Loch Leven
EQUINE PRACTICE

Hormonal issues in mares

Cyclical changes in reproductive hormone levels can cause altered mood and behaviour in horses as well as humans. Mares come into season every 21 days throughout the spring and summer, they typically show mild changes in behaviour including: increased frequency of urination, 'winking' of the vulva, raising the tail and flirting with other horses.

The severity of these symptoms can be very variable, in some mares their season will pass unnoticed by their owners, and in others the mare may become so moody she is un-rideable. In these severe cases mares may show aggressive behaviour towards people and other horses, become difficult to groom, buck when ridden, become distracted and unresponsive under saddle; ultimately causing poor performance whenever in season. This can become very inconvenient to owners, especially those with a busy competition schedule over the spring and summer.

Treatment options

Changes in management – hormonal behaviour can be more pronounced during the transitional phase between winter and spring, this often settles down after the first few cycles of the year. Young mares can also be prone to suffering from more pronounced symptoms during their first few cycles, it may be an idea to give her a bit of time off to mature before trying any of the other treatment options. Keeping moody mares in a separate field from geldings can often help.

Herbal supplements – there are many options available on the market, although the response to these can be variable, some people have found them to be helpful.

Regumate – a synthetic progesterone liquid given every day in the feed. It is like being on 'the pill', it prevents the mare from coming into season. It is very effective at suppressing hormonal behaviours so can be used as a test to determine whether a mare's behaviour is in fact due to hormones. It can also be used as a longer term treatment but it is expensive. Normal cycling will resume 5-7 days after stopping treatment. It is important to wear gloves when administering Regumate as it can be absorbed through your skin and effect your own cycle.

Ovuplant – an implant which slowly releases hormones which suppress cycling for a variable amount of time. It is not as reliable as Regumate and is expensive but does work well in some mares.

Uterine marble – it is possible to place a sterile glass marble inside the uterus which simulates pregnancy so the mare stops cycling. It has a variable effect and the marbles can fall out; they can also cause uterine infection or scars called adhesions which can reduce the chances of getting the mare in foal in the future. If the mare is to be used for breeding, the marble must be removed, which can sometimes prove pretty tricky!

Overiectomy – surgical removal of the ovaries may sound like a drastic, expensive option but it can be done by laparoscopy (key hole surgery) so it now less invasive and less expensive than previously. It is a permanent solution to hormonal behavioural issues but is obviously irreversible, meaning the mare could never be bred from in the future.

Hormonal abnormalities

If a mare is showing hormonal behaviour all the time, not just every three weeks, she may have a medical condition leading to abnormal levels of sex hormones.

Anovulatory follicle – mares ovulate at the end of their season, ovulation occurs from one or two follicles present on the ovaries. If ovulation fails to occur, the follicle may become very large and form an abnormal structure called an anovulatory follicle. These structures can sometimes release sex hormones causing prolonged seasonal behaviour. An injection of prostaglandin will usually cause these structures to regress and the mare should resume normal cycling.

GCT – a granulosa cell tumour (GCT) is a benign tumour of the ovary, it can release large amount of sex hormones and make mares seem like they are constantly in season, it can also cause mares to become very aggressive and show stallion like behaviour.

PPID – also known as Equine Cushing's Disease, can cause changes in hormone levels. This condition is more common in older mares. It can cause increased seasonal behaviour and can even cause some mares to produce milk. Any older mare producing milk when she does not have a foal should be tested for PPID.

To diagnose these above conditions we can use ultrasound scans of the uterus and ovaries. Anovulatory follicles and GCTs can sometimes look similar on scans so a simple blood test can be used differentiate between the two conditions. GCTs can be treated by surgical removal of the tumour. PPID can be diagnosed using a blood sample and can be treated with a tablet given daily in feed.

If you would like any additional information please call us on 01577 841010.