



Tysul Vets Farm Newsletter May 2015

Calf Scours

Calf scour can be a major cause of poor growth and calf mortality in dairy herds. The incidence and severity of disease is highly dependent on the level of colostrum protection received at birth.

As a basic rule of thumb calves should receive 10% of their body weight within 12 hours of birth. For example, a 40kg calf would require 4 litres of colostrum.

Main Infectious Causes of Calf Scour on Farms

- Bacteria → E. coli, Salmonella spp., Clostridium perfringens.
- Viruses → coronavirus, rotavirus.
- Protozoa → Cryptosporidium, coccidiosis.
- Yeasts and Moulds



E.coli.

The majority of new born calves will be exposed to E.coli from the environment, especially where cleanliness levels are low. The main source of infection is faeces from healthy cows and scour from other calves. Infection can result in death due to severe dehydration and toxæmia.

Salmonella.

Salmonella produces toxins which cause shock and severe illness. Treatment should be aimed at targeting and minimising the endotoxic shock. Source of infection can be from other cattle, birds, cats, rodents or the water supply. Clinical signs include diarrhoea tinged with blood, depression and fever. Calves affected are usually 6 days old or more.

Clostridium perfringens.

Clostridia infections are commonly known as enterotoxæmia, the disease is usually fatal and has very acute onset. Some calves may be lethargic, strain and show signs of colic. Some may have bloody diarrhoea. Others may not show any clinical signs at all. The disease is usually associated with changes in feed, management practices or changes in weather conditions.

Rotavirus and Coronavirus.

Both act by damaging the lining of the small intestines resulting in diarrhoea and dehydration. The damage is often exacerbated by secondary bacterial infections which lead to more fatalities. Calves can be affected as young as 1-2 days old, with death often caused by dehydration. Treating with intravenous fluids can improve survival rates.

Cryptosporidiosis

A small parasite that sticks to the cells lining the small intestine and damages the absorptive surface. Crypto can cause scour by itself but is more commonly a component in mixed infection. Infection usually occurs between 1 and 3 weeks of age. Disease can be transmitted to both other animals and human so good hygiene and a strict disinfection policy is essential. Clinical signs include weak, lethargic calves with watery diarrhoea containing mucus, blood and undigested milk. Calves may also be seen straining to pass faeces. The only treatment for Crypto is thorough rehydration and a product containing halofuginone called Halocur which acts to reduce the oocyte excretion. Don't forget that secondary infections will also need treatment and supportive care is paramount.

Coccidiosis

A fairly common condition, usually seen in weaned calves, although it can occur in calves from 3 weeks of age. It is caused by a single celled parasite called Eimeria which acts by attacking the cells of the gut lining. Scouring is seen 2 weeks after infection so the damage has already been done by the time clinical signs are seen. Signs seen alongside blood stained scours are loss of appetite, straining, stunted growth, dehydration and secondary infection. Death may occur.

Welcome back to vets Lowri Thomas and Sara Hull following their maternity leave. 😊

**Halocur 490 ml special price for May was £78-ex
vat now £68 ex vat - cash sales only**

Scour By Age:

1-4days: E.coli

1-3 weeks: Rotavirus, Coronavirus, Cryptosporidium

3 weeks +: Coccidiosis

Control and Prevention

- Keeping the calving pens as clean as possible/ removing the calf from the calving pen immediately after birth.
- **COLOSTRUM:** calves should be fed 3 litres as soon as possible after birth (within 6hours), this is equivalent to 20 minutes of sucking continuously; research has shown that 60% of dairy calves will not suckle properly for this long. The best way to ensure adequate colostrum intake is to feed calf directly by bottle/stomach tube. Another 3 litres should be given by 12hours of age. By 12hours of age the absorption efficiency of vital antibodies into the bloodstream is reduced by 50% and by 24hours reduced to 10%.
- **Isolate** and treat any sick calves immediately.
- **CLEANLINESS** of pens, water/ feed troughs, passageways hurdles etc. is paramount in control of scours. Used approved disinfections to the correct dilutions and directions.
- **Test** samples of scour if possible to establish pathogens present on your farm.



Treatment

Any sick calf should be isolated immediately. The goal of treatment is correcting the dehydration that occurs in scours. Oral electrolytes provide a balanced source of salts and fluids but the energy levels are not enough to support the calf. Hence, feeds should be alternated between electrolytes and milk/milk replacer. If the calf is collapsed then oral fluids will not be sufficient and veterinary treatment of intravenous fluids should be given. Depending on the pathogens involved, vaccination of dams may be required in the future.

Rotavec

Rotavec Corona is effective against rotavirus, coronavirus and E.Coli. It is given to pregnant cows and heifers between 12 and 3 weeks pre calving. Vaccinated cows raise antibodies and calves gain protection by drinking the fortified colostrum from their dams. Before considering vaccination, testing should be carried out on farm to determine the pathogens present.

News

Website

www.tysulvets.co.uk

Our website has undergone a redesign. Please visit it at the address above as it goes live in the next few days. We will continue to add to it over the next few months to bring you information on the practice, our staff, newsletters, factsheets and events

What would you like to see on the site? Email me at tysulvets@gmail.com with your comments.

Cycling

We have a very athletic group of staff who spend much of their spare time cycling, swimming and walking - with and without their pets. April saw Vets Sarah Mosley and Helen Phillips complete the Tour of Pembrokeshire cycling an incredible 75K from St Davids and around the coast and hills of Pembrokeshire. Well done girls! Also well done to Daryl, partner of vet Liz Harries who also took part.

Race for Life

Annwen Richards is running a 'Race for Life' in Aberystwyth, on 17th May. She is running with her cousins in memory of her Anti Ellen who passed away in October. A just giving page has been set up under 'Tim Ellen'. Pob lwc Annwen.

S4C

The practice has been a weekly feature on the Prynawn Da program. If you didn't see it live, catch it on S4C Clic catch up for the following dates:- April 9th, 17th and 22nd. With more episodes to come this month.

For a limited time, we are offering **FREE** testing of the most common conditions causing scour (E. Coli, Coronavirus, Cryptosporidium and Rotavirus) using Rapid Scour Check. The tests can be carried out calf side or in the practice and provide instant results, so that treatment/prevention plans can be formulated.

Please telephone us on 01559 363318 if you are would like us to do some sampling.

Sheep Section

Tel: 01559 363318
Email: tysulvets@gmail.com
www.tysulvets.co.uk



Cerebrocortical necrosis (CCN) in Lambs: Question and answer

What is CCN?

This disease is characterised by changes to brain tissue caused by impaired metabolism following a deficiency of Thiamine, also known as Vitamin B1.

Who is at risk of CCN?

Mostly weaned lambs 4-8 months old but sometimes seen in adult sheep.

What are the risk factors?

Vitamin B1 is usually made in the lamb's rumen by the rumen flora. Therefore a disturbance of the rumen flora population and production of enzymes that breakdown Vitamin B1 results in a deficiency.

Lambs are usually affected 2 weeks after moving to another pasture or following a dietary change.

What signs might I see with CCN?

Early stages:

- Sudden blindness and aimless wandering
- Isolation from the group
- "Star gazing" – lamb appears as though they are looking up at the sky with the neck flexed upwards

Later stages (12-24 hours later):

- Lying down on side and unable to stand
- Over-sensitive to sounds and touch
- Fitting/Seizures
- Eyes flicking from side to side
- Drooping eyelid and ear on one side



Lambs will die within 3-5 days if left untreated and without nursing

How can we treat affected lambs?

- Nursing is essential as these animals are unable to eat or drink unaided and will need propping up as otherwise they will bloat.
- Bring affected lambs indoors and monitor them closely as they are vulnerable to be preyed on by birds and wildlife.
- Offer fresh food and water within reach and syringe water, electrolytes and propylene glycol if necessary ensuring that the lamb is swallowing.
- Place on clean, deep bedding to protect them from further injury.
- Injections of Vitamin B1 in the early stages can be beneficial.

Can treated lambs get better?

Following successful treatment and nursing:

- Lambs should be able to stand and start eating within 24 hours
- Normal vision may not return for 5-7 days.

Faecal Egg Counts

Faecal egg counts is a method of determining how many internal parasite eggs are present in a particular faecal sample and is a useful tool to determine if you need to worm your livestock. Faecal egg counts are becoming increasingly useful as we are seeing more resistance develop to the wormers we are using.

We perform faecal egg counts here, at the surgery. All you need to do is bring in a faecal sample (as described below) and we will analyse it for you, report the results back to you and advise on the best course of action and wormer to use. It may be that the egg count is too low to require worming at that point.



How to collect

- 'Composite faecal egg counts' is a number of faecal samples which are pooled together. This is the best way of finding out if your flock needs worming rather than just relying on the result of one faecal sample from one sheep in that group.
- It is advised to collect faecal samples from 10% of the animals in the group. However, in very large flocks this would not be possible so 10 different faecal samples is usually sufficient.
- It is important that your samples are fresh so take your samples from warm, wet droppings.
- Bring them down to the surgery as soon as possible – the best FEC are done within the first 24 hours of sampling.
- If you are unable to bring them down immediately, keep them cool – ideally in the fridge!

Handy tip

If you walk quietly through a group of sheep lying down, you may be able to encourage a few individuals to stand up, at which point they will often defecate – providing you with a fresh sample!

**OFFER: Faecal Egg Counting £10.30 ex VAT -
3 for the price of 2**

Farm Cats

The RSPCA always need homes for outdoor feral/farm cats. They come neutered, vaccinated and chipped. If you could give a cat a home on the farm telephone Frances on 01239 810595 or see the website for more details.

www.rspca.org.uk/petsearch/cats/cardigan

