VETERINARIAN EXPLAINS

Foals

The next generation

Foals are the future. A good basis ensures that they can have a healthy start to their career at a later age. It is essential to make optimal preparations before the birth of a foal.

Before birth
By vaccinating the mare in time before giving birth, there will be sufficient antibodies in the colostrum to protect the foal. In addition, the mare herself will also make antibodies based on the bacteria and viruses that occur in her immediate environment. It is therefore important not to move her shortly before giving birth, but to let the foal be born and grow up in the environment to which the composition of the colostrum is fit. In addition, check the worm status of the mare and deworm her if necessary to avoid contamination from the mare to the foal.

At birth
Normally, the birth of a foal goes smoothly and no help is needed. However, make sure to have supplies available for when it should be necessary, as well as the vet's phone number. After birth, let the foal and mare lie down for as long as possible. During this time, extra blood comes from the placenta to the foal. After birth, the foal should be able to stand up within an hour, drink within two hours and the placenta should come off within three hours. If not, contact your vet. It is very important that the foal gets enough colostrum during the first 24 hours after birth. A foal is born without antibodies and relies on the antibodies in the colostrum to avoid getting sick. Infections can easily occur, especially through the navel. It is therefore important to disinfect it properly after birth.

After birth
For the mare, expelling the placenta quickly is of great importance. If this takes too long, an infection of the uterus can occur, which can cause the mare to become very sick. The mare may be given medication (oxytocin) to help her get rid of the placenta. If this is unsuccessful, the vet can pass water into the placenta through the umbilical vessels, causing the connection to the uterine wall to detach and the placenta to come off. Even if the placenta comes off easily, it is important to check that it is complete and that no pieces have remained in the uterus. Even small pieces can make the mare very sick. To check the placenta, spread it on the ground and reposition the inverted horn. See if both horns are intact and show no tears. While at it, also check for other abnormalities like swelling of the umbilical cord or signs of inflammation. Notify your veterinarian if any abnormalities are found.

Failure of passive transfer
If the foal has not received enough antibodies from the colostrum (failure of passive transfer), this can be determined with a simple test 24 hours after birth. The antibodies can then be supplemented by giving the foal a plasma infusion. This is to prevent neonatal sepsis. This involves bacteria entering through the navel, for example, and spreading through the blood vessels. Ultimately, they can cause the foal to become very ill and get infected joints, but they can also, for example, spread to the eyes and other organs. In the case of joint infections, it is important to act immediately and to rinse and treat the affected joint. When multiple joints are affected, the prognosis is often very poor. In the event of an infection, insufficient antibodies can therefore lead to permanent damage in the joints and/or death of the foal.

Tetanus
Tetanus is a disease in which the foal gets an infection with Clostridium Tetanii. This can also happen through the navel. The toxins produced by these bacteria cause the foal to develop spasms and in many cases die. By vaccinating the mare and ensuring that the foal is getting enough colostrum, this can easily be prevented.

Meconium
During the first 24 hours, the foal will excrete the manure produced during pregnancy. This is called meconium. It is a sticky, almost black substance. Colts in particular may have problems with this as they have a narrower pelvis. If the meconium does not come off impaction can develop, causing the foal to get stomach pain. It will then start to show colic symptoms, such as lying on its back, rolling and it stops suckling. However, it is the action of drinking milk that is important to keep the bowel movement going and to get rid of the impaction. A foal has little options to store energy and will therefore quickly weaken. Frequent straining can also cause a leaking of the navel. When the foal is straining a lot (standing with the tail upward), it is important to give it an enema and, if necessary, a painkiller. This way it can get rid of the meconium and keep drinking.

An abnormal stance usually resolves within four weeks. If not, adequate treatment is indicated to prevent future athletic problems.

A quick veterinary check can help in the early detection of abnormalities.

Ruptured bladder
Colts are also more likely to develop a bladder rupture during birth. The foal is initially fit, but the belly thickens after a few days and the foal can become lethargic or colicky. The foal may occasionally urinate. Diagnosis is made by ultrasound examination of the abdomen. Free fluid between the intestines will be visible. In addition, blood tests are also done to determine the health status of the foal and how high the potassium level in the blood is. This potassium comes from the urine and is absorbed through the abdominal wall instead of excreted in the urine. This causes the potassium level in the blood to become too high and heart arrhythmias can occur. After treatment to correct this, the tear in the bladder wall can then be repaired surgically.

Locomotion; the foundation of a future sport star
As a future athlete it is important that the foal's locomotor system is exposed to movement. After all, only through that load will bones and tendons adapt themselves during growth in such a way that they are optimally adjusted to be able to absorb the forces that arise during movement. Here the foundation is laid for the future sport horse. It is therefore very important to offer young horses sufficient free movement. In addition, it is essential that the nutrition matches the age of the young horse. This contains the building blocks for the growth of the foal into a young sport horse. An optimal de-worming policy prevents the best nutrients from being absorbed by worms and thus not benefiting the foal. Adjust the pasture management to this and have the feces of the mare and foal checked regularly. De-worming policy is highly dependent on the conditions under which mare and foal are kept, the number of worm eggs to which they are exposed and their immune status. It should therefore be customized.

Conformation in the growth phase
Proportional and even load of the joints is dependant on the correct conformation of the legs. Immediately after birth, the foal may have an abnormal conformation. If the foal has a very straight leg conformation and club feet at birth, contact the vet immediately. The development of a normal conformation can in these cases be promoted by means of medication and/or splints. Other conformation abnormalities usually disappear on their own within four weeks after birth. During this period it is important to protect the foal's joints and not to let it walk too much. Movement is good for strengthening the muscles and tendons, but when joints make such an abnormal angle they can be damaged by excessive movement. If after four weeks the abnormal conformation has not disappeared, contact the vet and/or the farrier. By means of trimming, appropriate shoeing (an adhesive shoe) and/or surgical treatment these deformities can be treated. If not, joints, ligaments and tendons are loaded asymmetrically and the horse can develop osteoarthritis or other problems at a later age.

Vaccinations for the foal
When the antibodies that the foal has obtained from the colostrum (the maternal immunity) disappear, the foal will start producing antibodies itself. This production will be stimulated by vaccinating it at an age of around five months. In the Netherlands, foals are regularly vaccinated against influenza and tetanus around this age. Depending on which diseases occur in the area where the foal lives, this can be supplemented with other vaccines.

Optimizing foal health
The management of a foal has a major impact on its health, resilience and durability at a later age. By optimizing preventive measures and intervening quickly when deviations are found, a good foundation can be laid for a career as a sport horse. ■

THE VETERINARIANS


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ABOUT SMDC
Sporthorse Medical Diagnostic Centre (SMDC), based in the Netherlands, is a multidisciplinary centre of excellence where all orthopedic diagnostic and treatment modalities can be utilized in combination with experience, extensive knowledge and individual attention. Dr. Bergman, Dr. van Toor, Dr. Cokelaere, Dr. Hoogelander and Dr. van Veggel dedicate their time to optimize sporthorse performance while considering all factors which might influence it. Their caseload contains horses showing lameness but also includes horses with spine related problems, pre-purchases examinations as well as preventative sporthorse care. www.sporthorsemdc.com