

GYMPIE VETERINARY SERVICES

ABN: 16 069 376 370



PREGNANT MARES AND FOALING

Mare owners are always happy to hear that their mare is in foal, but to get a healthy foal on the ground 11 months later requires attention to good mare husbandry. First, however, we need to be sure that she is definitely in foal.

ULTRASOUNDS

With the advent of ultrasound, pregnancy can be detected earlier, as early as 12-14 days. However, there is a significant incidence of pregnancy loss in the first 30 days after conception, and assuming that your mare will maintain her pregnancy based on a single 14 day pregnancy ultrasound may have an unhappy outcome. Every year we see mares that were scanned once at 14 days, thought to be in foal, turn up not in foal several months later- if they had had follow up scans, the pregnancy loss may have been detected in time to return the mare to the stallion, and the management of the mare would have been different.

We recommend repeat ultrasounds at fortnightly intervals till after 45 days pregnancy.

The benefit of ultrasound examination at 14-16 days is so that *twins* (which are more common in Thoroughbreds and Draft breeds, but are still possible in any breed) can be detected early and dealt with at the best time. If twins are detected after 16 days, there is a high risk of losing both embryos when attempting to remove one (depending on where the twins are located).

A follow up ultrasound at between 25 and 30 days will allow us to determine that there is a normal embryo present, with the heartbeat becoming visible after 22 days of pregnancy. However, the pregnancy doesn't "implant" into the wall of the uterus till after 35 days, and this is a very important step in the health of the foal and placenta. It is therefore recommended that at least one ultrasound be performed after 35 days to confirm that everything is still normal.

TRANSPORTING MARES

Travelling mares long distances in early pregnancy may result in pregnancy loss, and in previous studies, it has been found that the highest risk is around the 30-35 day mark, which appears to be a time when blood progesterone levels are lower. After 35 days, the progesterone levels go up, receiving a boost from structures in the placenta called the "endometrial cups". If you must transport a pregnant mare a long distance, try to delay the journey till after 40 days, and break up the journey so that she is not standing in a moving vehicle for more than 2 hours.

LAMENESS/HOOF CARE

Lame mares, either from injuries, or from foot abscesses, have a higher risk of losing pregnancies prior to 35 days, so good attention to hoof care prior to sending your mare to the stallion is extremely important. Any wall cracks, deformities, imbalances or overgrowth should be attended to by an experienced farrier. During pregnancy, any hoof

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abnormalities which might lead to lameness can cause mares to lose condition, and this will affect their foal, so good farrier attention during pregnancy is important.

NUTRITION, WORMING, TEETH

Once your mare is past 45 days, it is important not to just turn her out in a large paddock without paying attention to certain husbandry details.

Mares need to be maintained in good body condition during pregnancy. It pays to familiarize yourself with Condition Scoring so that her condition can be visually monitored during the pregnancy. Go to the following link to learn more:

http://www.horsecouncil.org.au/_upload/files/Condition%20scoring%20Agnote.pdf

You should aim to keep her at CS 2.5-3.5 during the pregnancy. If a mare loses condition, it may cause her back end (vulva and anus) to sink in and predispose her to an infection getting into the cervix and uterus, which can be a cause of abortion. Also, studies have proven that if a mare loses weight prior to foaling, and is in poor condition while feeding the foal, not only does the foal suffer, but the mare will have a higher risk of early embryonic death if she is mated in this condition.

The most nutritional demand on a pregnant mare occurs in the last third or trimester of the pregnancy, which is from 7 months of pregnancy to term. It is during this time that the foal will increase in size the most, and therefore your mare will require more good quality feed during this time.

Mares that conceive before the end of the calendar year will go through their last trimester (last 1/3 of pregnancy) in the winter/spring, and in this area this is the time of poorest pasture growth, as well as the coldest time of year. This would be the time to consider supplementary feeding her, and making sure there is a good balance of nutrients in the diet, especially Calcium/Phosphorus. Any pregnant mare grazing on pastures known to cause Bighead, like Setaria, kikuyu, panic or buffel grass, need to have adequate Calcium and phosphorus in the diet to prevent the foal having deformities or bone abnormalities.

Normal routine worming and dental care should be kept up during pregnancy. Most wormers now are very safe in pregnant mares. It is safer to do dental treatments in early to mid pregnancy than in heavily pregnant mares, but our sedations are extremely safe now and can be used in late pregnant mares if necessary.

VACCINATION

Foals derive their immune system antibodies that will be their only defense in the first 6 weeks of life from the colostrum they suckle in their first 18 hours of life. It is therefore a good idea to vaccinate your mare/s 6-8 weeks prior to their due foaling date to ensure that antibodies against common organisms are circulating in the mares bloods at foaling and therefore get concentrated into the colostrum. See our web article on Vaccination in Horses for a discussion on choices of vaccination.

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ABORTION

Unfortunately, we see a moderate incidence of abortion in mares in this area, most of which remain unexplained. However, there are some common causes which a mare owner can possibly do something to prevent.

The most common cause will be related to poor mare health and condition, which tends to suppress her immune system, at the same time allowing her back end to become sunken in and less able to stop bacteria rich dust entering the vagina, allowing an infection to become established in the cervix and ultimately the placenta.

Another cause which is becoming more concerning is the Processionary Caterpillar induced abortion, Equine Amnionitis and Foetal Loss Syndrome. The following link is a short article which can help explain this syndrome:

<http://www.equivetaustralia.com/horse-talk/equine-amnionitis-foetal-loss.html>

Basically, the Processionary Caterpillar "Ochrogaster lunifer", has been identified as a cause of pregnancy loss after an epidemic of abortions in the Hunter Valley in 2004.

This followed a similar syndrome in Kentucky in 2002.

The caterpillars form nests in native trees, usually wattles and eucalypts, including Mountain Coolibahs, white box, white cedars, and other wattles.

Investigations have found that the fine hairs on the caterpillar, after they are shed and drift in the wind, can be inadvertently eaten by the mare. These hairs can penetrate the bowel, damaging the gut wall, and carrying with them gut bacteria. Some hairs can penetrate the uterus of pregnant mares, causing damage and infecting the placenta with bacteria, causing abortion.

In most experimental studies, abortion occurs within 2 weeks of ingestion, but some have occurred up to 60 days after exposure to the caterpillars.

Experiments have also found that exposure of mares to caterpillars prior to 35 days of pregnancy doesn't cause abortion then, or later in the pregnancy. The implication of this is that, on studs where caterpillars have been known to exist, it would be wise to have early pregnancy diagnosis and sending mares home early, in the pre-placental phase so that exposure to caterpillars at risk periods doesn't occur.

Whatever the cause of abortion, some can be prevented if signs are detected early.

These signs included premature lactation (bagging up/udder development mid pregnancy), and vulval discharge. If these signs occur, an ultrasound and reproductive examination can help determine if abortion is likely, and treatment can be started. Unfortunately some abortions occur without any signs occurring beforehand, which makes starting treatment in time impossible. For this reason, prevention is always the best method.

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Strategies, including ensuring your mare is in the best health during her pregnancy, and is not grazing in areas where caterpillars occur, as well as what has already been discussed above, may reduce the risk of abortion.

We sometimes recommend a caslick surgery for older mares with poor vulval conformations as an abortion prevention.

Also, certain mares require antibiotic and/or hormone treatment throughout her pregnancy to help prevent abortion. The antibiotic treatment is usually given in short 3-4 day bursts once a month during the pregnancy. The hormone altrenogest is also often used, and we have available weekly injections which is often preferred over the daily oral treatment traditionally available.

FOALING

The one certainty about your mare's pregnancy is that it will finish eventually. Exactly when and how is less certain. Some owners try very hard to stay up night after night in the hope of witnessing their mare foaling, and usually end up exhausted and asleep when their mare finally delivers.

If you are determined to be present at your foal's birth, or have reason to be concerned that your mare may have foaling difficulties, it would be wise to have on hand foaling alarms, and possibly another person to help.

Neither is fool proof!

The alarms currently available detect when your mare is lying down, and in late pregnancy that can be often for no other reason than the mare wanting to take the weight off her feet, creating a false alarm. This can be very trying if it happens every night.

Helpers need to be as committed as you, or they may sleep on the job also!!

It would be wise to have in place an action plan and some basic foaling kit.

In your kit you should have: a tail bandage, some antiseptic (ie Betadine solution), a clean bucket, a source of clean water, some clean towels, some sterile lubricant, our phone number in your mobile phone, and some knowledge of what should normally happen during a foaling.

Foalings often happen quickly and "explosively", once the mare reaches the second stage of labour. Usually, 4-5 strong abdominal contractions will have the foal out. If the foal isn't presented normally, the mare can be in trouble quickly.

For this reason, it is unwise to attempt to deliver a foal unless you have lots of experience with deliveries – it would be smarter to phone for help as soon as possible.

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