals show anomalous behaviour and often fail to find their mother's udder. They aimlessly

bit older and shows signs of colic. In veterinary terms the period is known as the peri parturient period. Meconium is the regular dark brown fetal feces. A lack of passage can result in a bowel impaction and consequent colic. It is more common in colts than it is in fillies. It is assumed this has to do with the slightly smaller pelvis of the male horse. Treatment involves analgesics, laxatives and enemas. Surgery is occasionally indicated. Never try and remove the meconium from the foal with your own hands. Damage is easily done leaving your foal with an even bigger problem. Always notify the vet and have him examine the foal and treat it before it's too late.

The foal must take its first sips from the udder within three hours after it's born

wander around and in many cases their suckle and swallow reflex are deviant. Scientists are still in the dark as to the causes of this syndrome. Treatment consists of fast and intensive nasal explorer feeding or bottle rearing and other symptom controlling. These foals are often seen suffering from colic making them lie on their backs and turn over a lot. These symptoms can be treated with medication. To only way, if any, to successfully control Neonatal Maladjustment Syndrome is intensive treatment and monitoring in an expert clinic. Because these foals take in either too little colostrum or too late they often show signs of reduced antibodies and an increased risk at secondary infections. This of course again calls for intensive medication and monitoring.

Meconium Impaction

Meconium impaction is usually diagnosed within two days after the foal was born. Sometimes the foal is a

Septic Foal Syndrome

An overall infection in a foal caused by germs such as bacteria and viruses can lead to so-called Septic Foal Syndrome. The foal may already have been infected in his mother womb prior to its birth. Herpes viruses are notorious in this respect. They may also have entered the newborn foal's body after it was born or in the few days after, for example aided by an insufficiently or tardy disinfected bellybutton. Also, sucking on unclean objects such as hands and stables can cause infection. Even after weeks an inflamed and therefore swollen bellybutton can be the cause of Septic Foal Syndrome. Because the germs travel through the foal's entire body and also reach, for example, the young animal's joints, the foal can develop inflammation of the joints. The foal now stands and walks poorly. These overall inflammations of the joints are part of this neonatal disease. Other symptoms include fever, weakness, reduced suck and swallow reflexes,



Soon after it's born the foal must assume this so-called chest position all by itself.

diarrhoea, et cetera. It may take a while before it becomes apparent that the foal is not well. Often, the damage is done already. Only in rare cases the foal stands a chance in an expert clinic with continuous monitoring of the blood values, antibiotics and controlled feeding. Septic foals suffer and often don't survive. In this scenario, colostrum is again essential. Taking in ample colostrum in time can help prevent the Septic Foal Syndrome. These infections usually don't make it when the foal has enough antibodies.

Urinary Bladder Rupture

If the birth of a foal comes with excessive force or speed the foal's urinary bladder may be crushed against the mother's pelvis while it's born. You won't notice the first few days. The foal drinks well at first, but after a few days it's drinking less and less and its belly swells up. The foal wants to drink but doesn't simply because it doesn't feel well. It doesn't clearly pee. You sometimes notice the problem after a few days. The foal then suffers from what is called uroperitoneum, the presence of free urine in the peritoneal cavity.

Affected foals lose their need to suck, become increasingly lethargic and show a painful rounded belly. They prefer lying down and have trouble standing. Foals may also show signs of colic. Sometimes the symptoms are similar to those of meconium impaction. A vet can diagnose the symptoms by scanning or performing a peritoneal puncture. The only treatment possible here is surgery in which the urinary bladder is closed again. The prognosis is fairly good especially when the rupture is discovered fast.

Jaundice

When a foal develops jaundice (Latin: Icterus neonatorum) the antibodies from the mare's colostrum react to the foal's red blood cells. The antibodies start breaking down the red blood cells. This process causes a lot of by-product in the foal's body, which is apparent from the yellowish colouring agent from the gall in the mouth, eyes and other mucous membranes. This massive breakdown causes the foal to weaken and drink less and less. The deviant colour of the mucous membranes calls for immediate action. The problem usually occurs when the

foal is about three days old and isn't always noticed. The more a foal has drunk, the weaker it will get. In theory a first foal can be affected by jaundice but in practice chances increase with every foal a mare has. Blood contact between foal and mare during birth allow the mare to start producing special antibodies. The more blood contact a mare has suffered with her foals in the course of years, the greater the risk. Apart from the mare's the stallion's blood type is also relevant. Vets can test whether or not jaundice is a risk. If so, the foal is separated from the mare after birth instantly and fed with different milk. After a while the foal can return to its mother and drink freely as the special antibodies lose strength. It is wise to use a different stallion when another foal is desired.

Don't Hesitate

A foal is prone to many diseases in its early life. Some of those we have discussed here. A foal is actually under constant attack of many germs, awaiting their chance to break through. Make sure the mare and her foal are kept in the best possible conditions to prevent as much as you can: a clean, non-slippery surface and quiet surroundings to avoid stress in horse and owner. Make sure the mare can have her foal in peace. If you feel the birth doesn't progress as it should, call in veterinary help. The afterbirth should come off quickly and the foal should drink within a few hours. These first few days are essential to the newborn foal's health. Don't hesitate to ask for help. Better safe than sorry. •

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