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### DEMYSTIFYING EQUINE REPRODUCTION- What those terms mean...

1. Your mare was **PG'ed**, can you **PG** your mare before she arrives....

PG stands for prostaglandin F<sub>2α</sub>. This is a drug used to short-cycle the mare's cycle causing her to come into season (oestrus) about 4-6 days later. The normal length of the cycle is on average about 21 days. The mare will only respond to the drug if she has ovulated at least 5 days prior. By administering this drug we can shorten the cycle by about 16 days. This allows us to decrease the time the mare needs to stay in the clinic.

2. Your mare has a **35mm follicle**....

A follicle is the structure on the ovary that contains the egg, it grows about 3mm per day under the influence of hormones produced in the brain. Once the follicle size is greater than about 30-35mm, the mare will start to show behavioural signs of being in season. The follicle will ovulate once it is greater than 40mm. Of course, not all mares read the book and some will ovulate unexpectedly on smaller sized follicles. We tend to inseminate mare once the follicle becomes greater than 35mm and she is showing signs of oestrus.

3. We have given your mare **ovuplant®** or **chorulon®**.....

Both of these drugs allow us to more accurately predict the time of ovulation and thus when to inseminate or breed the mare. These drugs are given once the follicle size is at least 35mm and the mare is showing signs of oestrus. The majority of mares will ovulate between 36-40 hours depending on which drug we use.

4. Your mare has **fluid**.....

Some mares can develop fluid in the uterus before and particularly after insemination. This is detected on ultrasound. The fluid develops as an inflammatory reaction to the semen which is seen as a foreign material to the mare's immune system. There can be an accompanying infection also. Most mares will develop some fluid but are able to get rid of it easily, it is usually mares that are older, have had several foals or have poor conformation that are more likely to develop fluid. We need to get rid of this for the mare to become pregnant. Mares are flushed with polyionic fluids or given drugs that contract the uterus. Mares can be safely treated up to 4 days after ovulation without affecting the pregnancy.

5. Your mare was **flushed**.....

Fluid that develops and can not be resolved with drugs or is associated with infection, is treated by flushing the uterus with polyionic fluids to remove inflammatory products and to mechanically remove pus and infectious organisms. A catheter is placed into the uterus, fluids are flushed in and drained out again. This is repeated until the fluid appears normal. Antibiotics are often placed in the uterus after this process.

6. She was given **oxytocin** or oxy (for short)

Oxytocin is a drug that causes uterine contractions. It is used to help remove fluid that develops in the uterus. It can also be used to help a mare pass the placenta after foaling or induce parturition.

7. Your mare has **twins** and one was squeezed

Large breed mares, older mares and those breed early after parturition are more likely to have twin pregnancies. Twin pregnancies develop from double ovulations and not from a dividing ovum. The mare has a natural mechanism to eliminate one of the twin pregnancies. This is fortunate since twin pregnancies that are allowed to develop do not usually have a good outcome. Mares will either abort in late gestation, deliver dead or weak foals with at least one dying. Twins are detected at the fifteen day pregnancy scan and one of the foetuses is crushed. This does not usually result in the destruction of the other pregnancy. Twins detected later on are more difficult crush and will increase the risk of the other pregnancy being lost.

8. Your mare needs to go on **regumate®**

Regumate® is commercially prepared progesterone- the principal hormone of pregnancy. In the mare, progesterone is produced from a structure on the ovaries early in pregnancy and then by the placenta around day 80 of gestation. If we think the levels of this hormone are not adequate, the mare is placed on Regumate® to provide an exogenous source and therefore maintain the pregnancy.

Regumate® is also used to help synchronise mares and help some mares to start follicular development early in the season.

9. The semen has poor **motility**

One of the indicators of a stallion's fertility is the motility of the semen. Motility is usually directly related to fertility, in other words, a stallion is more fertile if his semen has high motility compared to a stallion with low motility. This relationship is not the only indicator of fertility and is only a guideline. Sperm count and morphology are other parameters that are examined.

10. We have **caslicked** your mare

Caslicking involves stitching the lips of the vulva together to prevent faecal material contamination of the vagina and help prevent ascending infections. Mares that have poor conformation in this area or those that have a history of infections or abortions are likely candidate for a caslick operation. This procedure is common in older mares.