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Every breeding season there are a multitude of articles written focusing on the health and well-being of the foal, but, what about the mare?

As Dr Katelyn McNicol from WestVETS Animal Hospital and Equine Reproduction Centre explains, there are just as many potential health concerns surrounding the mare post-foaling, some of which can be rapidly fatal.

My mare has just foaled, do I need to call a vet?

A thorough examination of your mare should be performed by your vet 12-24 hours after foaling. This is often conducted in combination with the foal check. Many of the issues that will be discussed below can be detected by your veterinarian at this time.

In order to know if you need to call your vet sooner we must first familiarise ourselves with what is normal. The mare will get up soon after birth and should be attentive to the foal. If the mare is aggressive or continually faces up to the foal and will not let the foal beside her to drink, additional help from your vet may be needed. Remember, the foal must ingest an adequate amount of colostrum and a vet must be called immediately. If any signs of colic or depression are shown, again your veterinarian should be called and the mare examined as soon as possible.

Post-foaling emergencies

Retained foetal membranes

A relatively common and potentially deadly occurrence is the retention of some, or all, of the placenta. This is termed retained foetal membranes (RFM). The retained placenta rapidly decomposes which leads to bacterial growth and the production of endotoxins. These are absorbed into the mare’s blood stream and cause endotoxaemia, which in turn causes hypovolaemia (low blood pressure), dullness, organ damage, sepsis, laminitis, and eventually death.

If treated quickly and appropriately, many cases of endotoxaemia can be managed and cured, however the last damage to the lamellae in the feet can mean the death of the horse due to uncontrollable laminitis. Therefore, retained foetal membranes are an emergency and warrant an immediate phone call to your vet.

Once the placenta is passed it is important to keep it in a safe place until your vet arrives for the first foal/mare check. Your vet will be able to examine the placenta to determine if the entire placenta has been passed. This is not always as easy as it sounds as the mare will often trample the placenta causing tearing. If there is any doubt as to the entirety of the placenta your vet can flush the mare’s uterus to determine if there are retained foetal membranes.

Clinical signs of retained foetal membranes can include some of the following:

- A chocolate coloured fetid discharge from the vulva,
- high heart rate (above 40 bpm),
- high respiratory rate (above 20 bpm),
- high temperature (above 38.50°C),
- low grade colic, and
- in advanced cases you may see signs of laminitis.

It is crucial that you do not try to remove the placenta yourself. This can result in tearing of the placenta, leaving behind tightly adhered sections. This will make it more difficult for your vet to resolve the RFM and may protract the treatment time, therefore increasing the risk to your mare. If the placenta is tightly adhered to the horn of the uterus pulling the placenta can cause the tip of the uterus to invert. This is typically painful and can not only cause colic but can lead to compromise of blood flow to the uterus. It can take up to a couple of days for your vet to safely remove a retained placenta and remove any infection from the uterus.

Ruptured uterine artery

The uterine artery supplies the pregnant uterus with the majority of its blood supply. This becomes very large during pregnancy and can be damaged during birth. If the artery ruptures into the abdominal cavity this is typically fatal as the bleeding is uncontrollable. Signs of weakness, pale gums, staggering, and dullness can be a sign of rupture. Often there is little to be done to save the mare.

In some cases the artery can rupture but the bleeding is contained within the broad ligament of the uterus. This allows pressure to build and the bleeding to stop, forming a haematoma. The only external visible sign of this can be marked asymmetry of the vulva with one side noticeably swollen. If this is noted the mare should be kept very calm until the vet arrives. Trauma to the vaginal wall and vulva during birth is very common and can present with very similar signs. (See image of asymmetrical swelling of the vulva, with retained foetal membranes on the next page).

If there are no external signs of rupture, your mare may show signs of colic, pale mucous membranes, and weakness. A clinical exam may allow your vet to determine there has been haemorrhage but sometimes additional diagnostics such as haematology and a rectal examination may be necessary. The mare must be kept confined and kept quiet to reduce the risk of rupturing the broad ligament and bleeding into the abdomen. This form of rupture generally has a good prognosis if the problem is identified.

What about your mare?
Above: Asymmetrical swelling of the vulva with retained foetal membranes.

Other Complications

The remaining complications are typically detected during the vet's visit 12-24 hours post-foaling.

Tears

No matter how big the mare or how small the foal, it is common for tears and bruising to occur in the vestibule, vagina and vulva. Most of this bruising and tearing will be superficial and usually does not require any intervention. There are, however, a few notable exceptions.

If the foal has had any trouble passing through the birthing canal tears can occur in the roof of the vagina and vestibule which can communicate with the rectum, causing a recto-vaginal or recto-vestibular fistula. This will mean that the mare will pass mucus into her vagina. A more severe form of this tear is a third degree perineal laceration where the tear involves the anus and vulva causing one external opening. These are not the emergency situations they appear to be and are typically surgically repaired several weeks later once the swelling has reduced.

Tears extending from the vulva are normally repaired at the foal check. It is vital that if your mare has a caesarean this is opened one month before her expected due date; otherwise tearing will likely occur.

The bruising and small tears caused during foaling can cause a varying degree of discomfort for your mare and this can sometimes affect her willingness to let the foal drink. If your mare is showing reluctance to allow the foal to drink your vet should be called so that the mare can be assessed accurately before anti-inflammatories and analgesics are given.

Metritis

After foaling the mare's uterus begins to shrink and continues to contract to help expel any residual fluid. If the foal is healthy, it is ideal if the mare is left in a paddock so that she may continue to move around in an aid to remove this fluid.

If the mare's uterus is not successful at removing this fluid, or if there has been infection in the uterus/placenta during pregnancy, infection of the uterus can occur. This is termed metritis, and if it is left untreated it can result in similar consequences of a retained placenta.

Some vaginal discharge for 7-10 days post-foaling can be normal, however thick brown/red discharge or thick yellow discharge is not normal and may indicate metritis. If in doubt, it is recommended that you call your vet and describe the discharge to determine if a visit is warranted.

Uterine Rupture

A rare complication is uterine rupture due to the foal’s long legs and the mare’s strong uterine contractions. Uterine rupture allows bacteria and bleeds into the abdomen which will rapidly lead to a septic and unwell horse. This can be difficult to diagnose in its early stages and often requires sampling of the fluid that bathes the abdominal organs (abdominocentesis). Sometimes the uterine tear may not be full thickness and may cause a haematoma in the wall of the uterus. This tends to be painful and will cause your mare to colic. This is as dangerous as a complete tear as these can easily rupture in the following weeks. If your mare becomes dull, depressed, or starts colic ing following foaling your veterinarian should be contacted.

Impaction

Foaling is a stressful time for the mare and can result in increased water loss and decreased water intake, resulting in impaction of faeces in the intestines (constipation). Pain in the area of the vulva and uterus can also make the mare reluctant to push and defecate normally. The mare’s faecal output should be monitored post-foaling.

Other rare complications

There are a few other rare complications that can occur as a result of foaling. The foal’s legs can cause tears ( rents) in the intestinal mesentery without causing rupture of the uterus. These rents can trap small intestines and present as colic.

The mare’s contractions and abdominal muscles are incredibly strong, meaning that prolapses can occur. This can be a prolapse of the rectum, bladder or uterus. This will present as additional tissue protruding from the anus or vulva.

Don’t Panic!

Luckily, most mares foal without complication! The above, although alarming, simply highlights the need for a veterinary exam post-foaling. Arm yourself with knowledge and this will help reduce any anxiety. If you are worried about your mare keep her calm and call your vet to discuss the situation.