

Damory Veterinary Clinic

Equine Newsletter



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- An introduction to artificial insemination
- An update on laminitis causes
- Laminitis Awareness Campaign

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Artificial Insemination

At this time of year we often get asked about the options for breeding a foal from a mare. Although just sending her away to stud may seem to be easiest, artificial insemination (AI) is a popular alternative.

AI offers several advantages such as:

- The mare can stay at home.
- A single insemination helps to reduce inflammation of the uterus.
- The process is cleaner than natural cover which helps some problem mares.
- Foreign stallions can be used

A pre-breeding fertility examination helps to identify any problems before starting an AI programme. A swab is usually taken to check for any underlying infections.

Once the mare is in season an ultrasound scanner is used to measure the size of follicles on her ovaries. This is used to estimate when she

will ovulate and release the egg. Drugs are usually used to make this more predictable.

The insemination of semen is timed around ovulation. For chilled AI we usually inseminate her the day before she ovulates but for frozen AI it is within six hours of ovulation.



An ultrasound scan the day after insemination will detect problems such as inflammation/infection. This can then be treated early if present.

15 days after the day of ovulation, the mare is scanned to see if she is pregnant. At this stage all that can be seen is a black 'bubble' of fluid.

15 day scan:



About a week later an embryo with a beating heart can be seen (arrow).

22 day scan:



Frozen semen can be used and offers the advantage that a stallion from anywhere in the world can be used on your mare. However the pregnancy rate is lower when using frozen rather than chilled semen in an AI programme (40% compared to 60%).

Please note: It is not possible to breed a thoroughbred for racing by AI.



Metabolic Syndrome and Laminitis



It is currently thought that over 90% of horses or ponies suffer from laminitis because of an underlying hormonal problem. It is not simply eating too much grass.

Cushing's disease is one such hormonal problem that older equines develop. A simple blood test will identify the disease. Treatment is available with daily tablet medication.



The other hormonal problem which is very common in ponies is Metabolic Syndrome (MS).

Ponies with MS are genetically programmed to be good doers. As a

result they tend to become overweight. The fat is typically laid down on the crest and behind the shoulders. Crucially this fat is not just an energy store but produces a variety of hormones.

These chemicals render the pony up to 10 times more likely to suffer from laminitis.

Also the chemicals interfere with the body's production of insulin. A simple blood test can be performed after the horse has been starved for six hours. A high insulin level at this point is usually a sign of MS and hence this pony is at increased risk of laminitis.

Several things can be done to manage MS:

- Low energy diet to reduce the fat stores: Hay and Hi-fi Lite
- Exercise will lose weight. It will also improve the insulin metabolism.
- Metformin is a medication that will improve insulin metabolism.
- Supplements are also available. We recommend Formula for Feet which contains many useful trace elements
- Some ponies with severe MS must be removed from the pasture. One solution is using a school and feeding hay in small quantities.

Laminitis Awareness Campaign



Until the end of June there is a campaign running to increase the awareness of laminitis and the true underlying causes.

Owners are being encouraged to have their horses tested for potential underlying hormonal diseases.



We now know that Cushings disease doesn't just occur in elderly

ponies. Any mature horse that has had laminitis can be screened for the disease. Boehringer Ingleheim is offering vouchers for a free laboratory test for Cushings disease. Any horse that is not on treatment currently can be tested.

More information is available at the website:

www.talkaboutlaminitis.co.uk

There is a page where you can download a voucher for a free laboratory test for Cushings disease.

The website also has a wealth of information about laminitis and useful photographs.

Remember: 90% of cases of laminitis are not simply the result of eating too much grass.