



## Anti-inflammatory pain relief for lame cows, for better cure rates and better welfare

Over the past few years, a lot of research has demonstrated the beneficial effects of anti-inflammatory drugs (“NSAIDs”, e.g. Metacam, Ketofen or the new formulation Dinalgen) to treat lame cows with claw horn lesions: sole ulcer, sole haemorrhage and white line disease. These drugs have both anti-inflammatory and pain relieving effects, and they improve cure rates for claw horn lesions when given in addition to a curative trim and block. Recent work additionally suggests that anti-inflammatory pain relief should be given to lame cows immediately prior to trimming, in order to give the drugs the best chance to work and to optimise welfare.

NSAIDs are most effective when treatment is given early in the lameness process, and the best approach for resolution of lameness revolves around the mantra “early detection and effective treatment”. I.e. detecting lameness early, then treating it as soon as possible and as well as possible will give the best chance of success.

Treating these lesions can also be painful, yet treatment is necessary to aid cure. A new

study has demonstrated that the pain and stress involved in treating lame cows is reduced by giving anti-inflammatory drugs prior to treatment. In the study, lame cows either received Ketofen intramuscularly 15 minutes prior to treatment with a trim and block, or did not receive it prior to treatment. The study found that blood cortisol – an indicator of pain and stress – was lower immediately after treatment in cows that had received Ketofen.



Ketofen and the new product Dinalgen contain the same drug, and Synergy has recently switched to using Dinalgen. Both have no milk withdrawal. Dinalgen is given at a dose of 2ml per 100kg intramuscularly, and can be given as a one off dose or once daily for up to three days.

Our Vet-Techs see a lot of claw horn lesions and are often the people treating lame cows.

### October 2017

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Since a newly lame cow has the best chance of curing, before she becomes chronically lame, we want to do everything possible to cure her at the first time she is presented to the trimmer. Vet-Techs cannot prescribe Dinalgen, Ketofen or Metacam, but they can be dispensed to farms through the ledger system and administered at the farmer’s discretion.

Based on a large and growing amount of research evidence, we strongly recommend that if you’re putting lame cows up for treatment by our Vet-Techs or treating lame cows yourselves, you also treat these cows with anti-inflammatory pain relief immediately before trimming. Detecting lame cows early and treating immediately – including giving pain relief – is the best approach for resolving lameness and is best for welfare.



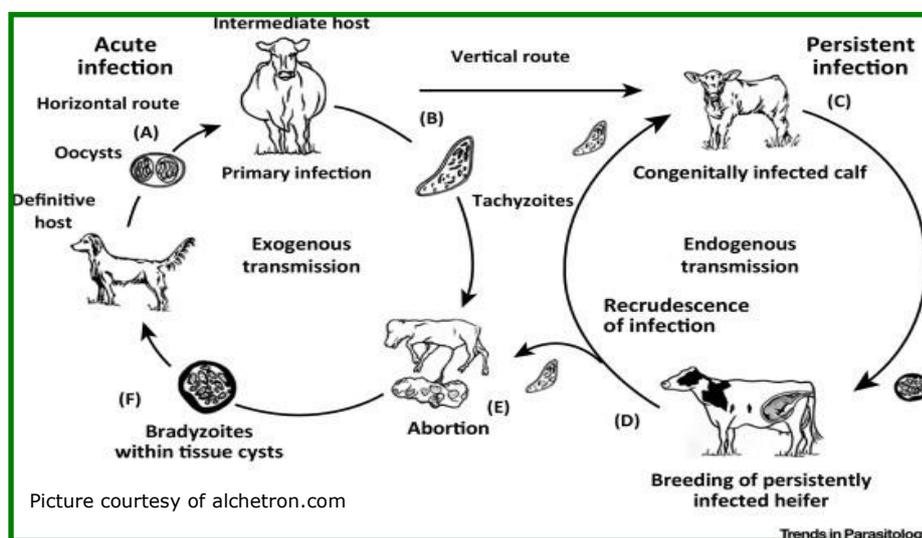
Reuben Newsome

## Neospora

Many farms are affected by neospora abortions (estimated 50% of herds and the most common cause of abortion in cattle) and the most common cause of abortion in cattle) and there is still much confusion out there amongst the veterinary and farming community about the disease and where it is coming from. Neosporosis is caused by a protozoan organism similar to coccidia, cryptosporidia and toxoplasma and is a relatively 'new' disease having only been recognised in dogs since the 1980's and cattle in the 1990's, so there is still much to be learned.

The worst outbreaks occur when a naïve group of pregnant animals are exposed to the organism, this results in an 'abortion storm' with up to 30% of cattle aborting. Often these animals will develop protective antibodies, but will continue to be infected with Neospora as there are two stages to infection:-

- **Tachyzoite** – with rapid replication and cell invasion, these predominantly invade the placenta and foetus. If a cow is more than 3 months in calf this can lead to abortion. If infected during late gestation this may produce a stillborn calf, one with neurological deficits or the calf may appear normal.
- **Bradyzoite** – These form from tachyzoites in response to the immune system and are the protozoa's means of hiding. These will persist within the majority of cows that have been infected and any calves born alive following dam infection. At a point of immune suppression e.g. pregnancy, these bradyzoites convert back to tachyzoites, potentially causing another abortion depending on the level of immunity retained by the cow. Immunity will be better in the cow infected as an adult (estimated >5% of cows will repeat abortion) but worse in the heifer infected in utero.



For a naïve herd or one with a low level of infection, the main concern is an abortion storm after groups of animals are exposed to contaminated pasture, feed or water. A farm that is already infected needs to prevent new cases by preventing contamination, but must also identify and manage infected animals to prevent vertical transmission from cow to calf. It may be surprising the number of cows that are infected, but have not aborted.

### Where does this disease come from?

Currently the known routes for transmission are:

**Infected cattle** - Most Important. Neospora is very effective at passing disease vertically (cow to calf) over several lactations. There is no current treatment for the disease and vaccines used in other countries are not seen to be very effective.

**Infected dogs** - Dogs ingest either infected placenta or are fed infected carcasses and propagate the disease by depositing infected faeces on pasture or feed stores, or in water courses. The infective cysts can survive for 6 months in the environment, however a dog will only shed cysts in its faeces for 3-9 days and will then be immune for life. There is no medication that can be given to dogs to prevent infection.

There is no evidence to support a wildlife transmission route (including foxes) although these are often cited, (including recently in the Farmers

Weekly) as the cause of infection. Less than 5% of UK foxes have been exposed to Neospora and no naive foxes have successfully been infected to reproduce shedding as seen in the dog. It doesn't mean that foxes, badgers, mink, rabbits etc can't be intermediate hosts (like cattle) if they were eaten by dogs, so dispose of any carrion effectively. This risk however is small in comparison to the cow to calf route.

### What should you do?

**Naive herds** – Avoid canine faecal contamination of feed, pasture and water. Check for Neospora in purchased cows. Sample every abortion within the herd.

**Infected herds** – Test for infection within the herd using bulk milk or blood samples. All infected cows should be bred to beef or culled. Trace the lineage of infected cows. It may be necessary to sample all newborn calves as a management tool; infected calves identify infection of the cow.

The cost of this disease is expected to be £3000/120 cow dairy unit. However this does not include the ongoing management of the disease or attempts to remove the disease from the farm. It therefore makes economic sense to try and prevent this disease affecting your herd. Talk to your routine vet if you have concerns or would like more information.

Gareth Foden



## Interesting Case

At a recent routine visit I identified a number of cows (when trying to retract the uterus for examination) with adhesions between the uterus and other structures in the abdomen. I also found a couple of cows with abscesses in the abdomen with the uterus tightly attached.

It is likely that these findings are a result of metritis occurring in the days and weeks after calving. All producers will be familiar with metritis. It has a characteristic putrid smell – a mark of the anaerobic bacteria involved. Metritis is often precipitated by retained foetal membranes but not always. Metritis is defined as infection in the uterus that involves more layers

of the uterus than just the internal lining. There are 3 layers to the uterus. The internal lining (endometrium), the muscular layer (myometrium) and the thin lining of fibrous tissue that it is contained within in the abdomen. It is thought that coliform bacteria (bacteria commonly found in faeces) are the original invaders and anaerobic bacteria thrive in the low oxygen environment.

Peritonitis can result when all three layers of the uterus are penetrated by the bacteria and peritonitis results. This may cause the death of a cow in severe cases. However, treatment with antibiotics often serves to enable the cow to contain the infection.

## Peritonitis – an unwanted finding at a routine

Nevertheless, adhesions and abscesses can leave a cow under threat of further peritonitis later on and infertility.

To prevent this happening, early identification and treatment of metritis is important. Post calving checks 5-7 days after calving can pick this up. Temperature monitoring can also pick up early infection and there is potential for technology to assist to this end. Talk to your routine vet about how you might detect and treat metritis early to prevent it causing your cows to leave the herd.



Graeme McPherson

## Using the Rollover Crush

When I first started at Synergy in 2013, I was asked if I could work with the rollover crush. It was very different to the common upright crush I was used to, as the foot angle is very different and you trim from the side.

I agreed to use the rollover and built up a few clients for it. There were a few teething issues, but we soon put them right!

- ◆ Originally, when the cow started to roll over there was too much room for her to kick around as it only had a belly band - nothing to hold the feet or legs. To correct this we had the crush converted to a squeeze crush and put thick matting in to make it more comfortable for the cow. This conversion has made the crush safer for the trimmer and more comfortable for the cow so they are less likely to kick.

- ◆ Control of the crush - the trimmer had to stand at the side of the crush to operate it which deterred cows from coming in. To rectify this problem we had a remote system fixed to the crush. This allows the trimmer to be behind the cow to encourage the cow into the crush and operate the crush from any position.

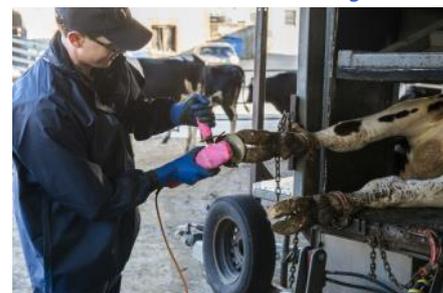
### The main benefits of the rollover are:

- ◆ It is battery operated so it can be used anywhere.
- ◆ It has an awning so it can be used in light rain.
- ◆ It's quick to set up.
- ◆ Cows don't move around or go down in the crush.
- ◆ It is quick for routine trimming as all four feet are in front of the trimmer and are checked.

It is charged out on a per hour basis (although can be per animal). The crush is out a lot of the time now and the clients

using it love it! Our new vet tech, Deen Taylor has been coming out with me and is also keen to use it.

Daryl Foot



### Cow Mobility Scoring

A reminder to clients that we have vet technicians who are officially registered mobility scorers who can help fulfill the milk contract requirements for mobility scoring their herds. This may be especially useful for new Morrisons/Arla contract farms. Please phone Dave Frecknall or Dave Phillips to discuss options for a cost effective solution.

*More on milk contract requirements next month*

## Staff News



### Meet the Team

Julian is our Transport and Facilities Manager and as well as ensuring our premises are in tip top condition he also keeps our 30+ fleet of vehicles on the road! He is also the roadie for our show stands, and can be seen out on the road as a Medicines Delivery Driver.

Welcome to baby Toby Powell-Jackson and congratulations to Ed and Polly.

Congratulations to **Alice Geddes** our Pharmacy Manager on achieving her Masters in Veterinary Pharmacy and **Lucy Wilkins** from our Vet Tech team on gaining her honours degree in Farm Management.

We sadly have to say a very fond farewell to **Sarah Wilton** as she says Au Revoir to Blighty and retires gracefully across the Channel!

Sarah has been a very loyal and extremely valued member of the Synergy Team since joining us back in 2010. She has been our Dairy Hygiene specialist and has been responsible for ensuring that we provided the right advice and right products at the right times. Always bubbly and always prepared to go out of her way she will be sorely missed by clients and staff alike.

I am sure you will join us in wishing her and Darrel well on their new adventure in France! Relaxing days and the odd vin rouge - sounds fantastic!

# News from our Rounds

## East

### Andrew Davies

It was great to meet up with lots of clients at the various shows over the summer.



Dorset County was certainly a weekend of two halves with a glorious summer day on the Saturday and a pretty damp Sunday! Great to chat and enjoy a cracking Ploughmans (Great cheese Tom Foot - ) and a cool beverage!

There was certainly a lot of positivity around and encouraging to see the numbers of livestock entries and a lot of youthful as well as more mature stockmen and women! Good to see lots of local Prize winners and Congratulations to all of them.

I have been carrying out herd health visits on our Buitelaar calf rearing units around the country recently and the common key issues are as always:

Ensure colostrum immunity from source farm. Insist on good colostrum protocols being in place for adequate absorption of adequate volumes of quality colostrum early enough.

Early detection of clinical signs is crucial including identifying and grouping smaller or more vulnerable calves. The Wisconsin Scoring system is a very useful tool to aid with this.

Good ventilation through well designed and well maintained buildings essential. Always worthwhile having an independent ventilation assessment from our Youngstock team.

Looking forward to the Farmers Weekly awards at the beginning of this month where we have two clients in the Finals. Good luck to Gary Hawker and Scott Bagwell.

## North

### Graeme McPherson

September saw the departure of Tom Cook from the Synergy North Team to



concentrate on the family farm business. Tom will be a much missed member of the team and I am sure our clients will agree he was a great asset to the team. Tom is an extremely likable and reliable bloke and accomplished vet. But he also brought to the team a farmers perspective on matters that was always welcome in team discussions.

We have employed Ben Pullen to replace Tom who is a very experienced farm animal vet and we welcome him to the team.

Farms in the South of the Practice are seeing a lot of 'red water' at the moment. This is a tick borne blood parasite that causes red blood cells (the cells that carry oxygen around the body) to die. This causes the haemoglobin (the red component of red blood cells) to be released into the blood and subsequently find its way into the urine – hence the 'Red Water' name. Historically this has not been a condition seen in the Northern part of the practice. However, I have had to treat a case near Fivehead so farmers need to be aware that it is in the area and to watch for the tell-tale blood-red urine that is synonymous with the disease.

We are fast approaching the time for turn-in for many clients and that will precipitate much activity on the TB testing front. Remember to book in your pre-movement tests as early as possible to give us the best chance of doing the test at a time convenient to you.

## South

### Alasdair Moffett

Good to see the maize tractors and trailers beginning to be out and



about. I have only seen one lot of machinery needing to be pulled out of a field near Axminster so far...

The change in temperature has brought the first pneumonia issues. We have already had several confirmed cases of IBR, with more and more farms choosing to vaccinate cattle pre housing to see them through the peak respiratory disease season. This not only reduces the number of clinical cases, but also the severity and the chance of carrier animals being present in the herd.



One case of interest (not sure the farmer saw it that way) this week, was a case of acorn poisoning. One of a group of Blue steers, all growing well, must have taken a particular liking to the acorns that were bouncing of the shed roof and into the loafing space of the pen; despite the animals being on ad lib feed. The green acorns seems to be particularly poisonous, and it results in a severe belly ache and if severe (as in this case) kidney failure.

Join us at  
**AgriFest South West**  
November 8th  
in Exeter



## EVENTS

0-6 Youngstock  
Workshop

**Combating  
Calf Scour**

Thurs 12th October



**2 Day Foot  
Trimming**  
19th & 20th  
October

**Cattle Lameness  
ACADEMY**

**Lamb Loss Meetings**

12th Dec 7.30pm - The Royal Oak, Bere Regis  
13th Dec 7.30pm—Ridgeway Hotel, Axminster  
14th Dec 7.30pm—The Rose & Crown, East Lambrook

**Herd Health and Fertility**

Thursday 2nd November At Evershot

Visit our website for further details or email [courses@synergyfarmhealth.com](mailto:courses@synergyfarmhealth.com)

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