



Farm news

Dairy Cow Lameness *what's the cost?*

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What do you think is the biggest cause of economic loss when a dairy cow goes lame? Have you ever hesitated to call us out to treat lameness in your dairy herd because you were worried about the cost of treatment? If so, we have some good news. Studies have shown that the cost of treatment accounts for just 10% of the economic losses incurred by a lame cow and veterinary visits for only 1%². So, if cost is holding you back, please don't hesitate to contact us now!

If you are thinking of enhancing your lameness management strategy or looking to develop a long-term plan that strips out unnecessary cost on your dairy farm, then read on...

What farmers say about the cost of lameness in dairy cows

When asked to attribute costs incurred because of lame dairy cows, most farmers told researchers that they perceived the biggest costs to be:

- 1) a loss of milk production, and
- 2) treating lame cows¹.

Interestingly, these two reasons were mentioned almost twice as often as the next most popular answer, but when the lameness data was analysed, researchers came up with some pretty surprising findings.

Contrary to farmer perceptions, the biggest single source of economic loss associated with lame dairy cattle is infertility² – including a 3.5 times rise in the number of cows showing delayed cyclicity, leading to an increase in the calving-to-conception interval of up to 50 days³.

Infertility accounts for almost 40% of the economic losses associated with lameness – a significant and underestimated financial impact. Other significant contributors to costs included increased cull rates and reduced milk yield, accounting for around 25% each – with increased farm labour, vet costs and treatment together accounting for the remainder². This is not what most of us expected!

How dairy cow lameness causes a fall in fertility

It's easy to understand how lameness can cause a drop in milk production (by 270-850 kg per lactation³). Pain and discomfort can quickly cause a change in feeding patterns, including an impaired ability to compete for space at the food or water trough and a reduced desire to stand for long periods, preventing optimal food intake.

For more information call our practice on **01332 294929** or email farmandequine@scarsdalevets.com

But why should fertility be affected by lameness?

There are several reasons⁴:

- Reduced feed intake, resulting in negative energy balance. The loss of weight and condition can start even before lameness is observed.
- Behaviour – it may be more difficult to identify the signs of oestrus in lame cows and these signs may be less obvious, or apparent for shorter periods.
- Stress can have an adverse effect on ovarian function and follicular development, with a potential delay in cycling or in the timing of ovulation.
- Inflammation can be associated with an increase in the service to conception interval. This may be caused by an increased production of prostaglandin (PGF^{2a}) – a chemical messenger that is important in the regulation of the cow's oestrus cycle⁵. Chronic inflammatory changes in the tissues of the foot can take some time to treat, so these effects can be longer lasting.

All these factors combine, meaning the effects of lameness on fertility can be quite marked:

- Cows are 9 times more likely to need an increased number of services compared to the herd average⁵
- There is a 3.5 times increased risk of delayed cyclicity⁴
- The calving to conception interval can increase by up to 50 days⁴

Is there something more you could be doing to manage lameness in your herd?

Our practice is taking part in CEVA's 'Wave Goodbye to Pain' initiative by encouraging early lameness detection, regular mobility scoring and prompt treatment.

To find out more please call our practice on **01332 294929**.

References

1. Leach K.A. et al. 2010. Working towards reduction in cattle lameness: 1. Understanding the barriers to lameness control on dairy farms. Res. Vet. Sci. 89: 311-317.
2. Willshire J.A. & Bell N.J. 2009. An economic review of cattle lameness. Cattle Practice. 17(2): 136-141.
3. Huxley J.N. 2013. Impact of lameness and claw lesions in cows on health and production Livestock Science. 156: 64-70.
4. Huxley – Are lameness and infertility in dairy cows linked? Cattle practice 2009 Vol 17; 13- 15
5. <https://www.nadis.org.uk/disease-a-z/cattle/fertility-in-dairy-herds-advanced/part-5-the-impact-of-mastitis-and-lameness-on-fertility/>

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Hap-PEA Days!

Charlie Mays BVetMed MRCVS

A Case Study of a Teat Granuloma, more commonly known as...a Teat Pea!

After a routine it is common for us to see a couple of cows that may be under the weather for one reason or another, and today was no different. We stopped to look at a cow with a bad quarter that was swollen and sore. When a cluster was applied the ACR just knocked it off, and when hand stripped you could feel a hard lump within the teat and no milk could be stripped. Understandably she was not very amenable!

The cause of teat granulomas is debated, but they are generally accepted to be associated with chronic inflammation. Here the teat pea was fairly fixed in the teat canal, but sometimes they can be movable and even manually stripped out. However, in this case, she was too painful and the pea too large and fixed to continue to milk. As you can see from the picture – she was quite swollen!

This left us with limited options but essentially, we either needed to remove the pea, or the teat!

Local anaesthetic was used to ring block the teat base and was also infused up the teat canal. Using the slightly barbaric looking Hudson teat spiral, inserted higher than the level of the blockage, the canal was cleared and **OH THE SATISFACTION!**

After plenty of free-flowing mastitis milk and subsequent stripping out the pressure release must have been such a relief.

Due to the trauma to the teat canal and sphincter from the removal of the granuloma (and following clots!) further pain relief was advised as the local would soon wear off. She is also at high risk of subsequent mastitis so will need further stripping out and some tubes.

Best case scenario is that she manages to get over her mastitis, has no recurrence and can remain milking on all 4! However, the teat may also have to be dried off once the mastitis has cleared. If this is the case, the other 3 teats will produce considerably more than 75% of the previous milk yield due to increased blood flow to the remaining milking quarters!



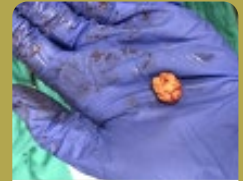
Hudson teat spiral



Swollen teat



Free-flowing mastitis milk



The Teat Pea

For more information or to arrange an emergency visit from one a member of our Farm Team, please call 01332 294929.



Keep Enzootic Abortion out of your Flock

Pablo Sancho Ros MRCVS

What is enzootic abortion?

Abortion continues to be a major worry during the lambing season. There are many causes, but the most common is enzootic abortion of ewes (EAE), which is the result of infection by the bacteria *Chlamydia abortus*. Around half of the 400,000 infectious abortions in sheep each year are estimated to be from EAE. Typical abortion storms average 13% losses, but figures can reach 50%.

What does it do?

EAE causes abortion in late pregnancy or the birth of very weak lambs. The infected afterbirth and vaginal discharges are highly contagious and spread the infection very rapidly round the rest of the flock. The bacteria can remain in the environment for around six weeks. If ewes are infected when they are less than 6 weeks away from their due date, or after lambing, the infection lies dormant but re-emerges in the next pregnancy, causing abortion the following year. Ewes are often well in themselves at the time of abortion and will develop an immunity to it in the future.

How does infection happen?

The major reason for infection is simply that many sheep are not vaccinated. If your flock is genuinely closed and EAE-free, this may be justified. However, there is still a biosecurity risk from animals transferring infected material from neighbouring farms. Having the odd abortion is often accepted by shepherds, but if 2-3% of the flock are aborting due to EAE it is likely that the problem will escalate in subsequent years. When you buy in replacement stock you can't guarantee their disease status unless they are blood tested, but the test can't distinguish between vaccinated and infected animals. The safest bet is to buy from a reputable source and, unless proof of vaccination is available, immediately have new stock vaccinated.

How can I stop the spread of infection?

Control measures have to be put into place immediately in the face of an EAE outbreak. Post mortems of aborted lambs and their placentas are vital to get a definitive diagnosis. Aborted ewes need to be isolated. Afterbirths and bedding they have been in contact with must be removed and destroyed, and the area disinfected thoroughly. Treatment of ewes with a long-acting oxytetracycline in the face of an outbreak can help reduce the incidence of abortion but this will not reverse any damage already done in the uterus. It may delay the abortion until the ewe is nearer term, able to produce more milk and can foster a lamb, but any lambs reared on a ewe that has aborted must not be kept as replacements.

How can I avoid the problem in the first place?

Prevention is by far the most effective way to control enzootic abortion and a specific vaccination is widely available. It cannot be given to ewes during pregnancy, so the usual protocol is for sheep to be vaccinated one or two months prior to tupping, which needs to be planned during the summer. Lambs can actually be vaccinated from five months of age, which has the advantage of reducing the risk of disease to followers over the spring and summer months. It also means you will have one less job to deal with before the tups go in during the autumn.

The cost of vaccination with live vaccines is offset by the protection, which in many flocks is a one-off cost per ewe. Saving just 14 abortions in 500 ewes can make vaccination economically viable. It is recommended that the whole flock should be vaccinated in the first year and all replacement stock in subsequent years.

Even if there are no signs of abortion in your flock you could still be at risk. Ceva Animal Health, manufacturers of the Ceva *Chlamydia EAE* vaccine, are running Assure Ewe, a subsidised enzootic abortion blood testing programme which allows you to monitor and prevent enzootic abortion in your flock whether you've experienced abortions or not. Scarsdale would like to support you in controlling abortion on your farm.

For further information and to find out more, please call our practice on 01332 294929

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