Lungworm

Lungworm, Husk or Parasitic Bronchitis is caused by the worm Dictyocaulus vivaparous.

The life cycle is as follows

- Adult worms inhabit the lungs and lay eggs.
- Eggs are coughed up and swallowed.
- As they pass through the gastrointestinal tract the eggs become larvae.
- Larvae are passed in the faeces.
- Larvae develop further on the pasture (Takes a minimum of 7 days even with ideal warmth and humidity).
- Infective larvae are consumed with herbage (moves up blade with moisture).
- Infective larvae penetrate the intestinal mucosa and migrate through the body via the blood to the lungs.
- Adult lungworm develop fully in the lungs.

Lungworm larvae begin to penetrate the air sacs of the lungs 10-15 days after being eaten. Symptoms are first seen at this stage.

Clinical Signs tend to be seen as – Weight Loss > Fast Breathing > Forced, grunting breathing > Coughing > Death (Can happen before any coughing is heard).

Usually disease is seen in calves at their first season at grass, although second-year heifers or even adult cows, can be affected following a heavy larval challenge. We tend to see outbreaks from mid July till October, with groups of calves coughing or rapidly breathing when you go to move them. Infected animals can have a raised temperature (Over 39°C or 103°F), tend to be reluctant to move and later on may stand with their mouths open and backs arched. It is obvious they are struggling to get enough air. Death can occur 2 weeks after exposure to heavily infected pasture.

A complication of diagnosis for us is that because there can be disease once the worms penetrate the lungs, before they are producing eggs, there may be no eggs in the dung at this early stage (15-20 days after infection). We occasionally see a similar presentation in adult dairy cows, where they have been exposed to a heavy challenge.

They cough badly, making milking difficulty but never develop larvae in their dung as the cow’s immunity prevents the worms reproducing. The quickest approach with these may be to dose the cattle with wormer and wait for a response but a blood test is possible for definitive diagnosis.

Treatment

Remove calves from infected pasture.

Dose with a suitable anthelmintic (All work well, but injectables may give a quicker response).

Beware this can cause death of the worms in the lungs, and treatment could lead to a pneumonia in some calves.

Severely affected calves are unlikely to ever reach mature bodyweight and will have extensive scarring of the lung tissue.

Antibiotics and NSAIDS (Metacam/Allevenix/Ketofen) maybe indicated in animals with a secondary pneumonia depending on veterinary advice.

Alasdair Moffett
Digital Dermatitis (DD) is widespread in the UK dairy industry causing economic losses through reduced milk production and poor fertility. DD is a bacterial infection of the tissue surrounding the interdigital area of the foot, causing severe discomfort and lameness. DD can also result in non-healing sole ulcers, white line lesions and necrotic toes. The bacteria has the ability to survive in the environment, and therefore good slurry management is fundamental in the control of this disease. The prevalence of DD is much lower in herds that scrape up more often. Additionally, improving cow comfort through correct cubicle size and appropriate stocking density will reduce standing times, and therefore time spent in passageways where slurry accumulates.

Having problems with non-healing sole ulcers, white line lesions or necrotic toes?

Look into your DD control!

Regular hoof trimming reduces the prevalence of digital dermatitis on farms for several reasons: The lesions are more likely to be identified at an early stage and treated appropriately, and regular hoof trimming results in better hoof conformation which improves slurry clearance from in between the claws. Build-up of slurry in between the claws provides the perfect environment for bacterial survival. DD bacteria also have the ability to persist on hoof trimming equipment and, therefore, disinfection of hoof trimming equipment (in an iodine solution or peracetic acid between animals and farms) is an essential control measure.

When buying in cattle, absence of DD lesions does not necessarily mean “free of disease”. Make sure when purchasing cattle, you know the status of DD in their herd, otherwise you risk bringing the disease onto your farm! Just because you have DD doesn’t mean you can’t buy in another, more severe strain!

### THREE IMPORTANT FACTORS FOR SUCCESS:

- Good Biosecurity
- Early detection and treatment of cases
- Control and prevention that incorporates regular footbathing

#### Treatment

The best treatment is early treatment, so be vigilant with your DD monitoring to get on top of the disease and reduce lameness in your herd.

Topical oxytetracycline (blue spray) is still considered to be the most effective treatment, when applied for THREE CONSECUTIVE DAYS. However, non-antibiotic alternatives should be encouraged where possible to avoid unnecessary use of antibiotics.

#### Footbathing

Routine footbathing is the best form of CONTROL and with concurrent treatment of individual cases, you will see much improvement in DD amongst your herd.

Formalin and copper sulphate are the most commonly used solutions. Formalin footbathing may be disappointing if not carried out regularly enough, which necessitates a strict protocol to be adhered to. Copper sulphate, although more expensive, has been shown to be just as effective when adopting a less frequent regime compared to daily formalin footbaths.

Formalin is a known carcinogen and copper sulphate has adverse environmental impacts, so there is huge pressure to reduce their use and try alternative solutions. Recently, acidification of copper sulphate has been recommended which decreases the amount of copper sulphate needed. Alternative products are also available; however, there is very little evidence to show their effectiveness.

Don’t forget to footbath your youngstock and dry cows – these are an important reservoir of infection!

#### Footbath design

The optimal size of a footbath should be 3.7m L, 0.5m W and 0.28m D which allows for both feet to be immersed twice in the solution and good cow flow. Solution depth should be at least 10cm when the last cow passes through. Often, the limiting factor in success with footbathing is the time and disturbance to cow flow: perseverance and increasing the frequency of footbathing will improve cow flow as the cows become used to it. You should be able to drain and clean your footbath easily. Make your set up easy to use!

For information on footbathing protocols check out DairyCo’s Footbathing and Lameness pamphlet via their website.

#### Early and effective treatment of individuals is paramount!

#### The future for DD?

Previous vaccinations developed for DD have not been efficacious and it is unlikely that a vaccine will become available in the near future. There have been studies into the genetic heritability of DD, which have given promising results suggesting there may be potential to breed selectively for cows that are at lower risk of contracting DD.

Get in touch for advice on how to improve Digital Dermatitis control in your herd.
Interesting Cases

More a round up of clinical cases rather than a specific case this month. On the rounds in the last 4 weeks I have seen –

Coccidia in 14 week old calves that stopped their Deccox treated feed 10-15 days prior. This shows the importance ofstocking density/ pen cleaning and disinfection and that even with Deccox the calves will still be exposed to low levels of coccidia that can quickly multiply. (For every one cocci oocyst in the mouth end, one million oocysts are produced out the other end!) The idea of a preventative Deccox dose is to allow the calves’ immunity to develop to cocci without developing clinical signs. Only at 6 months do we reckon a calf’s immunity is fully developed.

On another farm there has been a fatal and rapid bloat occurring in 4-5 month old calves. We have provisionally diagnosed this as an acidosis resulting from the too rapid breakdown of starter pellets, (These were the only size of pellets the farm could obtain with Deccox treatment, but were too rapidly eaten by calves of this age. Cocci is classically seen in animals of age 3 weeks to 3 months but can be seen up to 6 months) These pellets would be very quickly swallowed and then broken down in the rumen, producing gas and causing bloat.

Nematodirus outbreak, on a smallholding resulting in 3 dead lambs. Lambs grazed the same field as this time last year. On Post Mortem we found bloody contents in the gastrointestinal tract where Nematodirus worms were identified. Normally immunity would develop, typically by 4 months in lambs, but repeated use of the same pasture resulted in a high challenge. This becomes a real issue on the smaller acreage farm.

ATTENTION All Beef Farmers

AHDB Beef are offering 50% funding for 20 Beef farmers to learn how to AI cows (£262.50 is available per delegate towards the cost of the AI course).

To be eligible you must own or work full time on a suckler farm AND have 30 + breeding females on the farm.

Please contact Synergy Farm Health office for more details. Hurry as once the funded places go the funding will stop.

Book now for the course - 17th – 19th July 2017

The course is also open to dairy farmers but the funding is not available for them.

Medicines News

Spotinor

A very exiting funding opportunity to learn how to artificially inseminate your cows

Place your orders with the Dispensary now

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Prices correct 08/05/2017 Offers end 30/09/2017

Huge CONGRATULATIONS to Mr Barry Sumption, herdsman at Westbrook Dairy owned by David Foot Ltd in Weymouth. He very deservedly won the LKL Herdsman of the Year 2017 award at a ceremony last month after being visited and questioned at length by the judges. Barry has successfully managed the high yielding 200 cow dairy herd near Dorchester for the last four years. Barry is very in tune with his cows and is always aiming to keep the cows as comfortable, relaxed and happy as they can be. He is a stickler for detail and routine which has helped the herd achieve some excellent milk and fertility figures so a big congratulations from all at Synergy Farm Health.

Welcome to Synergy

Sam Cottam
Hi I’m Sam, from Lancashire. I graduated from the University of Liverpool in 2015 and I have worked in farm animal practice since. The search for sunnier climes lead to me to Dorset! I will be based on the east team at Synergy Farm Health. Outside of work I enjoy swimming and messing around on the Kayak.

Vlad Belghir
Hi everyone! My name is Vlad and I joined the Synergy team recently, I am originally from Romania and have been working in the UK for a number of years. I enjoy working with both farmers and their livestock, especially cattle - that’s why I chose to become a TB tester. I’m an enthusiastic character and I look forward to experiencing the varying farms and their different husbandry systems.

Jade Ellis
Jade has recently joined the team as Health Planning Co-ordinator. She has a background in farming as she grew up on a dairy farm. She has been in a local veterinary practice for the last 12 years, working as a qualified veterinary nurse. She is now looking forward to a new venture and going back to her roots. Jade enjoys spending time with her family and friends outside of work and has a keen interest in falconry and running dogs.
News from our Rounds

Josh Swain
With the sun shining first cuts are underway and #silage17 is go. It’s been a busy few months on the North and it is good to have Graeme back from down under to ease the load (but don’t tell him that!). I’ve had plenty of interesting cases to keep me occupied as well as the pre-turnout TB testing boom. There has been Malignant Catarrhal Fever in a suckler cow, a devastating case of copper toxicity in a group of ewe lambs, a not so routine caesarean (see photo), along with calf hernias and eye enucleations to pop. On top of all this, Schmallenberg complicated a few calvings and lambings earlier in the year, meaning the midges that spread the disease were active late into 2016, perhaps something we will see more of as milder winters become the norm.

Youngstock and heifer rearing has become one of my main interests and at Synergy I’m lucky enough to have some resident experts to take me under their wing in the form of Tom S and Esme. Along with the 0-6 Youngstock Advisory Service, some of you have been kind enough to allow the RVC students (The vets of the future!) on farm to see heifer rearing put into practice and hopefully you have found these visits beneficial as well.

As with all things, prevention is better than cure and this was recently highlighted whilst on a visit to a farm with a scour problem. We were discussing the importance of colostrum on calf health with the 4 Qs of colostrum, GOOD QUALITY, at the right QUANTITY, given QUICKLY and importantly in a squeaky clean fashion! Although the farm had protocols in place and thought colostrum wasn’t an issue, we decided to carry out some quick and easy testing to ensure plans were being put into practice. In the case of passive transfer this is done by taking blood samples from healthy calves in the first week of life. To put a long story short we found that nearly half of the calves were not getting sufficient colostrum at birth (not an uncommon finding!). With a few simple, inexpensive tweaks made hopefully we will see the benefits very soon. It is worth remembering good colostrum is cheaper and far more effective than any antibiotic or vaccine.

Antibiotics in the Sheep Flock
Here on the East of the practice we’ve seen more balmy sunshine than April showers with some gorgeous weather recently. It’s been lovely to see stock out in the sunshine but fingers crossed for some rain soon so the grass can really get going. Always a busy time of year with lambing and spring calving in full swing, this month has been no exception with plenty of emergency calls coming in along with our usual routine and planned visits. As mentioned above we’ve a new vet on team East and look forward to working with him. Welcome aboard Sam!

EVENTS

Practical Calving
Wednesday 10th May at Evershot

Safe use of Veterinary medicines in Sheep - 17th May at Evershot
Antibiotics in the Sheep Flock – 31st May at Sydling Estates
The Resistance (Pub Quiz) 5th June at The Eagle Tavern, Chard or 7th June at The Red Lion, Winfrith

1 Day Grinder Course
25th May at Evershot

Visit our website for further details or email courses@synergyfarmhealth.com

A not so routine caesarean

Clare Rudd
Hope you have found these visits beneficial as well! Thankfully all the lambs bar one made it back out of the kitchen in a better state than which they arrived. Unfortunately for my ego according to my children this was solely due to them reading and singing to the lambs rather than any skill I had with intra-peritoneal injections of warm glucose solution!

We have had a few reports of spring lambing flocks not starting the lambing season very well with significant numbers of abortions. Whilst it is always best for us to take fresh samples from abortion cases to diagnose what is happening at the time but it is not too late for those that have missed this boat. At anytime before the tups go in (but the sooner the better) we are able to take blood samples from 5-6 ewes that have aborted this year to establish if they have been in contact with 2 of the main abortion agents – Chlamydia (enzootic abortion) and Toxoplasma. This information will be useful for the following lambing season and will assist us in decision making around future flock vaccination to prevent further abortions.

Clare Eames

Josh Swain

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@SynergyFarmVets @SFHCalfClub

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